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

In the Matter of		
	)	
Reallocation of the 216-220 MHz	)	ET Docket No. 00-221
1390-1395 MHz, 1427-1429 MHz,	)	RM-9267
1429-1432 MHz, 1432-1435 MHz,	)	RM-9692
1670-1675 MHz, and 2385-2390 MHz	)	RM-9797
Government Transfer Bands	)	RM-9854
	)	

REPLY COMMENTS OF
THE HEARING INDUSTRIES ASSOCIATION

I. Introduction

1. The Hearing Industries Association (AHIA@)[1] hereby submits these reply comments in the above-captioned proceeding.[2] HIA's initial comments noted that Assistive Listening Devices (AALD=s@) operate in the 216-217 MHz band in the low Power Radio Service (ALPRS@) and that federal statutes require the deployment and effective operation of ALDs. Congress never intended the drive for auction dollars to undo its work in creating federal disability statutes or the public interest effectiveness of those statutes in vastly improving the lives of hearing-impaired persons.

2. Numerous other parties have advanced their proposals for use of the 216-220 MHz band. However, those parties have not adequately recognized the difference between the 216-217 MHz band and the 217-220 MHz band in terms of either federal statutory objectives and mandates or the protection of television reception on adjacent channel 13 (210-216 MHz). No justification has been

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[1] HIA is the national trade association of the manufacturers of hearing aids, components, and related hearing health products, including radio-based Assistive Listening Devices that operate in the 216-217 MHz band. HIA's members produce the vast majority of the hearing aids sold annually in the United States.

[2] Notice of Proposed Rulemaking, FCC 00-395 (released Nov. 20, 2000); 66 Fed. Reg. 7443 (Jan. 23, 2001).

presented, nor is there any, for any impairment of the progress our nation has been made in allowing those without full hearing to enjoy their lives and to be involved fully in our society. Accordingly, HIA submits the Commission is duty bound, by its own public interest mandate and other federal statutes, not to sell off the 216-217 MHz band to any user who could have an adverse impact on ALD=s.[3]

3. As set forth more fully in HIA=s initial comments, ALDs are a primary listening device in many institutions. They are used by children and adults in public buildings, religious places and entertainment facilities. ALDs also allow hearing-impaired students to be mainstreamed with hearing students because they can hear if the classroom teacher wears an ALD transmitter. These devices allow the sound receptor to be placed at the source of the sound (*e.g.*, the speaker) and are linked to the hearing aid-based amplifier by radio. Through the use of these devices, the desired sound becomes dominant, and the user can understand speech and other sounds that otherwise would be unintelligible. This development literally opened the door to a major improvement in the quality of life for millions of Americans.

4. All of the other commenters to seek to use the 216-217 MHz band seek to do so for commercial purposes, none of which justify impairing the operation of ALDs and all of which are or can be accommodated elsewhere in the spectrum. In contrast, 216-217 MHz is a perfect home or ALD=s, because of the low power environment required to protect television broadcast reception and the antenna miniaturization that is possible because of the wavelength.

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[3] Indeed, as explained in HIA=s initial comments, impairment of the operation of ALD=s could cause many public gathering places and educational institutions to be in violation of federal disability laws.

II. The Commission Should Reject Requests for Allocations in the 216-220 MHz Band for Services that Would Cause Harmful Interference to Assistive Listening Devices and Adjacent Broadcast Services.

5. HIA opposes the requests by several parties that the Commission reallocate spectrum in the 216-220 MHz band -- and specifically in the 216-217 MHz frequencies -- for new services or for services to be transplanted from other bands. For example, Millennium Networks, Inc., asks for a reallocation of 218-219 MHz for a wireless Internet network it is developing that will offer applications such as e-mail, instant messaging and web browsing. It does not explain why these functions cannot be accommodated by cellular and PCS systems, some of which are offering those services today, as well as by the coming third generation (A3G@) wireless systems, for which the Commission will provide spectrum in the 700 MHz band and perhaps other bands as well.

