BEFORE THE

Federal Communications Commission

In the Matter of	)	
	)	
Amendment of Section 90.239	)	RM No. 8013
Commission's Rules to Adopt	)	
Permanent Regulations for	)	
Automatic Monitoring Systems	)	

STATEMENT OF THE
NEW JERSEY EXPRESSWAY AUTHORITY,
THE NEW JERSEY HIGHWAY AUTHORITY,
THE NEW JERSEY TURNPIKE AUTHORITY,
THE NEW YORK STATE THRUWAY AUTHORITY,
THE PENNSYLVANIA TURNPIKE COMMISSION,
THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY,
AND THE TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

The New Jersey Expressway Authority, the New Jersey Highway Authority, the New Jersey Turnpike Authority, the New York State Thruway Authority, the Pennsylvania Turnpike Commission, the Port Authority of New York and New Jersey, and the Triborough Bridge and Tunnel Authority ("Interagency Group") submit this statement with respect to the petition for rulemaking filed by North American Teletrac ("Teletrac") seeking changes in the FCC's regulations governing automatic vehicle identification systems ("AVI").

As both existing and potential extensive users of AVI communications technology, the Interagency Group has a vital stake in the outcome of this matter. It is our position that the Teletrac proposal to grant certain AVI service exclusive use of most of the spectrum available for AVI is contrary to public interest. The proposed spectrum allocation plan would deny users

the opportunity to select the AVI technology most suitable to their particular needs.

There is, however, need for the FCC to regularize its rules governing AVI service. The FCC should consider authorizing this developing service on a co-primary basis with other services, should establish spectrum co-ordination systems to assure long term interference free operation of this vital service, and should adopt build-out rules specifically designed for this service. In support, the following is stated:

USERS HAVE THE PARAMOUNT STAKE IN THIS PROCEEDING

1. In June of 1990, the toll agencies in the states of New York, New Jersey and Pennsylvania joined together to form an interagency group to advance the implementation of electronic toll collection based upon AVI technology. Currently, the seven agencies set forth above actively participate in the group. Combined, these authorities collect over $1.4 billion annually in toll revenues, representing more than 37 percent of all toll transactions collected in the United States.

2. In a region with more than 25 million inhabitants and hundreds of millions of business travelers and visitors who pass through its land, sea, and air gateways each year, the impact of traffic congestion upon the economy, upon environmental conditions and upon public safety and convenience are acute. The use of AVI for electronic toll collection is increasingly being viewed as a

means to address and alleviate these problems and has given rise to the formation of the Interagency Group. The Port Authority of New York and New Jersey has already established and is operating AVI systems at John F. Kennedy International Airport and at the New Jersey entrance to the Lincoln Tunnel. The system at the Airport is used to regulate the flow of inter-terminal and parking lot shuttle bus service and plans for expanded uses are under consideration. The system at the Lincoln Tunnel is used to collect commuter-bus tolls.

3. The success of the existing systems -- as well as similar applications of AVI technology in other states -- has led the Interagency Group to embark upon a major effort to employ AVI technology on a broad basis throughout the New York/New Jersey/Pennsylvania region. This effort, referred to as the "E-ZPass Plan", is generally described in the attached article from The New York Times. The plan calls for eventual implementation of electronic toll collection at all of the tolled river crossings to New York City, at other major toll portals that provide access to and from central business areas (the Goethals and Verrazano Narrows bridges) and at toll collection points along the major intra- and inter-state arteries -- the New Jersey Turnpike, the Thomas E. Dewey (New York State) Thruway, the Garden State Parkway, the Pennsylvania Turnpike and the Atlantic City Expressway -- that lead to and from these crossings and portals. Although each authority

will be responsible for installation and operation of its own system, it is plain that maximum benefit to the public can be achieved only if interoperative and compatible AVI technology is employed at each toll plaza or other equipped locations (e.g., airports). Presently, the Interagency Group is embarking on a test of two read-write technologies. Both systems operate in the 900 MHz band; that is, 904 to 912 MHz and 918 to 926 MHz. The toll agencies are concerned about the interference susceptibility and licenseability of these two technologies being tested because they will be installing readers at several hundred sites and expect to eventually issue over one million tags. Members of the Interagency Group have made budget allocations in excess of $63 million for the period 1992-1996 to partially fund this project. The Federal Government -- through FHWA -- has authorized $32 million toward ETC implementation.

