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

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In the Matter of	)	
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Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Services and Modify the Policies Governing Them	)	PR Docket No. 92-235
	)	
and	)	
	)	
Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Radio Services	)	

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REPLY COMMENTS OF
THE ASSOCIATION OF AMERICAN RAILROADS

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SUMMARY

The Commission in its Report and Order and Further Notice of Proposed Rule Making in this proceeding proposed several market-based incentives to spur the conversion to narrowband technology. These incentives included auctions, resale of excess capacity and user fees. The Commission also proposed to consolidate the Private Land Mobile Radio services in order to "increas[e] spectrum efficiency" and provide for "more flexible spectrum use."[1/]

AAR is most concerned by the Commission's proposals concerning auctions and consolidation. Consolidation would destroy the fabric of railroad radio communications, increasing the risk of accidents with injury to life and property. The four consolidation proposals which were submitted to the FCC would expose railroad communications to harmful interference by allowing non-railroad users to occupy and operate on railroad channels. Because this interference could block safety-related transmissions, consolidation represents a direct threat to public safety. The Commission should, therefore, reject these consolidation proposals to the extent they apply to the Railroad Radio Service.

If the Commission subjects railroad radio frequencies to consolidation, it would be ignoring over fifty years of its own regulatory practice, as well as the advice of the Federal Railroad Administration, the National Transportation Safety Board, the Railway Association of Canada, and the numerous individual railroads who filed letters and comments urging the Commission to preserve the Railroad Radio Service intact. Because there is no sufficiently

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1/ Report and Order at ¶ 50.

compelling reason in favor of consolidation that outweighs the threat to public safety, consolidation of the Railroad Radio Service would be arbitrary and capricious.

The Commission's proposals concerning auctions also threaten the safety applications of railroad radio communications. Because auction outcomes are uncertain, the railroads could not be assured the access to channels that they require for safety-related functions. Auctions would make public safety hostage to the highest bidder, a result that does not serve the public interest.

Moreover, the overwhelming response of the commenters was that artificial incentives to convert to narrowband, such as auctions, are unnecessary and inappropriate because incentives in the form of congestion and pent-up demand already exist. Given the existence of these incentives and the clear threat to public safety that auctions would pose, the Commission should exempt railroads from auctions. Any other alternative would not serve the public interest.

The majority of commenters also pointed out that private users are not interested in resale of excess capacity because they do not experience significant excess capacity. In addition, PLMR users and manufacturers stated that user fees were unnecessary. Although some parties claimed that user fees might be preferable to auctions, there is a real danger that the imposition of user fees would actually encourage unauthorized use. Furthermore, there is no justification for singling out the Part 90 users for the imposition of user fees. If user fees are imposed, they must be applicable to <u>all</u> users.

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Land Mobile Radio Services	)	

To: The Commission

Reply Comments of
The Association of American Railroads

The Association of American Railroads (AAR), by its undersigned counsel and pursuant to Section 1.405 of the Rules of the Federal Communications Commission (Commission), hereby replies to comments filed in response to the Report and Order and Further Notice of Proposed Rule Making (R&O and FNPRM) in the above-referenced proceeding.

In this proceeding the Commission proposed various market-based incentives to spur the conversion to narrowband technology. In particular, the Commission has proposed to permit the resale of excess capacity, create geographic overlay licenses and assign those licenses via competitive bidding, and impose spectrum use fees on the Part 90 users. In addition, the Commission has proposed to consolidate the Private Land Mobile Radio (PLMR) services into a few broad pools of channels. By eliminating the current eligibility

restrictions on the use of spectrum, this proposal would allegedly facilitate frequency coordination and assignment by allowing any user within a pool access to any frequency within the pool.

The Commission's proposals concerning consolidation and auctions cause the greatest concern to the railroads. Arrayed against the theoretical and wholly speculative alleged benefits is the very real threat these proposals pose to the safety of life and property. The common thread of these proposals is that they would sacrifice public safety in search of questionable spectrum efficiency gains.

