

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Amendment of Part 101 of the Commission's	)	WT Docket No. 10-153
Rules to Facilitate the Use of Microwave for	)	
Wireless Backhaul and Other Uses and to Provide	)	
Additional Flexibility to Broadcast Auxiliary	)	
Service and Operational Fixed Microwave	)	
Licenses	)	
	)	
Request for Interpretation of Section 101.141(a)(3)	)	WT Docket No. 09-106
of the Commission's Rules Filed by Alcatel-	)	
Lucent, Inc., <i>et al.</i>	)	
	)	
Petition for Declaratory Ruling Filed by Wireless	)	WT Docket No. 07-121
Strategies, Inc.	)	
	)	
Request for Temporary Waiver of Section	)	
101.141(a)(3) of the Commission's Rules Filed by	)	
Fixed Wireless Communications Coalition	)	

To: The Commission

**COMMENTS OF THE SOCIETY OF BROADCAST ENGINEERS,  
INCORPORATED IN RESPONSE TO FURTHER INQUIRY PUBLIC NOTICE**

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1. The Society of Broadcast Engineers, Incorporated (“SBE”)<sup>1</sup> respectfully submits these Comments in response to the Public Notice, DA 11-1011, entitled *Wireless Backhaul: Further Inquiry into Fixed Service Sharing of the 6875-7125 MHz and 12700-13200 MHz Bands* in the above-captioned proceeding. The Public Notice seeks further comment on, among other things<sup>2</sup>:

(1) the feasibility of allowing Fixed Service (FS) operations to have access to the bands 6875-7125 MHz and 12700-13200 MHz, in areas outside the licensed service areas of Broadcast Auxiliary Service (BAS) and Cable TV Relay Service (CARS); or

(2) band segregation such that FS operators could have access to the bands 6875-7075 MHz and 12700-13150 MHz, and BAS and CARS would retain access to 7075-7125 MHz and 13150-13200 MHz without interference from fixed operations.

As SBE has established in this proceeding previously, neither of these proposals will adequately protect the active daily use of these bands by BAS and CARS licensees for mobile, temporary fixed and aeronautical mobile electronic news gathering (ENG) applications in *and near* most television markets, at all times of the day and night.

Accordingly, SBE opposes both proposals and urges the Commission not to proceed with either of them.

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<sup>1</sup> SBE timely filed comments in this proceeding, and in February of this year filed *ex parte* reply comments. SBE has also met with Commission staff to explain its position with respect to the issues raised in the *Notice of Proposed Rulemaking and Notice of Inquiry*, WT Docket Nos. 10-153, 09-106 and 07-121, FCC 10-146, 25 FCC Rcd. 11246, 75 Fed. Reg. 52186 (rel. August 5, 2010) (the “*Notice*”). SBE’s position has not changed, and the comments and reply comments are incorporated herein by reference.

<sup>2</sup> The Public Notice also seeks comment (at Paragraph 15) on the proper frequency coordination process for BAS and CARS if it decides to permit any FS in BAS/CARS bands outside the licensed BAS or CARS service areas of operation. While SBE does not at all endorse this sharing concept, should the Commission decide to proceed in this manner, under no circumstances should it compound the mistake that it has made in the past by applying the expensive and valueless Part 101 coordination procedures to TV Pickup operation in the 7 and 13 GHz bands. SBE’s frequency coordination procedures work fine for mobile BAS and CARS operation, and they are critical to facilitating shared use of scarce spectrum in most broadcast markets. The Part 101 coordination procedures, by contrast, add nothing but expense and delay to the process. Real-time coordination is critical to effective ENG operation by broadcasters and the frequency coordination processes now in place should not under any circumstances be interfered with or compromised.

2. It is no secret that the Commission has already conceptually adopted the addition of wireless backhaul to the BAS and CARS 7 and 13 GHz bands to facilitate expanded broadband. The concept appears as a *fait accompli* in the National Broadband Plan.<sup>3</sup> The issuance of this Public Notice, despite a full and complete record from the comments filed in the proceeding to date (which clearly identify the obstacles to effectuating FS sharing with mobile BAS and CARS operation), indicates that the Commission has already decided what the outcome of this proceeding is going to be. The only issue now is how to justify the policy decisions that it has already made. It is suggested that the process utilized in this case (as in so many others in recent Commission jurisprudence) has been conducted exactly backward. Policy decisions should not be determined in advance of technical spectrum planning. The prejudgment that is manifest in this proceeding is unsettling.

3. Turning to the first of the Commission's present sharing proposals, which is to permit FS licensing outside the licensed service areas of current BAS and CARS stations, there are numerous flaws in the concept. First of all, and most obviously, the proposal in effect freezes the areas of protected BAS and CARS mobile operation to a single point in time. Any new BAS or CARS applicants for facilities which envision service areas *outside* those which duplicate presently licensed BAS or CARS service areas would not be protected from FS operations which have located in the proposed new BAS or CARS facility's service area in the meantime. That is a complete disaccommodation for any new

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<sup>3</sup> Section 5.5 of the National Broadband Plan includes recommendations to "increase the flexibility, capacity and cost-effectiveness of spectrum for point-to-point wireless backhaul services, including the revision of Rule Parts 74, 78 and 101 to "allow for increased spectrum sharing among compatible point-to-point microwave services."

BAS or CARS facilities and presumes that there is and should be no growth in BAS or CARS operation at 7 or 13 GHz at all.

