

Before the  
Federal Communications Commission  
Washington D.C. 20554

In the Matter of:	)	
Amendment of Part 95 of the	)	
Commission's Rules to provide	)	WT Docket No. 98-169
regulatory Flexibility in the	)	RM-8951
218-219 Mhz Service	)	
Amendment of Part 95 of the	)	
Commission's rules to allow	)	WT Docket No. 95-47
Interactive Video and Data	)	Rm.-8476
Service licensees to provide mobile service	)	(proceeding
terminated)	)	

To: The Commission

Reply Comments of  
Interactive Video Data Service Trade Association Inc.  
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## Summary of Reply Comments

ISTA would like to thank all those that have contributed to this rulemaking. It is in the interest of all that we have an exchange of idea's. We believes that these idea's will result in the facilitation of the modernization to a government agency which is vital to the interest of the American business and the public at large. We believe that the free market should determine to correct use of telecom spectrum. We believes that overly burdensome regulations should be eliminated and that most spectrum should be placed in private ownership. We believes that centralization, micro management and obscure processes should be eliminated. We believes that unnecessary regulation imposes costs on industry without considering the benefits.

We support the belief that wherever possible, the Commission should abolish all needlessly rigid restriction. Business should be free to operate its telecommunications systems with little government supervision as long as crimes are not perpetrated against the public and that interference issues are identified and corrected between the parties of concern.

We believe that the Commission should base its new license term on a ten year basis beginning at the time of the release of the 218-219 Mhz Report and Order.

We believe that the Commission should adopt an automatic grace period for all IVDS auction and lottery winners. We believe that an emergency buyout of licenses should be put into place with a full refund. We believe that the implementation of a policy that will allow licensees that lack the funds or the desire to develop their licenses to exit the service. We agree the Commission should encourage those that are not qualified to exit the spectrum immediately. We also agree that the Commission to fulfill its responsibilities to the public, must ensure the only financially qualified parties hold public trusted spectrum. We believe that those that wish to exit should not be punished for this decision.

We believe that the Commission should move with speed for a new auction of 218-219 Mhz.

I.

In the NPRM, the Commission has correctly proposed to apply this "Marketplace" policy to the 218-219 Mhz Service, and permit the broadest possible use of 218-219 Mhz communications which do not produce harmful electrical interference to others. We agree that licensed services should be free to operate its systems within the broad requirements of the Communications Act. We agree that artificially limited types of service should be eliminated. We agree that the public interest is well served by letting the marketplace develop efficient uses for spectrum. We believes that interference issues should be regulated by a non government entity. We also believe that proposals regarding permissible uses of 218-219 Mhz Service, liberalization of construction requirements and technical restrictions, and elimination of the cross-ownership restriction, will make expansion of 218-219 Mhz Services operations easier, and this flexibility assists all licensees, including small business licensees. We also conclude that a flexible approach to regulation of the 218-219 Mhz Service will afford all providers, including small businesses, the ability to respond to market forces and demands for service relevant to their particular locations and service offerings. We agree with the of the Commission that these actions will establish a flexible regulatory framework for the 218-219 Mhz Band that will encourage spectrum efficiency, technical innovation, and competition by these licensees in the wireless marketplace, and serve the ultimate goal of ensuring that the spectrum at 218-219 Mhz will provide the greatest benefit to the public.

II.

The re designation of this service as the 218-219 Mhz Service will better reflect the breadth of services that will evolve in this spectrum. We agree that 218-219 Mhz service should be brought into equal parity with other services. With re designation comes new latitudes of regulation which includes the terms granted to other spectrums. A licensee's use of the PSN or CMRS should also permit the services granted other PSN or CMRS services with full interconnected services. The rules should not and do not limit the type of services offered. RTU to RTU with full interconnected service to the LEC should be allowed for both voice and data access to the IP addressable services. Greater parity of Power and elimination of duty cycle should be allowed to offer greater parity with other services. (AMTS) , ( SMR) and (PCS). In doing so, we reasoned that consumers, through market forces, should determine the variety of uses for this allocation, whether PSN or CMRS. We therefore recognize that allowing unrestricted mobile operations may promote flexibility with the service. Unrestricted access to interconnected services give equal parity to 218-219 Mhz services as with AMTS 216-220 Mhz services with 25 watts fixed power and 25 Watts mobile power with no duty cycle restrictions.