In terms of consolidation, the Commission should not adopt proposals which, in the opinion of the expert agencies charged with ensuring rail safety, would create an unacceptable risk of accidents with potentially disastrous consequences, including loss of life. Moreover, the record in this proceeding does not demonstrate sufficient need for the Commission to embark on such a risky and dangerous course. A large number of commenters expressed great confidence in the current system of separate service allocations and representative frequency coordination.

Some of the commenters who proposed pooling of channels in use by the nation's railroads appear motivated by a self-interested desire to gain access to railroad frequencies. All the pooling proposals reflect a dangerous ignorance of railroad needs and requirements which are unique among PLMR users and militate against elimination of the Railroad Radio Service.

The Commission's auction proposal also poses a serious threat to safety along the railroad right-of-way. Moreover, the overwhelming response of the commenters was that

market-based incentives to convert to narrowband, particularly auctions, are unnecessary and inappropriate. The Commission's adoption of a narrowband channelization plan has laid the foundation for the transition to narrowband technology and natural incentives to convert already exist in the form of pent-up demand, channel congestion and the need to accommodate system growth. Thus, in light of the questionable value of auctions and the public safety threat, there is no compelling reason to subject the railroads to auctions.

I. The Commission Should Not Consolidate the Railroads' Channels With Those of Other PLMR Services

There were four consolidation plans filed with the Commission which recommended consolidation of the Railroad Radio Service with other Part 90 users. All four of these plans pose the very threats that AAR delineated in its comments. Those comments described in detail the specific dangers of consolidating the Railroad Radio Service: interference; loss of clear, contiguous channels; blocked transmissions; an increasingly cumbersome and complicated channel plan; and an inability to maintain nationwide and cross-border interoperability. The risk of interference is of particular concern to the railroads because of the safety applications of railroad radio communications and the resulting need for constant access to clear channels. A transmission that is blocked or obscured due to interference could easily result in serious injury to life and property.

In separate letters to the Commission both the National Transportation Safety Board (NTSB) and the Federal Railroad Administration (FRA) described the public safety threat

that consolidation would represent.[2/] The NTSB, which regularly investigates and makes official recommendations on safety measures and practices, emphasized that consolidation would result in an increased risk of co-channel and adjacent channel interference. The NTSB concluded that consolidation "would have serious negative consequences for railroad safety."[3/] The FRA echoed this point: "[t]he Commission's consolidation proposal will endanger safety by compromising the very tools the railroad industry relies on to preserve safety...The continued authorization of the Railroad Radio Service is imperative."[4/]

In addition, the Railway Association of Canada, which represents thirty-one member companies, urged the Commission to reject any "proposals which would see the railways in the United States lose exclusive control of their assigned frequencies," stating that "both public and railway safety are radio dependent and loss of control could seriously compromise both safety and commercial viability of the industry.[5/] Numerous submissions from American and Canadian railroads reinforced these points.[6/] Thus the agencies charged with

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2/ Letter from Jolene Molitoris, Administrator of the FRA to FCC Chairman Hundt (filed December 12, 1995) in PR Docket No. 92-235 (FRA Letter); and Letter from NTSB Chairman Hall to FCC Chairman Hundt (filed December 15, 1995) in PR Docket No. 92-235 (NTSB Letter).

3/ NTSB Letter at 1-2.

4/ FRA Letter at 3.

5/ Letter from R.H. Ballantyne, President of the RAC, to FCC Chairman Hundt (filed December 13, 1995) in PR Docket No. 92-235 at 2.

6/ See, Comments of Burlington Northern Santa Fe Corporation (filed November 20, 1995) in PR Docket No. 92-235; Comments of CP Rail System (filed November 20, 1995) in PR Docket No. 92-235; Comments of Amtrak (filed November 20, 1995) in PR Docket No. 92-235; Comments of Union Pacific Railroad and Missouri Pacific Railroad (filed November 20, 1995); Comments of Norfolk Southern Corporation

(continued...)

oversight of railroad operational and safety matters, as well as the railroads themselves have expressed their firm opposition to consolidation. Rather than simply repeat those comments here, the discussion below confines itself to the specific concerns raised by the various consolidation proposals.