4. The members of the Interagency Group have a manifest interest in this proceeding because of the impact the proposed rules may have upon them, as users of AVI service. Manufacturers and vendors of competing AVI technologies have submitted extensive comments -- pro and con --- on the Teletrac petition. However, these comments tend to focus heavily on the technical performance characteristics of the differing technologies, the legitimacy of demands for spectrum and the economic impact of the proposed rules

on the manufacturers. This emphasis obscures the underlying issues.

5. The basic issue in this proceeding is not technological: The question is not whether one technology works better than others or whether one type of AVI system makes more efficient use of spectrum than others. Nor should the Commission base spectrum assignment decisions solely on the economic self-interest of competing manufacturers. Rather, the record plainly shows that the term "AVI" is an umbrella label that encompasses different uses of the same spectrum for very different public interest purposes. The relevant issue, thus, is whether the rules proposed by Teletrac will enable users -- such as the members of the Interagency Group -- to select the type of AVI service that is most responsive to their particular need.

6. In its decision adopting the interim regulations now in place, the Commission stressed that "user requirements for AVI capabilities differ, and consideration must be given to each of the methods being employed to respond to the various needs." Decision in Docket 18302, 30 Rad. Reg. 2d 1665, 1667 (1974). That principle is as valid today as it was when the rules were adopted. In assessing the Teletrac petition, the interest of users should be given paramount consideration.

TELETRAC'S SPECTRUM REALLOCATION PLAN
WOULD DENY USERS THE ABILITY TO SELECT
AVI SERVICE BEST SUITED TO THEIR NEEDS

7. The practical effect of Teletrac's spectrum proposal would be to give "pulse ranging" AVI systems exclusive use of the 904-912 MHZ and 918-26 MHZ bands; new, so-called "narrow band" systems would be eligible for licensing only at 903-904 MHZ and 926-927 MHZ. Implicit in this plan is the principle that narrow band service only requires one MHZ of spectrum. That is not correct. Particularly in areas serving a large number of traffic lanes or involving heavy usage, narrow band systems require multiple readers and, therefore, multiple frequencies. Both the systems generically characterized by Teletrac as "narrow band" and the Teletrac-type systems are "broad band" in the sense that both technologies require more than one MHZ of spectrum to operate effectively; and some systems characterized by Teletrac as narrow band in fact use pulse ranging technology. The attempt to distinguish between systems based upon spectrum usage does not adequately address the real world application and operation of these systems.

8. Rather, the real difference between the technologies lies in the application of these services -- the uses to which they are intended to be put. Teletrac-type systems are designed primarily to enable the user to locate a particular vehicle or object as it moves within a defined service area. By contrast, so-called narrow

band technology is principally designed to identify a vehicle or object as it passes a reader at a fixed geographic location. Undeniably, the service proposed by Teletrac has many important public interest applications, including fleet tracking service and stolen vehicle and emergency road service. But, narrow band technologies -- such as those being tested in the E-ZPass Plan -- also have clear public interest benefits in a broad variety of applications, including traffic and toll control, trucking and inventory control and airport security service. One type of AVI technology cannot serve the needs of all users and potential users: Narrow band service is not well suited for fleet tracking; systems like Teletrac's are unsuitable for automatic toll collection, control of vehicles entering security areas, and vehicle inventory or scheduling. It cannot be contended that one of these applications is of greater public interest value than the others. The value is dependent upon the particular needs of the particular user.

9. The infirmity of Teletrac's spectrum allocation plan is that it would force the FCC to arbitrarily assign public interest values to different types of AVI service, depriving users of that decision. By granting Teletrac-type service a monopoly on the 904-912 and 918-926 MHZ bands and denying narrow band applications access to multiple frequencies, the allocation plan would deny users the power to select the AVI technology best suited to their

particular needs. In concrete terms, if Teletrac's proposal were adopted, participants in the E-ZPass Plan would probably be forced either (i) to abandon the project (ii) or to employ so-called pulse ranging technology, even though that service provides capabilities the plan participants do not require and fails to efficiently provide the capability that the plan participants do require. In addition, the ability of users to expand "grandfathered" systems -- such as those installed by the Port Authority -- would be foreclosed.