1.

III.

We agree with the extension of the license term for stations licensed in the 218-219 Mhz Service from five to ten years, which would result in a re amortization of the installment plan principal and interest payments from three

to eight years. This would offer greater parity with PCS and SMR terms and conditions. We also recognized some special conditions that have effected IVDS which require some extraordinary treatment of the situation. Because of the flawed agreements and confusion surrounding the payment schedules and correct filing of grace requests, we believe that the treatment of "default" and "grace" should be revisited. With the renaming of the spectrum should come the beginning of a new spectrum without punishment to those that have formally filed for ownership of spectrum. Those that filed initially for licenses both lottery or auction have legally tendered the right to acquire such licenses and those rights should not be eliminated do to the confusion over correct procedures and processes administered by a government agency. The legal right to acquire should be granted or extended to include the new conditions and procedures of the newly form spectrum. The terms and conditions of the new spectrum should begin at the time of the creation of the new spectrum. The terms of the past spectrum should be determined to have been replaced by the new terms and conditions. The beginning date of these new terms and conditions should begin at the formal time of the creation of the new spectrum, 218-219 Mhz Report and Order.

All installment payments and grace filing under the old spectrum of IDS should be considered null and void with respect to the new spectrum 218- 219 Mhz. All terms and conditions will be determined in the report and order. We would respectfully request that those that have paid money's to the US Treasury be granted credit for those payment. We respectfully request that a "deadline of determination and agreement" with short duration be granted to those that hold tender offers with the FCC for the right to purchase particular spectrum. We suggest that the commission go forward with its plan of re amortization of a ten year term of license beginning with the creation of the new spectrum at the time of the Report and Order. We suggest that all terms and conditions are rolled over to that time of the new Report and Order.

We also recommend that the commission offer a buyout package for those that wish to surrender the past option on a future option to purchase spectrum in 218-219 Mhz. We recommend that a complete buyout package shall include a complete refund except for the filing fee's. We also suggest that no penalties be placed on any future options to enter into a auction on future options to purchase 218-219 Mhz.

2.

Financial alternatives:

1. Surrender all licenses for a complete refund less the filing fee. Banned from future auctions for a period of 2 years.
2. Signature of a new financial documents, amortizing the payment obligations over the ten-year license term, with all unpaid interest being repaid as part of the next eight payments.

3. Surrender any licenses they choose to the Commission for reaction and, in return, have all of the outstanding debt on those licenses forgiven, choosing either to (1) Receive no credit for its down payment but remain eligible to bid on the surrendered licenses in the reaction, with no restriction on after market acquisitions; or (2) obtain credit for 70 percent of its down payment and forego for a period of two years from the start date of the reaction eligibility to re acquire the licenses surrendered through either re auction or any other secondary market transaction.

4. Fail to timely and properly adopt either of the other options, and be held to the original five-year payment schedule

IV.

Service and Construction Requirements: These rules were crafted in the 1992 Allocation Report and Order in the context of awarding licenses by lottery, and were intended "to reduce the filings of speculative applications by entities that have no real intention of implementing an IVDS System. The use of auctions to award licenses reduces the incentives for speculation, and therefore, the one, three and five year benchmarks are unnecessary. We believe that it was a good decision by the commission not to enforce these build out while relevant Commission policy were subject to review in the proposed rule making. We disagree with Petitioners that all construction benchmarks should be eliminated, we believe that strict construction requirements are not the most suitable and effective means of addressing these obligations. Construction benchmarks should be consistent with those presently used in other services. The term "substantial service" or 20% for the population or land area is adequate enough to provide individual motivations without unwarranted government control and regulation. Specialized or technologically sophisticated service may not require a high level of coverage to provide advanced services to a niche market. We agree that failure to meet the benchmark would result in automatic termination of the license.