A. The Joint Pool Proposal of the Personal Communications Industry Association, Industrial Telecommunications Association, Alliance of Motion Picture and Television Producers, Newspaper Association of America and Telephone Maintenance Frequency Advisory Committee ("ITA/PCIA")

ITA/PCIA advocated the most extreme consolidation proposal, a two pool arrangement consisting of a "Public Service" pool and a "Public Safety" pool. Under this proposal, the railroads would be placed in the "Public Service" pool along with power, petroleum, forest products, film and video production, relay press, special industrial, business, manufacturers, telephone maintenance, motor carrier, taxicabs, automobile emergency and radiolocation.[7/]

The prime motivation behind the ITA/PCIA pool proposal, as expressed by its members at joint industry meetings and in its proposal is "more efficient distribution of additional channels created as a result of the transition to narrowband technology."[8/] For

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6/(...continued)
(filed November 20, 1995); and Comments of CSX Transportation, Inc. (filed November 20, 1995) in PR Docket No. 92-235.

7/ The Joint Pool Proposal of the Personal Communications Industry Association, Industrial Telecommunications Association, Alliance of Motion Picture and Television Producers, Newspaper Association of America and Telephone Maintenance Frequency Advisory Committee (filed November 20, 1995) at 2.

8/ ITA/PCIA summary.

ITA/PCIA "more efficient distribution" is shorthand for access to additional frequencies. If the ITA/PCIA proposal is adopted as regards to the railroads, however, access would be achieved at the cost of compromising safety. For AAR that is an unacceptable price to pay.

In its comments AAR pointed out the flaw in the "access to channels" argument as a justification for consolidation. The Commission dealt with this issue under the rubric of "disparities in channel usage" in its R&O.[9/] The problem with usage disparities as a basis for consolidation of the Railroad Radio Service is that traditional measurements of channel utilization are inappropriate indicators of railroad use. They fail to take into account the fact that even when a railroad channel is not actively transmitting, it must remain immediately accessible.[10/] For the relay of information that could prevent a derailment or that is necessary to coordinate an emergency response, frequency availability must be virtually 100%. This fact was recognized by UTC, The Telecommunications Association, which affirmed that, for certain users, "availability of a clear channel is just as important as the use of that channel."[11/] The ITA/PCIA proposal is flawed precisely because it would seek to maximize the number of users per channel by sacrificing the railroads' need for constant access to clear channels. The end result would be similar to citizens' band (CB) radio, with

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9/ R&O at ¶ 43.

10/ Comments of AAR (filed November 20, 1995) at 24-25.

11/ Comments of UTC (filed November 20, 1995) at 7. See, also a 1977 Commission study, cited in AAR's Comments, whose authors stated that railroad channels have safety applications "where availability of channels, when needed, is more important than the number of users that can be accommodated on a channel." Larry D. Reed, Keith A. Larson and William V. Tranavitch, "Land Mobile Spectrum Utilization Chicago, Illinois-Categorization of Long-Term Data," Safety and Special Radio Services Bureau, Report No. SMD 77-01 at 5 (December 1977).

many users vying for access to channels in a "party line" environment. This result would be intolerable for the railroads and would inevitably lead to accidents.

ITA/PCIA also misstated the facts in their attempt to show that the separate service allocations no longer make sense. Specifically, ITA/PCIA claimed that

> there is no compelling explanation for the fact that the railroad industry has its own service classification, with its unique block of assigned frequencies, while the airline industry was integrated into the Business Radio Service and forced to compete with a multitude of industrial entities.[12/]

As ITA/PCIA should know, the airline industry's Business Radio Service frequencies, commonly known as "air terminal utility" (ATU) frequencies, are related primarily to the coordination of the provisioning of the aircraft, i.e., fuel trucks, catering vehicles and baggage handler vehicles. By contrast, ITA/PCIA conveniently ignored the fact that the aeronautical en route frequencies set forth in Part 87 of the Commission's Rules and under the exclusive control of ARINC, Inc. and the Air Traffic Control frequencies under the exclusive control of the Federal Aviation Administration (FAA) are not shared with other users. As AAR pointed out in its comments, it is the aeronautical en route and the Air Traffic Control frequencies which are analogous to railroad frequencies.[13/] The identical safety imperatives which dictate that ARINC and the FAA retain exclusive control over their allotted frequencies also dictate that the railroads retain exclusive control over their frequencies. All are indispensable to accident avoidance.