4. Furthermore, the Wireless Bureau's studies are flawed in at least two respects and do not reflect the actual range of use of the 7 and 13 GHz bands for ENG. This is because the coverage areas on the licenses, first, do not accurately indicate areas in which TV Pickup stations will use the 7 and 13 GHz bands for ENG. Licensees typically, and it is fair to say often, operate *well outside* those licensed coverage areas pursuant to Section 74.24 of the Commission's Rules, which was intended specifically to facilitate temporary operation outside a licensee's service area. It was a provision created at the outset of broadcast ENG to obviate the need for the Commission's staff to issue thousands of Special Temporary Authorizations for planned operations, and because of the recognition that broadcast news events are unpredictable in time and geography. LTTS licensees also operate in these bands. Those licenses, and some BAS licenses, specify nationwide operation, and the location of operations in a given area is determined on short notice and is facilitated by the good efforts of local market frequency coordinators who do their work in real time.

5. Just as new BAS and CARS operations pursuant to Section 74.24 of the Commission's Rules would not be protected from FS links under the Commission's plan, those same FS links would not be protected from licensed BAS and CARS mobile and temporary fixed operation. If the Commission proposes now to limit BAS and CARS licensees to operation only within licensed service areas, and to delete Section 74.24 in order to force this incompatible sharing plan, it would have the effect of eliminating broadcasters' ability to cover news events and it would have an exceptional, negative

effect on localism in broadcasting. SBE urges the Commission to put the horse back before the cart in this proceeding and to conduct a candid and honest technical evaluation of this proposal. Sharing between FS operations and mobile and temporary fixed ENG operation at 7 and 13 GHz is simply not feasible. Forcing such sharing notwithstanding this incompatibility will result in interference to FS stations, or else it will result in an unacceptable reduction in broadcasters' ability to do real-time newsgathering.

6. What, however, of the Commission's band segmentation proposal, which would segregate FS and BAS operations? This proposal was raised by Comsearch in its comments earlier in this proceeding. SBE has previously argued that it is not feasible to attempt to reduce the inherent incompatibility between BAS operations at 7 and 13 GHz and FS operations in those same bands by segregating channels used for mobile operations from those that are used for fixed operations, creating in essence mobile and fixed subbands. It would result in a substantial reduction in the availability of both bands for TV pickup operation going forward. In many markets, and especially in the largest markets,<sup>4</sup> the 7 GHz band is completely filled with mobile and coordinated fixed operations all of the time. The comments of the National Association of Broadcasters and Maximum Service Television (NAB/MSTV) drew the same conclusion. Short-notice time intervals are available when breaking news occurs. Dividing these bands into two,

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<sup>4</sup> In New York, all of the 7 GHz BAS channels and most of the 13 GHz channels are in daily use. News vans are dispatched to venues without prior knowledge of path direction, as many stations have several receive sites both within the city and in the suburbs. News vans use relatively high power into high gain antennas and generally angle upward to rooftop or tower levels. In practice, in order to establish a path, van antennas are panned while transmitting. With the density of tall buildings in New York, most transmissions result in reflections off buildings and structures with reflected signals having no directional predictability. This alone makes it impossible to determine the potential for interference, adjacent channel issues, or brute force overload of fixed path receive sites. Prior, Part 101 coordination to determine path direction, proximity to a fixed path receive site, with fixed paths would be virtually impossible. If fixed paths in a shared band are to have priority, this will cripple ENG efforts.

arbitrarily-determined, fixed and mobile segments does not take into account local variations in use.<sup>5</sup> As the National Spectrum Managers' Association has already noted, further study is needed of the 7 and 13 GHz bands to determine usage of these bands on a market-by-market basis. Such a study would reveal the difficulty in segregating mobile and fixed operations by subbands in these BAS allocations. Because the 7 and 13 GHz bands are being used extensively and increasingly for real-time newsgathering, band segmentation substantially decreases the availability of channels in regular, daily use for mobile and temporary fixed operation and will cripple localism in broadcasting and newsgathering.

7. Market size is not determinative of demand for 7 and 13 GHz in this respect. Though 7 and 13 GHz may not be in regular use in a given broadcast market, a news event can change that situation in a matter of hours. A political convention, for example, or a major sporting event, changes substantially the level of use of those bands for mobile and temporary fixed use. Band segmentation will preclude the type of video production and newsgathering that American citizens have come to expect and rely upon, especially during emergencies.

8. Finally, SBE is constrained to question the source of the data used in the preparation of the maps in the Public Notice. ULS data is widely known by SBE and SBE-affiliated frequency coordinators to be inaccurate, by comparison with local market databases maintained by those volunteer frequency coordinators. No sharing decisions should be based exclusively on ULS data, as many TV Pickup license records in the ULS are missing technical data critical to ascertainment of use.

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<sup>5</sup> For example, in the Albany, New York market, there is a common DTV transmitter facility, making frequency reuse difficult or impossible. Use of all the 7 GHz channels for mobile is necessary.

9. The record in this proceeding shows that neither of the Commission's newly-proposed sharing plans is workable, and neither is in the best interest of either FS or BAS/CARS licensees of the Commission.

Therefore, for the reasons discussed herein, SBE again respectfully requests that the Commission abandon the sharing proposal as unworkable.

Respectfully submitted,

**THE SOCIETY OF BROADCAST ENGINEERS,  
INC.**

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