3.

Following the argument of ITV and IALC who respectfully suggest that, as applied to the existing 218-219Mhz Service licensees, these requirements are redundant and excessive. As stated by ITV and IALC, "The problem is that "five years from the effective date of such rules promulgated pursuant to the NPRM is roughly at the end of the existing IVDS license term. The lottery - winning IDS licensees received there licenses on March 28, 1994; unless the Commission is proposing to grant the ten-year licenses starting now, their ten-year license term is up in March 2004. The auction winning IDS licenses received their licenses in December 1995 or January-February 1996; their ten-year license term is up in December 200r or January-February 2006"...."Given the normal pace of the Commission's rulemaking, it is reasonable to assume that this rulemaking will conclude, and promulgate rules, in the second quarter of 1999.....Thus, the proposed five-year deadline for assessing substantial service would likely fall

in the second quarter of 2004. This deadline is virtually the same as the lottery winner's (assumed) ten-year license renewal date, and within 12 months of the auction winners license renewal dates.'...."In other words, the five years after rulemaking" deadline for assessing substantial service is more or less the same as the license-renewal dates for all existing 218-219 Mhz licensees. The public interest is not served by having two construction deadlines falling with a short period of time."

In agreement with ITV and IALC argument we would also have to assume that substantial service and the beginning of the license term would coincide with the allocation of a new spectrum on the date of the forthcoming Report and Order. All bench marks should begin with the re negotiation of the loan agreements.

V.

License Transferability: We believe this is a business decision best made by those who are managing the business. We agree with Stephen Kaffee that "one of the most important elements of free market is the ability to efficiently allocate needed resources- a process which takes place by unrestricted purchase and sale of those resources. The most persuasive rationale for preferring auctions of FCC licenses to lotteries was the efficiency of the former process in putting licenses into the hands of those who value them most. 2

" Bay area recognizes the value of ensuring that the government receives appropriate value for use of a public asset. However, other methods would accomplish that purpose more effectively with discouraging participation by small business as auctions do. The best approach would be one which gave the government a continuing interest in the revenues generated with the spectrum, since that would ensure that the public received the actual long-term value of the spectrum rather than the perceived value at an instant in time. The spectrum (such as an ownership interest or an annual tax)

That rationale neither ends with the auction, or applies only to licenses awarded by auction. The Commission has a continuing interest in ensuring that all of its licenses are held by those who value them most highly and can use them most efficiently. This truth applies to all 218-219Mhz licenses, not just to those awarded by auction.

4.

We would agree with Mr. Kaffee and Bay Area that the time for "Unjustly enriched" lottery license holder sales has " passed under the bridge". The commission should be more concerned with the efficient use of licenses in 9 of the 10 largest markets in the nation than with the profit that a licensee might receive from a sale years after it obtained the license.

We agree the commission should also remove existing restrictions on the ownership of both the A and B frequency block in the same market. It would not serve the public interest to prevent such services from being developed with the use of more spectrum.

VI.

Spectrum Aggregation: We agree with Kingdon Hughes; " that the current 500Khz allocation for each 218-219Mhz Services is quite small compared to SMR, Cellular and PCS Services. Even the D,E and F blocks for PCS contain 10 Mhz of spectrum each with the same licensee being permitted to acquire more than one block. Therefore, the 500Khz limit imposes significant restrictions on the types of services that can be offered by licensees. Hughes agrees with the Commission's proposal to eliminate the cross ownership restrictions on the two 218-219Mhz Service spectrum blocks. Even the combined 1.0 Mhz level, the potential service offerings remain limited, but every step the Commission can take to make this service more viable should be adopted". ISTA would support the 218-219Mhz Service spectrum being included in any overall spectrum caps that are generally imposed on CMRS licensees.

VII.