12/ ITA/PCIA at 4.

13/ AAR at 15-16.

ITA/PCIA's statement concerning separate service allocations also ignores the rationale for the creation of the Railroad Radio Service. AAR's comments discussed in detail the history of the Railroad Radio Service. The Commission created the Railroad Radio Service for the purpose of "preventing rail accidents and ...reducing the seriousness of injury and damage after accidents, by permitting the prompt summoning of aid."[14/] As the 1994 Report to Congress by the FRA and the recent letters to the Commission from the NTSB and the FRA clearly demonstrate, the preservation of the Railroad Radio Service is just as, if not more, important today, as it was at its inception.[15/] If ITA/PCIA do not consider safety a "compelling explanation," what guarantee is there that they will protect railroad communications in a pooled environment?

The inaccurate characterization of airline and railroad radio use is not the only instance in which ITA/PCIA displayed a fundamental lack of awareness of radio use by other industries. The ITA/PCIA proposal to set aside specific frequencies for "unique requirements," such as for slave locomotive control and fixed point-to-point telemetry,[16/] demonstrates a notable unfamiliarity with railroad radio use which would prove very dangerous in a consolidated environment. ITA/PCIA does not appear to comprehend that the vast majority of railroad communications are safety-related. It is impossible to separate out

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14/ Amendment of Part 93, Subpart H, Railroad Radio Service, Report and Order in Docket No. 16780, 5 FCC 2d 842 (1966).

15/ "Railroad Communications and Train Control," Federal Railroad Administration, Office of Safety, Report to Congress, July 1994; See, also Letter from Jolene Molitoris, Administrator of the FRA to Chairman Hundt in PR Docket No. 92-235 (filed July 13, 1994) (FRA Letter #2).

16/ ITA/PCIA at 6.

the non-safety uses on railroad channels just as it is impossible to separate out the non-safety uses on aeronautical en route or Air Traffic Control frequencies. ITA/PCIA's proposal ignores the fact that dispatch-to-train communications for the purpose of rail traffic control, ensuring safe separation distances between trains and for coordinating emergency responses are just as critical as communications related to control of slave locomotives and fixed point-to-point railroad telemetry. Equally essential are mobile-to-mobile communications between train crews engaged in the hazardous work of coupling and uncoupling trains in rail yards or repair work along the railroad right-of-way. These communications cannot be prioritized in terms of the protection they should receive. They are all necessary to ensure safe conditions along the railroad right-of-way.

Furthermore, the ITA/PCIA proposal is based on several flawed assumptions regarding spectrum management arrangements and technology choices. For example, ITA/PCIA asserted that

> [w]ith protected service areas, and the introduction of trunking technologies and digital techniques, it becomes impossible, as a practical matter to distinguish between different types of communications...The only considerations are sufficient co-channel and adjacent-channel separation.[17/]

The exact meaning of this statement is unclear. If ITA/PCIA meant that the new technologies and the implementation of protected service areas (PSAs) will adequately protect all communications, they could have only arrived at that conclusion by a leap of faith that the railroads cannot make for the following reasons:

17/ Id. at 2.

