

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

In the Matter of:)
)
Expanding Use of the 12.7-13.25 GHz Band for) GN Docket No. 22-352
Mobile Broadband or Other Expanded Use)
)

**REPLY COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS**

I. INTRODUCTION AND SUMMARY

The National Association of Broadcasters (NAB)¹ hereby replies to comments submitted in response to the Commission’s Notice of Inquiry in the above captioned matter.² NAB reiterates that it is not opposed to exploring how to accommodate expanded use of the 12.7–13.25 GHz band (the “13 GHz band”) by repacking broadcasters into a smaller portion of the band. As the Commission considers whether and how to permit expanded use of the band, however, it must protect broadcasters’ use of at least *some* portion of the band.

Contrary to the unfounded assertions of some commenters, there are no readily-available options for relocating all broadcaster operations – and particularly broadcast mobile operations (electronic news gathering or ENG) – to other bands or technologies. If the Commission values broadcasters’ coverage of live and breaking news, it must ensure that

¹ The National Association of Broadcasters (NAB) is the nonprofit trade association that advocates on behalf of free local radio and television stations and broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

² *Expanding Use of the 12.7-13.25 GHz Band for Mobile Broadband or Other Expanded Use*, Notice of Inquiry and Order, GN Docket No. 22-352, FCC 22-80 (rel. October 28, 2022) (NOI).

broadcasters have access to spectrum resources necessary to provide such coverage. Stated plainly, if the Commission fails to preserve spectrum in this and other bands for broadcasters' ENG operations, the Commission will be making a conscious choice to reduce broadcasters' ability to serve the public during times of crisis and frustrate the public's ability to acquire information.

II. THE COMMISSION SHOULD TAKE A BALANCED APPROACH IN THIS PROCEEDING

A handful of initial comments in this proceeding suggest that wholesale relocation of broadcasters and other incumbents out of the 13 GHz band is a simple proposition. For example, T-Mobile states that broadcasters' mobile operations can be accommodated either in the 2 GHz band, or through use of 5G networks.³ CTIA also states that broadcasters can rely on 5G networks, and that broadcasters' fixed operations in the band can be moved to different fixed microwave service bands or to fiber.⁴ But these proposals do not withstand scrutiny.

First, as the Commission is well aware, broadcasters are already being displaced from the 2 and 6 GHz bands due to increased interference from band-adjacent AWS systems (in the case of the band 2025–2110 MHz) and expected interference from Wi-Fi 6E systems (in the case of 6425–6525 MHz and 6875–7125 MHz). In other words, competing uses of spectrum in alternative bands are making those bands less, not more, practical as alternatives to the 13 GHz band. Further, NAB is unaware of any other alternative bands to which broadcasters' operations can feasibly be relocated. No amount of hand-waiving will conjure up available spectrum to accommodate broadcasters' operations.

³ Comments of T-Mobile USA, Inc. at 5-6, GN Docket No. 22-352 (Dec. 12, 2022).

⁴ Comments of CTIA at 8, GN Docket No. 22-352 (Dec. 12, 2022).

Second, relocating broadcasters' operations to 5G networks puts broadcasters – and the viewing public – at the mercy of those networks in the event of an emergency that causes network congestion or failure. Mobile service networks have multiple points of failure, offer no assurance of priority access to broadcasters, often have no backup power, can be overwhelmed by a large number of simultaneous users at breaking news events, and are not always resilient in disaster situations. The Commission is well aware of the potential for network outages during disasters. But, as other commenters have noted, such events and emergencies are *precisely* the situations where reliable broadcast news and emergency coverage is most important.⁵

Third, fiber and other alternatives may, in some limited cases, work as substitutes for *fixed* broadcast links in the 13 GHz band. However, fiber and other alternatives are not ubiquitous. In many cases, construction of fiber links to replace fixed 13 GHz operations is challenging or impossible due to difficulty in obtaining rights of way. Even where fiber service is available as a potential option, the costs to construct and operate such service may be prohibitive for broadcasters. In any event, because fiber links are limited to communication between *fixed* points, they cannot possibly serve as a replacement for radio frequency spectrum for mobile ENG operations. NAB agrees with initial commenters observing that there is no solution meeting the unique needs of ENG operations – including mobile operations – that does not involve access to adequate spectrum resources.⁶

⁵ Comments of Scripps Broadcasting Holdings LLC at 4, GN Docket No. 22-352 (Dec. 12, 2022) (“As the Commission is aware cellular networks may become overloaded during natural disasters. It is precisely at these times that broadcast television can be critical for delivery of news and emergency information to residents.”) (Scripps Comments).

⁶ See *id.* at 4; see also Comments of the Society of Broadcast Engineers at 3-5, GN Docket No. 22-352 (Dec. 12, 2022).