We would also agree with Kingdon Hughes; "Partitioning and disaggregation go hand-in-hand with spectrum aggregation. In some cases it may be appropriate for a licensee to partition or disaggregated its license. In other cases, it may not. Some services offerings may require the entire 0.5 or 1.0 Mhz allocation; others may not. The is that such decision should rest with the licensee and not be restricted by rule. If the Commission's desire is to put the 218-219Mhz Service on par with other CMRS services, then partitioning and disaggregation must be available to licensees in this service." We conclude and agree with Kingdon Hughes.

5.

VIII.

Technical Standards: We believe that the Commission should use this rulemaking to eliminate a redundancy of regulations which makes the 218-219Mhz Service spectrum unique compared to other services that are closer to TV channels 4,5,6,69,10,11,12,13. These other spectrum allocations have operated in these capacities for as long as 15 years with no complaints of interference. We wish greater parity within the rules that would eliminate unfair anti competitive regulations in regards to interference issues. We believe that resolution of interference issues should be resolved by the private parties to the problem. The Commission has enough of a shortage of staff and money to take on the task of monitoring all spectrum for interference. Interference issues should be resolved by private business not the government.

We agree with William Franklin and ITV Inc and IDS Associates, LLC; "This approach is similar to that used by other services in adjacent bands. Other

services are authorized to transmit in frequencies adjacent to or nearby 219-219 Mhz with higher power levels than allowed at 218-219 Mhz and no duty cycle restrictions. The Commission notes (NPRM, Supra, & 54) that it has not received any complaints of interference to TV Channel 13 from any of these operations".

We also believe that the basis for interference studies "Eckert Report" should be revisited with testing done on TV that are built with the last 10 years. We also make note that the spectrum services in the 72 Mhz, & 75 Mhz have also operated for the past 10 years with less than 1.25 sideband guard spectrum with no complaints to TV channels four and five. TV channel 69 operates in close proximity to and FM carrier with no interference complaints.

We believe that further developments in television broadcasting have and will minimize the potential for interference from the 218-219 Mhz and other Services. At present, roughly 60% of all households are served by cable, direct-broadcast satellite, or various forms of MDS and are thus removed from the possibility of over-the-air interference to TV channels 13, 12, 11, 10, 7, 4, 6 and 69.

We have seen many tests conducted with the same results little or no significant interference results. ITV and IALC, Signal Science Inc., Berkeley Varionics Inc, Young Design Inc, Old Dominion University, College of Engineering and Technology and Orion Telecom Inc. have submitted test results verifying the lack of perceptible interference. Signal Science Inc., in its analysis, concluded that valuable 218-219 Mhz spectrum would be wasted if the Commission does not raise the maximum duty cycle in parallel with lowering the maximum ERP. Comments below have been submitted to testify that Spectrum 216-218 AMTS have had no problems with interference complaints with much higher transmission rates both fixed and mobile.

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Federal Communications Commission  
Washington D.C. 20554

In the Matter of )  
Amendment of Parts 2 and 80 of the )  
Commission's Rules Applicable )  
To Automated Maritime )  
Telecommunications Systems (AMTS )

PETITION FOR RULEMAKING

Fred Daniel d/b/a/ Orion Telecom, an AMTS licensee for system on the West Coast, East Coast and the portions of the Great Lakes, hereby petitions the Federal Communications Commission the amend Part 80 of the Commission's Rules to eliminate system engineering study requirements for AMTS applications for new and expansion systems, and fill-in transmission locations.

## I. Background

As a result of a U.S. proposal, the 1979 World Administrative Radio Conference (WARC) allocated the 216-220 MHz to the maritime mobile service in Region 2. The Commission allocated this band for use on the Mississippi River System by AMTS. Inland Waterway Communications System, 84 FCC 2d 875, recon., 88 FCC 2d 678(1981), aff' d. sub nom. WJG Tel. Co., Inc v. FCC., 675 F.2d 386 (D.C. Cir. 1982). Subsequently the Commission expanded the authorized service area of the AMTS to the Gulf Intracoastal Waterway (GIWW), 51 RR 2d 440 (1982) and the Gulf of Mexico, 56 RR 2d 1613 (1984). The Commission established the AMTS to provide automated, integrated, interconnected communications as a solution to complaints from the tug and barge operators that existing ship-to-shore service from individual public coast stations was not adequate.