First, ITA/PCIA's conclusion rests on the faulty assumption that PSAs will be the predominant spectrum management arrangement. While AAR supports the concept of PSAs, the difficulties in achieving mutual agreement regarding implementation of PSAs in heavily congested metropolitan areas, as well as the problem of overlapping service contours, the so-called "daisy chain effect," mean that the actual use of PSAs will be limited in scope. Indeed, Motorola -- a recognized expert in the management, engineering and administration of mobile radio systems -- concluded that PSAs would be "exceedingly difficult to administer and manage."[18/] The American Mobile Telecommunications Association (AMTA) reinforced this point when it noted that

> [t]he geographically random siting of stations and intensive reuse of shared frequencies in these bands will make it extraordinarily difficult, both practically and economically daunting, for parties to clear enough spectrum to achieve exclusivity and thereby the ability to implement technologies such as trunking which are not compatible with shared channel usage.[19/]

AMTA correctly added that this level of difficulty will be increased exponentially when all of the offset channels are available for licensing.[20/]

AMTA's comment regarding the use of trunking highlights a second flawed assumption in the ITA/PCIA proposal; that the implementation of trunking will eliminate the need for service distinctions. Trunking is not suitable for all systems or for all users. For instance, it is unlikely that services which have large numbers of small users will be able to achieve the consensus regarding control over access that is necessary to implement trunking.

18/ Comments of Motorola (filed November 20, 1995) at 3.

19/ Comments of AMTA (filed November 20, 1995) at 8.

20/ Id.

Even in services where consensus will be possible, trunking is not appropriate for communications where channel access time is a concern. For example, trunked communications would be unsuitable for communications related to switching rail cars where continuous rapid transmissions are necessary to guide the process. If the switching crews are not guaranteed instantaneous access to clear channels, the result could be disastrous. Similarly, in man-to-locomotive transmissions, for instance where a crew member on the ground is guiding a train in a rail yard, delayed channel access could easily lead to an accident. Thus, the presumption that trunking eliminates the need for separate channel allocations is flawed because trunking will not and cannot be implemented by all users.

In addition, ITA/PCIA's faith in the ability of geographic separation criteria[21/] to avoid any interference problem is misplaced. In order to arrive at accurate geographic separation criteria, coordinators will need information which is not currently required or available on FCC licenses and which would be extremely difficult to verify. Working Group 8.8 of the Telecommunications Industry Association has drafted a list of "data elements" which would be necessary to "facilitate spectrum management" (attached).

The likelihood of coordinators being able to both collect and verify this information is minimal at best. Many operators, particularly small users in the Business Radio and Special Industrial Services, know only enough about their systems to keep them operational. They are not readily conversant with technical parameters such as effective radiated power and maximum antenna gain. Most importantly, and unlike the railroads, because these entities' primary use of radio is not safety-based, interference is not a prime concern. Indeed,

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21/ ITA/PCIA at 2.

interference is a common occurrence on the congested shared business channels and the users on such channels have viewed interference merely as an inconvenience and have been able to live with it. They would thus have little incentive to be accurate in their reporting concerning these necessary "data elements."

In order to police interference in a pooled environment such as the one proposed by ITA/PCIA, interference would first have to occur. But as the railroads have repeatedly stated and in contrast to the majority of users with whom ITA/PCIA would have the railroads share frequencies, the risk of interference is intolerable because it results in blocked or obscured transmissions, which in turn can cause accidents and injury to life and property. Whatever benefits would accrue as a result of this system would be more than outweighed by the increased risk of accidents and the threat to life and property. All it takes is one blocked transmission for an accident to occur. The far wiser option, the one that would best serve the public interest, would be to preserve the railroads' contiguous block of frequencies intact, as they are today.

Finally, the ITA/PCIA assertion that "[t]he only considerations are sufficient co-channel and adjacent-channel separation"[22/] ignores the fact that both channel planning and channel quality are important to railroad safety. Consolidation threatens the reliability of railroad communications not just because it will increase the potential for interference, but also because it will threaten the ability of the railroads to preserve nationwide and international (i.e., cross-border) interoperability. AAR's comments explained how nationwide and international interoperability is a key component of railroad radio use -- a

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22/ Id.

component that makes the railroads unique among all other user groups. The railroads' channel plan is national and equipment must be interoperable on a nationwide and cross-border basis because of track and equipment sharing arrangements among the railroads.