6. Several entities advocate allocations in the 216-220 MHz band for the operation of land surveying equipment used in public-works projects, post-disaster infrastructure analysis, disaster recovery and other emergency situations, and in construction, mining, agriculture, and transportation infrastructure development and management.[4] These parties -- the Association of Public Safety Communications Officials International (AAPCO@), Trimble Navigation Limited (ATrimble@), and Pacific Crest Corp. (APacific Crest@) -- state that this Real-Time Kinematic (ARTK@) survey equipment is used by federal, state and local governments, and other entities. But most, if not all, of these same users are bound to accommodate hearing-impaired persons; the commenters do not explain how both objectives should be achieved. Trimble expressly asks for an allocation of channels

[4] *See* Comments of the Association of Public Safety Communications Officials International, Trimble Navigation Limited, and Pacific Crest Corp., filed Mar. 8, 2001. APCO is an organization which represents state and local government users of frequencies for police, fire and emergency services, highway maintenance, forestry conservation, disaster relief and other public safety communications. Trimble and Pacific manufacture these RTK systems.

in the 216-217 MHz band for the RTK system but does not explain why other radiolocation frequencies cannot meet this need.[5]

7. In addition, other parties currently operating in part or all of the 216-220 MHz band seek to expand their operations in the band, including the American Radio Relay League, representing Amateur radio operators, and Regionet Wireless License, LLC -- which operates maritime and land mobile systems. While its request is not entirely clear, Regionet appears to want greater use of the band for its Automated Marine Telecommunications Systems (AAMTS@),[6] again without explaining why existing AMTS allocations cannot meet needs or why hearing-impaired citizens should pay a price for AMTS expansion. United Telecom Council and American Public Power Association, in joint comments, recommend the elevation of public land mobile radio and telemetry services to co-primary status across the 216-220 MHz band and the elimination of restrictions concerning usage so that licensees may make the Abest use of their spectrum.@ Warren Havens, a holder of licenses in 216-220 and 220-222 MHz proposes a nationwide environmental wireless service in reconfigured spectrum that would combine frequencies from 216 to 225 MHz under one set of rules.[7]

8. If the FCC were to grant all or many of these requests for additional uses of the 216-220 MHz band, serious interference to existing users would be the result. Trimble believes that an allocation for the land survey system could be made without interfering with existing primary or secondary operations in the band. However, APCO makes it clear that the RTK survey systems are

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[5] Comments of Trimble at 1.

[6] *See* Comments of Regionet at 5-6 (AAdditional AMTS Spectrum Is Needed@).

[7] Havens suggests that current licensees in these bands could elect to operate under their current rules until a certain date, after which they would be required to conform to the new operating rules.

causing interference to the public safety operations of its members in the bands where these services currently co-exist. APCO states that business users, including construction and engineering firms, Ahave sometimes operated the survey equipment in a manner that creates inadvertent interference to public safety land mobile operations.@[8] Indeed, APCO=s apparent interest in advocating on behalf of the land survey system in the 216-220 MHz band is to find an alternate location for these users.

9. Clearly, LPRS users would be at great risk of destructive interference from these RTK survey systems if these systems are already causing interference to other services in their spectrum where they now operate. It would be impossible to avoid interference with the LPRS operations in the 216-217 MHz band because they are mobile and do not always operate in the same location. Users of assistive listening devices face a similar interference situation in the 72-76 MHz band where they first operated and some continue to operate. This type of interference problem is a substantial reason why ALDs received an allocation of frequencies in the 216-217 MHz band.

10. As HIA stated in its initial comments, there are already many nongovernment users operating throughout the country on the 216-217 MHz band, including LPRS and AMTS. Many of these commenters who are advocating allocations in the 216-220 MHz band concur with this assessment. APCO recognizes that the band is Aheavily used@ by government and non-government users.[9] Regionet states that the band is fully allocated and that the opportunities for new licensing or for non-licensed use are limited.[10] Even Havens, who claims that the 216-220 MHz band is

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[8] Comments of APCO at 3, filed Mar. 8, 2001 (AThe itinerant and typically unlicensed nature of such operations makes it extremely difficult to trace and eliminate the interference.@)

[9] *See, e.g.*, Comments of APCO at .

[10] Comments of Regionet at 3.

Alightly used@ makes that claim only with respect to remote areas. Due to its congestion, this band has very limited utility for other services, including the systems or services advocated by commenters in this proceeding. The Commission's job is to manage the spectrum, not to pile on uses to the point where the spectrum becomes impaired for all users. As HIA has previously urged, the overall statutory framework makes it clear this management function should be exercised with ALD=s given the highest priority.

III. If the Commission Authorizes Reallocation for Additional Services in the 216-217 MHz Band, It Must Ensure the Protection of Assistive Listening Devices and Adjacent Television Broadcasting Services

11. If the Commission nevertheless decides to allow additional services into the 216-217 MHz band and to sell spectrum to those services at auction, it must ensure the protection of incumbent users of the spectrum, including LPRS/ALDs and adjacent-channel broadcasters. HIA demonstrated in its initial comments how strong the established public policy is that requires the protection of ALDs. Although the FCC aims to promote the flexible use of spectrum when possible,[11] as discussed in HIA=s initial comments, a completely flexible, market-driven approach to allocations is not appropriate where market forces would fail to provide for important services, such as public safety communications, or would not achieve important public policy goals, including the successful operation of ALD=s. Both Congress and the Commission have made exceptions to purely economic considerations in spectrum allocations, and services for disabled users are specifically protected in certain cases, such as captioned television.