Through the course of its deliberations regarding AMTS the Commission had concern about the potential for interference to reception of television, particularly from channels 10 and 13, and conditioned operation of AMTS coast stations on the requirement that no harmful interference be caused to television reception. Section 80.215 (h). TV channel 13 is adjacent to the AMTS band so there may be a potential for adjacent channel interference. Channel 10 (192-198 MHz) is one-half the TV intermediate frequency below the AMTS band so there may be potential for half IF" interference.

7.

The Commission further adopted some specific provisions to minimize the possibility of interference to television reception. There are 80 channels in the AMTS, divided into four groups - Groups A, B, C and D. Section 80.385. Applicants proposing to locate a coast station within 169 kilometers (105 miles) of a TV channel 13 station or 129 kilometers (80 miles) of a TV channel 10 station must submit an engineering study showing the means of avoiding interference within the Grade B contour of the TV station. Section 80.80.475(b)(1) and 80.215 (h)(2)-(4). Finally, if despite these precautions interference to television is caused, Section 215 (h)(4) requires the licensee to eliminate any interference caused within the Grade B contour of the TV station 90 days of being notified by the Commission. If the interference is not eliminated within the 90-day period, operation of the offending coast station must be discontinued. That rule also requires the AMTS licensee to help in resolving all complaints of interference, whether inside or outside the Grade B contour.

A study was conducted to analyze the interference potential from AMTS systems to TV reception. R. Eckert, Guidance for Evaluating the Potential for Interference to TV from Stations of the Inland Waterway Communications Systems, FCC/OST TM 82-5 (July 1982)(Guidance). This report is a model for applicants to use in performing any required engineering analysis of potential interference from AMTS systems to TV reception. This analysis was based on very conservative interference protection criteria. The TV picture quality used for the analysis was just perceptible interference. Further, the analysis does not account for the interference reduction due to TV receiver antenna discrimination. That is, generally, the TV transmitter and the AMTS transmitter would be in different directions from the TV receiver antenna. When that antenna is directed toward the TV station so as to enhance its reception, the AMTS signal, coming from a different direction, would end to be suppressed.

There are presently a number of AMTS systems serving various areas of the United States. The oldest of these, licensed to Watercom, serving the Mississippi River and the GIWW. Other systems are licensed to Paging Systems Inc. and Fred Daniel d/b/a/ Orion Telecom along the East and West coasts of the US, as well as a number of the Great Lakes. Since the introduction of AMTS services in 1982, not a single case of reported TV interference from AMTS operations has been recorded.

There have been a number of other proceedings with respect to AMTS, including RM-5712, adopted January 10, 1991 making AMTS systems available nationwide and this also provided for blanket licensing of AMTS users.

In 1995 the Commission issued a Further Notice of Proposed Rulemaking continuing its efforts to provide adaptive regulations and improve communications capabilities in the Maritime Service begun in its Notice of Proposed Rule Making and Notice of Inquiry (NOI) released November 30, 1992.<sup>^</sup> In this proceeding the Commission reallocated 1 MHz of spectrum from AMTS to a new Interactive Video and Data Service (IDS).

8.

In 1997 the Commission issued its Second Report and Order and Second Further Notice of Proposed Rule Making in PR Docket 92-257, released June 26, 1997. The Commission amended its rules to allow public coast stations, including AMTS, to serve units on land, both fixed and mobile (including hand held units). In addition, the Commission sought comment on a number of other proposed rule changes. The Commission tentatively concluded that AMTS licensees should be permitted to construct additional coast stations within their respective service areas, including fill-in sites and stations at remote locations, with a minimum of regulatory burdens imposed by the Commission.