Interleaving non-railroad users on railroad channels will lead to an extremely cumbersome and complicated channel plan and will make it impossible for the railroads to preserve uniform channel assignments for similar applications as they convert to narrowband. In addition, the more complicated the channel plan, the more complex the radio equipment will be to operate. This will have a direct impact on safety. The ITA/PCIA consolidation proposal fails to address these concerns. Indeed, any consolidation plan would, by definition, pose a threat to nationwide and international interoperability because it would allow all users within the pool access to railroad channels.

B. The UTC "Criticality of Function" Pool Proposal and the API Industrial Safety Service Fail to Protect Railroad Radio Communications

Both UTC and API proposed pool arrangements which ostensibly protect "priority" services. Whether truly motivated by safety concerns or by other non-safety-related concerns, neither of these proposals guarantees the railroads the reliable communications they require.

UTC proposed a three pool consolidation arrangement: (1) an "Emergency Response" pool to be composed of police, fire, emergency medical, and special emergency; (2) a "Public Service" pool to be composed of local government, highway maintenance, forestry-conservation, power, petroleum and railroads; and (3) a "Business/Commercial" pool to be composed of forest products, film and video production, relay press, special industrial,

business, manufacturers, telephone maintenance, motor carrier, taxicab, and automobile emergency.[23/]

API proposed a five pool arrangement: an Industrial Safety Service, an Emergency Response Safety Service, a Non-Commercial Radio Service, a Specialized Mobile Radio (SMR) Service, and a General Category Service accessible to all users. Railroads would be placed in the Industrial Safety Service along with pipelines, refineries, hazardous material transportation, public utilities and other users who rely on radio for "essential safety communications."[24/]

UTC stated that its pool proposal was shaped by the "relative criticality of functions" served by different users.[25/] API followed a similar course by grouping together users who ostensibly rely on radio for "essential safety communications".[26/] AAR agrees with both UTC and API's statements that access to clear channels is imperative for users, such as the railroads, who rely on their communication systems for vital safety functions. AAR disputes, however, UTC and API's claims that their consolidation proposals will guarantee and preserve clear channels. Their pool proposals would deprive the railroad industry of the very control over channel assignments that has guaranteed the extremely high reliability and access to clear channels that railroad safety requires. This loss of control would effectively

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23/ UTC at 6.

24/ Supplemental Comments of API (filed November 20, 1995) at 7-10.

25/ UTC at 4.

26/ API at 7.

deprive the railroads of the ability to plan for the future, making it correspondingly more difficult to develop and introduce safety-related applications and equipment.

Most importantly, the UTC and API proposals would expose railroad communications to harmful interference. The discussion regarding the ITA/PCIA pool proposal outlined the dangers of interleaving non-railroad users on railroad channels and the near impossibility of developing accurate geographic separation criteria. The API and UTC pool proposals, along with all of the pool proposals, are subject to these same problems. It is, therefore, inevitable that interference will occur if either the UTC or the API pool proposal is adopted. Because interference could block a safety-related transmission, the risk of pooling is unacceptable for the railroads. Prevention of interference through preservation of the Railroad Radio Service is clearly preferable to curing interference if consolidation takes place.

AAR also has serious concerns regarding a fundamental premise of the API and UTC proposals; that "priority" users can and should be grouped together. Coordination and interference problems threaten to be most contentious in a group where all the users claim priority. If one "priority" service causes interference to another "priority" service and both claim that their communications are essential and cannot be interrupted, it will be extremely difficult, if not impossible, to resolve the problem. The difficulty in balancing and reconciling these various claims for access to channels would threaten to make coordination and resolution of interference an impossible task.

API itself acknowledged some of the problems inherent in consolidation. It noted that "[c]onsolidation of the radio services, if not properly designed, could result in the chaotic

and unsafe implementation and operation of PLMRS systems."[27/] It also affirmed that "the current service organization and frequency coordination has functioned quite well."[28/] These statements accurately reflect railroad experience and concerns. In light of the success of the current system and the grave dangers posed by consolidation, the Commission has a significant burden to overcome in order to turn its back on over fifty years of regulatory practice and the advice of the FRA and the NTSB. Neither the Commission nor the proponents of consolidation have overcome this burden in regards to consolidation of the Railroad Radio Service.