NAB emphasizes that it may ultimately be possible to relocate broadcasters to a smaller portion of the 13 GHz band, assuming that broadcasters are not forced to bear any costs for such relocation. NAB has no objection to exploring this issue and is willing to work with the Commission and other stakeholders to accommodate expanded use of the band while protecting broadcasters' operations. Indeed, over the last two decades, broadcasters have participated constructively in numerous spectrum reallocations impacting BAS operations – including the Sprint/Nextel and MSS reallocations in portions of the 2 GHz band, accommodating DoD operations in the remaining 2 GHz band, participating in the broadcast incentive auction and spectrum repack which greatly affected BAS operations in the UHF band, opening up 6 GHz to use by unlicensed devices, and the C-band reallocation which impacts occasional use of satellites which was an alternative to some mobile BAS use. Each subsequent reallocation becomes increasingly difficult, yet broadcasters remain willing to participate constructively to accommodate other uses where possible. But commenters insisting on an uncompromising, maximalist approach based on wishful thinking about the prevalence of alternatives will do the Commission no favors in this proceeding and will ultimately risk undermining broadcasters' ability to serve the public.

The 13 GHz band provides 550 MHz of spectrum – enough to make a significant portion available for expanded operations while still protecting critical ENG operations. We urge the Commission to take a balanced approach in considering how best to accommodate expanded operations in the 13 GHz band rather than merely assuming that anything less than the full 550 MHz constitutes failure.

Finally, any relocation of broadcasters' operations must be fully funded. Broadcasters have made significant investments in 13 GHz operations,⁷ and the costs of relocation may be substantial. Even frequency changes within the 13 GHz band may require antenna replacements that are costly or impractical. For example, many 13 GHz links use 6-foot dish antennas, which have off-axis suppression of about 45 dB at ± 20 degrees. To accommodate increased frequency sharing in the band, an antenna having greater off-axis suppression, such as 55 dB, may be needed. Such an antenna would be 12 feet in diameter and present a massive loading increase in high winds.⁸ The basic weight of the antenna would similarly increase from perhaps 200 pounds to 800 pounds (not considering mounting hardware or icing). These factors could require replacement of the entire supporting structure at substantial cost and time and may be impossible or impractical due to local conditions.

III. THE COMMISSION SHOULD EXERCISE CAUTION IN CONSIDERING SHARING METHODOLOGIES

If the Commission does consider relocating broadcast operations to a smaller portion of the band, it should not authorize shared use of that portion of the band. While New America and Public Knowledge point to the alleged success of the sharing regime in the 6 GHz band,⁹ it is plainly too soon to know whether that regime will actually work in the real world. At a minimum, the Commission should give itself and other stakeholders time to see how the 6 GHz experiment unfolds before relying on it as a basis for future decisions.

⁷ Scripps Comments at 2-3.

⁸ The loading could increase from perhaps 10.7 kN to 26.8 kN (axial force) in critical wind directions.

⁹ Comments of Open Technology Institute at New America and Public Knowledge at 1, GN Docket No. 22-352 (Dec. 12, 2022).

As NAB has previously stated, all sharing regimes must recognize and deal with the hidden node problem. The Commission's framework for sharing in the 6 GHz band relies in part on the use of a contention-based protocol to address this concern. But NAB agrees with EIBASS that contention-based protocols are only effective if the sensitivity of the unlicensed system is comparable to that of the licensed system.¹⁰ The Commission has authorized a number of unlicensed systems in the 6 GHz band having a sensitivity more than two orders of magnitude below that of the licensed systems they are supposed to protect. The Commission should not repeat that mistake in the 13 GHz band.

Further, if the FCC does ultimately consider sharing in the 13 GHz band, it should *not* defer important questions about how to address interference threats to a multistakeholder group. A multistakeholder process can help inform Commission policy but cannot replace the Commission's duty to act in the public interest. In the case of 6 GHz, the Commission deferred to an unmoderated multistakeholder group to determine how best to deal with such interference threats. The Commission provided no direction or oversight of the group. As a result, the multistakeholder group was assembled and dominated by new spectrum users, who refused any discussion or consideration of interference threats to incumbent users. Based on this experience, the Commission should not go down the same path if it decides to open the 13 GHz bands to similar new uses.

IV. CONCLUSION

In its initial comments, NAB urged the Commission to recognize that the task of accommodating expanded use of the 13 GHz band has been made more complicated by the Commission's actions reducing broadcasters' access to alternative spectrum. There is simply

¹⁰ Comments of EIBASS at 2, GN Docket No. 22-352 (Dec. 12, 2022).

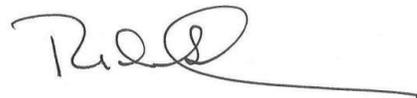
no way for broadcasters to provide the kind of breaking news coverage viewers expect without access to adequate spectrum resources, and broadcasters are already being squeezed in other bands.

This does not mean that it is impossible for the FCC to authorize expanded operations in the 13 GHz band. It does mean, however, that the Commission cannot afford to indulge uncompromising and maximalist positions based on magical thinking about the existence of alternatives. Broadcasters are more than willing to work with the Commission and reasonable stakeholders to develop a balanced approach to the 13 GHz band that will accommodate expanded operations while ensuring that broadcasters retain reliable access to spectrum to cover live events and breaking news, and that broadcasters do not bear any costs associated with relocation.

Respectfully submitted,

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January 10, 2023