## II. Discussion

To date the Commission has relied almost exclusively for guidance in assessing the potential for interference to TV reception from AMTS on the findings of Commission staff member Mr. R. Eckert, in his report, Guidance for Evaluating the Potential for Interference to TV from Stations of the Inland Waterway Communications Systems. The findings of this report, while prudent and cautious in their conclusions regarding the potential for TV interference from AMTS as relating to TV technologies available at the time of its issuance, may be entirely unreasonable today.

In Gen. Docket 88-372, released Aug. 8, 1988, the Commission noted that various commentaries<sup>^</sup> to this proceeding had quoted the Commissions own words with regard to nationwide AMTS service expansion, being that prudence requires an evaluation of an operating maritime system before the band is made available nationwide for such systems. The Commission properly placed these concerns in historical perspective by indicating that it had given restrictive approval for use of the 216-220 MHz spectrum along the Mississippi River only, for this very reason. During the initial one-year period the Commission noted that AMTS had not caused interference problems.

Since the inception of the AMTS, broadcasters have repeatedly, and incorrectly, portrayed the findings of the Eckert Report as an absolute indicator that interference to TV reception will occur. The very findings of the Eckert Report conclude almost exactly the opposite. The Report finds that, outside the Grade B contour of Channel 13 stations, interference is entirely unlikely to occur. Inside the Grade B contour there is only a possibility that harmful interference will occur.

This very reliance on an incorrect interpretation of the Eckert's findings has led to numerous unnecessary Petitions to Deny, filed by broadcasters against AMTS station applications. Each of these petitions states, as a matter of fact, that according to the formula put forward in the Eckert Report that a specific number of residences will suffer TV interference. The Eckert Report only states that there is the possibility, not the probability, that they may be adversely affected. The Commission noted, as early as Gen. Docket No. 80-1<sup>^</sup> para. 66, that the broadcasters statements are general in nature and somewhat vague.

9.

Throughout the history of the AMTS, broadcasters have often repeated these vague and general claims but on not one occasion has any broadcaster brought specific factual information to the attention of the Commission regarding actual cases of TV interference from AMTS operation. Quite to the contrary the AMTS community has since 1982 had an exemplary record, with no reported cases of TV interference. The Commission has acknowledged this one more than one occasion when it has rules on the broadcasters Petitions to Deny.

It is important to reiterate at this point that the Eckert Report only discusses the possibility of interference to TV reception from AMTS, not the eventuality of it. The very basis for an acceptable TV signal input is based on the 6th Report and Order<sup>^</sup>, and the OCE Report RS77-01<sup>^</sup>. Eckert, in referencing this information, as well as the Commission in including it as Appendix C to Gen. Docket No.80-1, states:

thus on the basis of documented planning factors, the signal input power to TV sets receiving acceptable pictures may be assumed to be -66 dBm or greater in rural areas and -59 dBm or greater in urban environments. These TV sets, now receiving an acceptable picture, are the ones to be protected from interference from IWCS signals.

15. The Eckert Report is largely based on a FCC Lab Division Report<sup>^</sup> published on October 1975. The tests performed by Middlekamp and Davis involved five (5) television sets, of different technical design, known to be in use at the time. There are three observations that must be made with regard to these TV sets.

First, all of the sets tested were, according to the Eckert Report in use at the time of test and it was not stated that they individually met the assumed performance levels of the OCE Report.

Second, it can be reasonably assumed that the reason for choosing five different designs of TV sets was that some were of then current design (1972-1975), while others were of much earlier vintage. Presumably all sets were manufactured before 1975 and would have included all-tube, hybrid tube-transistor and all transistor designs. The recommendations of the Eckert Report, regarding the

potential for possible interference to television, were based entirely on the worst performing television set. Orion contends that the use of the lowest denominator for determining any general performance guideline was in 1975, as well as today, entirely inappropriate.

Third, it is unlikely that any sets tested had SAW filters or today's improved receiver performance specifications. Certainly the design and quality of TV receivers has changed appreciably in the some 20+ years since OCE Report, the Middlekamp and Davis study, and Eckert Report were published.