For both the airline and railroad industries, the safety of personnel, passengers and property depends on reliable communications. Both industries rely on radio to perform similar safety-related functions. These safety-related applications reflect the constant and ubiquitous nature of safety concerns along airline and railroad rights-of-way. Because of these concerns, the railroads cannot accept the interference risks inherent in the UTC and API proposals. Instead, railroad frequencies must be treated similarly to aeronautical en route and Air Traffic Control frequencies, i.e., preserved separately from other mobile radio services.

C. The Coalition of Industrial and Land Transportation Users Consolidation Plan Should Be Rejected by The Commission

Finally, the Coalition of Industrial and Land Transportation Users (Coalition) submitted a four pool arrangement: a Public Safety pool, a Business pool, an Industrial

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27/ Id. at 6.

28/ Id.

Utilities pool, and a Land Transportation pool. The railroads would be placed in the Land Transportation pool along with motor carriers, taxicabs and automobile emergency services.[29/]

This pool proposal suffers from the same flaws as the pool arrangements discussed above. The Coalition itself specifically acknowledged that "consolidation is based on flawed premises...and is not necessary to facilitate the introduction of new technologies."[30/] The Coalition pool proposal would allow a multitude of non-railroad users to be interleaved on railroad channels which would lead to interference and a consequent decrease in the reliability of railroad communications. Moreover, while the Coalition proposal was ostensibly guided by the principle of "user compatibility",[31/] it would group together users such as railroads and taxicabs, who vary greatly in their spectrum needs and applications.

In sum, although all four consolidation proposals differ in terms of the composition of the proposed pools, all four, as applied to the railroads, would lead to unsafe conditions and an increased risk of accidents. The agencies charged with official oversight of railroad safety, as well as the railroads themselves within the United States and in Canada, have recognized this threat. The collective view of these parties, who are the entities most intimately familiar with the unique needs of railroad operations, is that the rationale for the creation of the Railroad Radio Service and the allocation of separate frequencies for the railroads is just as, if not more, valid today as it was at its inception. Whatever

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29/ Coalition Consolidation Plan (filed November 20, 1995) at 3.

30/ Id. at 2.

31/ Id. at 3.

consolidation plan is ultimately adopted by the Commission should reflect these concerns and the public interest by maintaining a separate Railroad Radio Service intact.

II. The Proposal to Auction Geographic Overlay Licenses Was Unanimously Opposed and Should be Rejected by the Commission

The Commission's proposal to create geographic overlay licenses in the bands below 512 MHz and assign these licenses through a competitive bidding process, was universally opposed by the commenters.[32/] Moreover, the Commission does not currently have the statutory authority to carry out this proposal. In the case of the railroads, auctions pose a particular threat because of the safety applications of railroad radio use.[33/] In its comments AAR emphasized the fact that auctions would make public safety hostage to the highest bidder. In an auction scenario, the railroads could never be assured that they will have access to the frequencies they require for critical train control and other safety-related functions. If someone outbids a particular railroad for frequencies, that railroad could be forced to operate its trains without the use of radio communications -- a virtual impossibility in this day and age. In addition, as the Alarm Industry Communications Committee (AICC) warned, competitive bidding would attract "spectrum slumlords" who would have a strong incentive to drive existing licensees off the band by creating interference problems and

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32/ See Comments of Alarm Industry Communications Committee (AICC) at 3-4 (filed November 20, 1995); Comments of American Gas Association (AGA) at 4 (filed November 20, 1995); API at 13; Comments of American Trucking Associations, Inc. (ATA) at 13 (filed November 20, 1995); Comments of Ericsson at 2 (filed November 20, 1995); Comments of International Taxicab and Livery Association (ITLA) at 11 (filed November 20, 1995).

33/ AAR at 28-34.

engaging in other harassing tactics.[34/] Such practices would have an immediate and adverse impact on railroad safety.