12. Nor is there a strong countervailing interest that weighs against the protection of ALD=s. There is no realistic fiscal policy objective to compete against the well-established national policy of

protecting persons with disabilities and the devices they use to improve their lives. Consequently, in view of the public benefit of ALD=s, the Commission should protect ALD=s from interference from other users of the 216 -217 MHz band, and especially any new users, through severe technical restrictions that include low power, infrequent operation, low numbers of units, secondary status, operation in sparsely-populated geographic areas, and registration of all operating locations.[12] In addition, any use of the band should be confined to specifically designated channels, which should be interleaved with and offset from channels used by ALDs.

13. Some commenters fail to distinguish the 216-217 MHz band from the rest of the band at 217-220 MHz, ignoring the important obligation to TV Channel 13. The FCC cannot simply treat the entire 216-220 MHz band as one homogeneous block for reallocation to other uses. The 16-217 MHz band is clearly different from the 217-220 MHz band because of both the existence of ALD=s and the TV Channel 13 interference issue.[13]

14. Several commenters that asked for allocations at 216-217 MHz have voiced support for special restrictions. For instance, ARRL states that it would agree to interference safeguards for primary services in the band and protection of TV channel 13.[14] Trimble offers to operate on a

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[11] *Plan for Reallocated Spectrum*, 11 FCC Rcd 17841, 17881-82 (1996) (AFCC Reallocation Plan@).

[12] In its initial comments, HIA noted that rural monitoring services might be able to operate in a compatible manner with existing applications in the band. For example, wildlife tracking and snowfall monitoring systems will be deployed mostly in rural areas, and monitoring of water and gas pipeline flows tends to be concentrated in sparsely-populated geographic areas. However, their authorization should not be allowed to jeopardize the continuing use of ALD=s for hard-of-hearing persons.

[13] ALDs also currently co-exist with government space surveillance (ASPASUR@) activities. If SPASUR continues to enjoy authorization in this spectrum, other potential users will be obligated to avoid interference to SPASUR as well.

[14] ARRL also proposes that these secondary users be allowed to use fixed distance separations as a mechanism to demonstrate the absence of interference potential to AMTS or other co-primary facilities, rather than the current consent requirements applicable to AMTS licensees.

secondary basis in this band and it promises to take the steps necessary to avoid interference with TV Channel 13. Securicor agrees that the incumbent users of the band should be allowed to continue operating in the band and should be afforded protection from encroachment by new users.[15] But these users have focused mostly on TV interference; the ALD issue is at least as important, if not more so, because of strong public policy and statutory mandates for assistance to hearing-impaired persons -- factors which the Commission may not and must not neglect.

IV. The FCC Should Dismiss Regionet=s Petition for the Allocation of Spectrum in the 216-220 MHz Band for Paging Services

15. HIA agrees with parties who oppose the authorization of paging operations in the 216-220 MHz band because of the existence of so many existing uses. Indeed, Regionet=s petition asking for allocation of spectrum in the 216-220 MHz band for two-way paging services appears, to be most, as the petitioner seems to have changed its mind, even though it has not withdrawn its petition. Regionet states in its comments in this proceeding that its petition Amay have been overtaken by events,@ specifically that manufacturers are making telephone handsets that incorporate paging capabilities and that intense price competition and consolidation among paging carriers Ahas made stand-alone paging a far less attractive business for both existing carriers and potential new entrants.@[16] HIA thus submits that the Commission should dismiss Regionet=s petition for allocation of spectrum for a two-way paging system.

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[15] Comments of Securicor at 6 (supporting protection of the operations of non-government users in the band).

[16] Comments of Regionet at 3-4.

V. Conclusion

16. The Commission must protect Assistive Listening Devices operating in the 216-217 MHz band by elevating their status to primary use and licensing them on a blanket basis. Other incompatible uses must be prohibited. To the extent the Commission decides that it must place additional services into this band -- a point with which HIA strongly disagrees and believes that Congress would disagree as well, it must establish operational and technical restrictions on these services for the protection of both ALDs and TV Channel 13 reception.

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Respectfully submitted,

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