By using lowest performing television set as it's basis, the Eckert Report is statistically inaccurate. As the lowest performing set was one of five tested, then it holds statistically that at worst 20% of the predicted households within the zone of potential interference, and not 100%, may be subject to harmful interference.

10.

Even this assumes there was an even distribution of the five television types within the general community. No specific information is provided about the age of the worst performing television set in the Middlekamp and Davis study. Presuming that it may have been the oldest of the five, then it could be further concluded that the number in the general population may have been very low. This would further bring into question Eckert statistical conclusions on the number of television sets with the potential for possible harmful interference from AMTS operations. Accordingly, Orion questions the applicability of the Eckert Report finding, and the underlying assumptions of the Middlekamp and Davis Report, to AMTS operations as the industry approaches the 21st century. Actual AMTS system performance would indicate a significant disparity between predicted levels of potential interference and those encountered in actual AMTS system operations.

Even with multiple AMTS systems in service, broadcasters have continued to reiterate their flawed interpretation of the findings of the Eckert Report, even though its findings may have long outlived their applicability. Orion has offered to conduct joint real world tests on the susceptibility of current TV sets to interference from AMTS systems with at least one broadcaster, however its offer has never been acted upon.

Orion's own tests have shown that on average a typical TV set produced in the last 5 years has performance specifications some 30 dB improved over those available to Middlekamp and Davis. This is further supported by independent tests, commissioned by Orion, and conducted by Mr. \_\_\_\_\_, a degree professional engineer. These tests were conducted according to the test criteria laid down in by Middlekamp & Davis. The tests were conducted on \_\_\_\_\_ television sets. These have been identified by manufacturer, type, serial number and quantity tested. While broadcasters will undoubtedly argue that it is possible that some TV sets from the period 1952-1975 may still be in use today, we find this possibility remote indeed. Certainly, the Commission should not base its rules or policy on such an obscure possibility. This view is further supported by the Commissions own comments as far back as August 4, 1988, in GEN. Docket No. 88-372 where it stated:

Experience with other private radio services operating in spectrum adjacent to TV is relevant here. Specifically we note that private land mobile stations have operated in spectrum adjacent to TV channels 14 and 69 for years without any adverse effects to TV reception. In fact experience has shown that it is

more likely that land mobile stations will receive interference from TV stations than cause it. In this regard, in a recent proceeding examining the issue of land mobile operating in spectrum adjacent to a TV allocation we stated.

We have also considered the degree to which television stations should be protected from interference caused by subsequently authorized land mobile operations.

11.

While we could impose technical criteria or limitations on land mobile operations to provide such protection, land mobile to television interference, in our view, given current [TV] transmission standards, does not appear to be a significant problem or at least a problem of sufficient magnitude to warrant government regulation.

We note that, in recent years, in excess of thirty television stations on channel 14 and three on channel 69, have been successfully operating in communities with adjacent channel land mobile operations. Based on that experience, we predict that the new television stations operating on those UHF channels should continue to be able to provide a quality signal to their viewing audience notwithstanding the presence of additional adjacent-band land mobile operations in their area. (Resolution of Interference Between UHF channels 14 and 69 and Adjacent-channel land Mobile Operations, 2 FCC CD 7328, 7331 (1987))"

18. There is additional demonstrable experience available to the Commission regarding the operation of services immediately adjacent to TV allocations. Many radio services, including Industrial, Common Carrier and Maritime may use 72 and 75 MHz allocations for full power operational fixed stations. This spectrum falls between TV channels 4 and 5. Frequencies in these bands have been licensed immediately up to the broadcast channel band edge without interference. In many cases these authorizations are for high powered stations (50-200 watts), with gain antennas. After 25 years of experience and improved TV receivers, the FCC no longer requires engineering studies or a probation period before granting a license to 72 and 75 MHz stations. The frequencies used by AMTS systems that concern broadcasters range from the 219.0125 to 219.9875. These are all more than 3 MHz removed from the TV channel 13 band edge, not as in the 72 and 75 MHz band, where assignments are routinely made right up to the television channel band edge.