Furthermore, as AAR and many other commenters explained, adequate incentives already exist to spur the conversion to narrowband technology. PLMR entities pointed to the severe congestion problems in the bands below 512 MHz, as well as pent-up demand and the need to accommodate system growth, as sufficiently compelling incentives for the transition to narrowband.[35/] In light of these powerful natural incentives, the addition of a market incentive such as auctions, is unwarranted and unnecessary.

Given the existing incentives to convert to narrowband and the real public safety threat if auctions were adopted, subjecting railroads to auctions would be arbitrary and capricious. If auctions are adopted, the railroads should, therefore, be exempt. Such an exemption would be consistent with explicit Congressional recognition of the important public safety role of railroad radio networks as set forth in Section 303(k) of the Communications Act of 1934, as amended, and elsewhere.[36/]

III. PLMR Users Agreed That User Fees Are Unnecessary and Inappropriate

In response to the Commission's proposal to impose spectrum use fees, users and manufacturers alike repeated their view that the Commission's channelization plan has already laid the groundwork for the transition to narrowband and that adequate incentives to

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34/ Comments of AICC (filed November 20, 1995) at 4.

35/ Id.

36/ 47 U.S.C. § 303(k); see, also, Colloquy between Senators Pressler, Stevens and Packwood, 98 Cong. Rec. S8469 (daily ed. June 15, 1995).

convert to narrowband technology already exist. Indeed, some parties warned that user fees would act as a powerful disincentive to licensed operation.[37/] Many small users faced with payment of user fees or the risk of unauthorized use of the spectrum would willingly risk unauthorized operation to avoid the extra financial burden of spectrum use fees.

A few parties claimed that user fees would be preferable to auctions.[38/] As the comments of the Land Mobile Communications Council (LMCC) and AAR pointed out, however, there is no reason to single out the Part 90 users for the imposition of user fees.[39/] Anything less than universal application of user fees would be arbitrary and capricious. ATA correctly stated that "if spectrum is a commodity and the 'opportunity cost' of spectrum is a constant that applies to all types of users, there can be no islands of privilege."[40/] Targeting the non-subscription based Part 90 users for the imposition of user fees, particularly after the vast majority will be making a very significant investment to convert to narrowband technology, is inequitable.

IV. PLMR Users Are Not Interested In Resale of Excess Capacity

The comments revealed widespread disapproval of the Commission's proposal to allow co-channel users who agree to shared exclusivity to resell excess capacity. Commenters explained that resale is inappropriate in the private services where users rely on

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37/ Comments of APCO at 6 (filed November 20, 1995); FIT at 12; AMTA at 11.

38/ Comments of Nebraska Public Power District (NPPD) at 8 (filed November 20, 1995); API at 5; Motorola at 8.

39/ LMCC at 17; AAR at 37.

40/ ATA at 11.

spectrum for internal needs.[41/] Other commenters warned that resale would encourage commercial speculation, further undermining the ability of private users to build and operate reliable communications systems.[42/] Most importantly, PLMR entities, including the railroads, pointed out that resale is not a useful option because most PLMR users do not experience significant excess capacity. In the metropolitan areas, for example, almost all PLMR users are experiencing severe congestion.

Conclusion

In the R&O in this proceeding, the Commission established a channelization plan and related rules which will form the basis for a conversion to more spectrally efficient technology. This plan has the support of the vast majority of commenters. Now is the time to implement those rules and allow the technology conversion to take its course. Additional incentives to spur the transition to narrowband equipment are unnecessary and, in the case of auctions, would threaten the safety of railroad operations and the very fabric of PLMR operations. AAR, therefore, urges the Commission to reject the use of auctions and users fees as well as the resale of excess capacity.

The Commission has also proposed a consolidation of the PLMR services in order to remedy perceived "usage disparities" and to help users attain contiguous channel blocks for the implementation of spectrally efficient wideband technology. However, the consolidation

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41/ See APTA at i; Comments of the United and Central Telephone Companies (filed November 20, 1995) at 4; AICC at 8; API at 12.

42/ API at 12.