10. No public interest justification for ignoring the differing needs of differing users has been advanced. There has been no showing that the two basic types of AVI service cannot co-exist in the same spectrum; they, have in fact, done so for nearly two decades. Even if sharing of spectrum by different types of AVI technologies is no longer possible, the solution to this problem does not lie in a spectrum assignment that denies users "the ability to pay for and receive the type of . . . service that best suits their economic and operational needs." Decision in Docket 18302, 30 Rad. Reg. at 2d at 1667. The Teletrac spectrum proposal is contrary to the interests of users and therefore to the public interest.

THE AVI RULES SHOULD BE MODIFIED TO PROVIDE, GREATER ASSURANCES OF PROTECTED SERVICE

11. Although the Interagency Group opposes the spectrum allocation scheme advanced by Teletrac, there are aspects of the

existing rules that have slowed the deployment of AVI service. A particular problem with AVI is that, under the interim rules (47 CFR 90.239), the service is secondary to other users of the same frequencies. In their responses to Teletrac's petition, equipment vendors state that they have encountered few instances of interference to primary users and have been able to satisfactorily resolve those situations in which interference has occurred. Nonetheless, the possibility of interference to primary users exists; and this has inhibited the deployment of AVI technology. A second problem is that the rules set narrow and unrealistic time limits within which an AVI site must be built-out and licensed. This greatly complicates the deployment of service.

12. The secondary status of AVI licenses creates serious concern. In connection with the E-ZPass plan the Interagency Group is confronted with the need to consider whether field measurements should be conducted at every potential site, a process which would increase the cost of deployment. And, even if interference-free conditions exist, the long term operations of systems like E-ZPass cannot be legally assured; subsequent use of the same spectrum in close proximity to an established AVI facility by primary users could force modification of particular AVI sites in ways that threatens interoperability.

13. The secondary status of AVI -- under Part 90 as well as Part 15 --- engenders uncertainty as to the reliability and

durability of the service and adds to the cost. These conditions inhibit broad scale deployment of AVI service particularly by agencies that have responsibility for the administration of public funds.

14. The Commission's rule governing the time within which a licensed AVI facility must be put into operation also complicates, delays and creates uncertainty in, the process of implementing service in AVI projects as large and complex as E-ZPass. The rule (47 C.F.R. 90.155) is of general applicability to all services licensed under Part 90. It does not recognize the real world conditions of multiple site and multi-reader applications of AVI, such as E-ZPass. It is virtually impossible to build-out all readers planned for use at a particular site at once; and it is completely impossible to apply for and build-out all of the several hundred AVI sites that E-ZPass involves at the same time or within a short -- e.g., eight month -- time period. Without regard to interference questions, the Commission's construction requirements confront users like the members of the Interagency Group with the potential necessity to make multiple applications for a single site (to accommodate later installed readers) and preclude the possibility of a coordinated system-wide licensing process.

15. There are near term measures that the FCC can take to alleviate these problems. First, consideration should be given to granting AVI applicants or users (under Part 90) co-primary status

with other licensed users on the frequencies. This would provide assurance that, when AVI service at a particular site is shown not to cause interference to existing users, the AVI system will not subsequently be subject to displacement or interruption. In addition, the Commission should establish a frequency coordination program -- administered by the Commission or a neutral committee. This will enable potential users to know, before plans are finalized and capital investments are made, that the proposed system will not cause or be subject to interference. Finally, the Commission should establish rules regarding build-out requirements of AVI service that reflect the scope and complexity of this service.

CONCLUSION

16. By regularizing service and providing efficient means of assuring that spectrum sharing is carried out fairly and effectively, the FCC can materially contribute to the long term stability of AVI and, thereby, to the benefits this service offers the American public. The Teletrac spectrum allocation proposal should be dismissed, but other, essentially procedural, changes to the rules should be made.

Respectfully submitted

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