On various occasions in public comment the broadcast community has brought into question, without showing of fact, the technical ability of the AMTS operators to solve interference. In light of the fact that there has not been a single case of documented interference to TV reception anywhere in the US, it would be reasonable to assume that technical ability of AMTS licensees has been well vindicated.

20. Incumbent on an AMTS' obligation to be a good RF neighbor, Orion has no objection to informing channel 10 and 13 licensees of record of AMTS stations it intends to place into service. This will facilitate the channel 10 and 13 television licensee being able to test for possible TV reception impairment within the Grade B contour. The channel 10 or 13 TV licensee would also be

aware of the location of any AMTS transmission facility within its Grade B contour and could deal with any viewer complaints effectively. While AMTS licensees have the ultimate responsibility under the rules, for resolving TV reception interference attributable to AMTS operation, we agree with the Commissions assumption that channel 13 stations would carefully monitor reception of channel 13 for any sign of interference that could be attributed to AMTS . . . ;the AMTS coast stations are in fixed locations, operate continually, and are well known to channel 13 stations in their areas ^.

12.

Orion further fully understand and accept the obligations attendant to Section 80.215 (h)(4) of the Commissions Rules as regards the rectification of harmful interference, should such interference be reported and be attributable to its AMTS operations.

### III. CONCLUSION

AMTS services as an industry have well and truly met the prudence test as suggested by the Commission and so warmly embraced by the broadcasters. AMTS services have an enviable record of success, namely 100%, as there is not a single occurrence or reported interference to TV reception.

While broadcasters have long misconstrued the findings of the Eckert Report to support their ill-defined position, none has provided any demonstration of fact to support their often-repeated claims that the allowance of AMTS operations will significantly affect their ability to provide quality television signals.

Orion has on at least one occasion offered to do joint testing with a Channel 13 broadcaster, but its offer has not been acted upon.

Orion has commissioned its own independent tests, the results of which fully support our contention that the Eckert Report findings of 1975 are not applicable today.

Over the period since the inception of AMTS in 1982 all AMTS licensees have performed diligently and not a single case of interference to channel 10 or 13 reception has been attributed to AMTS operations. This 100% success speaks well for the engineering ability of the AMTS industry and its commitment comply with the Commissions rules.

AMTS delivers a valuable CMRS service to the maritime public, further serving the public interest by providing a competitive telecommunications alternative.

^ PR Docket No. 92-257, 7 FCC Rcd 7863 (1992)

^ Oppositions of AMST at 12; Group W at 5; K-Six at 6; KTVE at 6; and WNET at 9

^ In the matter of: Amendments of Parts 2, 81 and 83 of the Commissions Rules to Allocate Spectrum for an Automated Inland Waterways Communications System (IWCS) along the Mississippi River and Connecting Waterways, Released March 11, 1981

^ Sixth Report and Order, Docket Nos. 8736, 8975, 8976, 9175, Federal Communications Commission, April 11, 1952

^ G.S. Kalagian, A Review of the Technical Planning Factors for VHF Television Service, FCC, OCE, Research and Standards Division Report RS77-01 March 1, 1977

^ L. Middlekamp, H. Davis, Interference to TV Channels 11 and 13 from Transmitters Operating at 216-225 MHz, FCC Lab Division Report, Project No. 2229-71, Oct. 1975.



15.

#### Conclusion

We agree that this NPRM is a great opportunity to rectify some inherent problems that always accrue with any new developments. The Commission should not be treated by congress or the office of management and budget as a "Cash Cow" or a computer software company. The FCC should be in the business of managing spectrum and devoting its much need resources to develop policy both legal and engineering which will better implement growth and development of a world wide telecommunications infrastructure. We would like to thank the Commissioner and the Staff of the Wireless Bureau for its high level of professionalism and its much appreciated attention to detail. You have done an excellent job. We would like to see Congress dedicate more funds for the physical and electronic upgrading of a public trusted agency.

Thank You

Don Lounibos  
President  
ISTA

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