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American Association of
State Highway and
Transportation Officials

James C. Codell III, President
Secretary
Kentucky Transportation Cabinet

John Horsley
Executive Director

March 10, 2003

Office of the Secretary
Federal Communications Commission
445 Twelfth Street, S.W., Room TW-A325
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re WT Docket No 01-90
ET Docket No YX-95
RM-9096

Dear Sir or Madame:

Enclosed are an original and nine copies of AASHTO's comments in the matter of WT Docket 01-00, ET Docket No. **98-95 Amendment of the Commission's Rules regarding DSRC, Parts 2 and 90 to Allocate the 5.850-5.925 GHz Band to the Mobile Service for Dedicated Short Range Communications of Intelligent Transportation Services**

Thank you for your consideration of AASHTO's position on this important matter

Yours truly,

John Horsley
Executive Director

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Before the
Federal Communications Commission
Washington D C 20553

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)	
)	
Amendment of the Commission's Rules)	
Regarding Dedicated Short-Range Communication)	WT Docket No 01-90
Services in the 5 850-5 925 GHz Band (5 9 GHz)	
Band))	
)	
Amendment of Parts 2 and 90 of the Commission's)	ET Docket No 98-95
Rules to Allocate the 5 85-5 925 GHz Band to the)	RM-9096
Mobile Service for Dedicated Short Range)	
Communications of Intelligent Transportation)	
Services)	

NOTICE OF PROPOSED RULEMAKING AND ORDER

Comments of the
American Association of State Highway and Transportation Officials
Special Committee on Wireless Technology

Richard Sheldrew,
Chairman

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

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
Amendment of the Commission's Rules)
Regarding Dedicated Short-Range Communication)
Services in the 5.850-5.925 GHz Band (5.9GHz)
Band))
)
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Amendment of Parts 2 and 90 of the Commission's)
Rules to Allocate the 5.850-5.925 GHz Band to the)
Mobile Service for Dedicated Short Range)
Communications of Intelligent Transportation)
Services)

WT Docket 01-90

ET Docket No. 98-95
RM-9096

To: Chief, Wireless Telecommunications Bureau

**COMMENTS OF
THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND
TRANSPORTATION OFFICIALS**

Background Information

The American Association of State Highway and Transportation Officials (AASHTO) respectfully submits these comments in the above-captioned Notice of Proposed Rulemaking and Order.

AASHTO is the national association of the state departments of highways and transportation in the 50 states, the District of Columbia, and Puerto Rico. Affiliate and Associate members include City, County and other Transportation authorities. Its scope includes all five principal transportation modes, and its major purpose is to foster the development, operation and maintenance of an integrated national transportation system,

AASHTO, through its Special Committee on Wireless Technology has been involved in the use of wireless telecommunications technology in all aspects of surface transportation for more than 50 years. AASHTO serves as one of the Commissions' certified Frequency Coordinators for the Public Safety Radio Services. AASHTO is uniquely qualified to furnish frequency coordination services for the Intelligent Transportation Radio Service and Dedicated Short Range Communications. It is the only Frequency Coordinator which has participated the DSRC Standards Development activities. AASHTO is the only national organization which has complete understanding of all aspects of surface transportation.

COMMENTS

In order to meet the demands presented by increasing numbers of vehicles, new approaches are necessary. The solution to improving the efficiency and effectiveness of nations surface transportation system, while also reducing air pollution caused by automobile exhaust. can be met in part by the application of wireless and wireline telecommunications technologies.

The Commission recognized this potential benefit in allocating 75 MHz of radio frequency spectrum for Dedicated Short Range Communications services.

In the instant proceeding the Commission requests comments on various issues related to the implementation of Dedicated Short Range Communications Systems (DSRC).

Licensing Methodology

The roadside units which will make up a part of DSRC systems should be licensed as site specific devices. This is necessary for accurate spectrum management.

In order to define communications zones and to prevent channel assignments which cause harmful interference, fixed geographic reference points must be licensed and recorded in the Federal Communications Commission's (FCC) license database. Without these reference points frequency coordinators will have no method for determining the potential for interference. License by location and frequency (channel) will also assist the **FCC** in enforcing applicable rules and in identifying violators.

Public-Safety and Private Internal Use

While the primary use of the band will be for Public Safety Services, it is important to also allow private applications within the DSRC Service. The justifications include economies of scale resulting from the greater market for devices and systems. Users may be reluctant to purchase a service which offers only Public Safety related messages, but they would buy a service which also allows automated payment, access to the internet and various data acquisition services

Technical Standards

In order to maximize the benefit of offering both Public and Private services the Commission must require that all equipment which operates in the DSRC Service meets the American Society for Testing and Materials (**ASTM**) E2213-02 Standard.

The Commission recognized that the adoption of standards helps facilitate interoperability in mandating such a standard for the 700 MHz Public Safety Radio Service. The Commission's failure to require such a standard in the 800 MHz Land Mobile Radio Service resulted in the inability of like users to communicate, due to equipment incompatibility

Interoperability

Interoperability is vital to the widespread proliferation of DSRC. It is unlikely that users will choose to purchase multiple devices each with its unique technical platform in order to receive all types of DSRC communications. The failure to mandate that all DSRC operations comply with **ASTM E221 3-02** standard will impede the widespread proliferation of DSRC systems and its accompanying usage and benefit to the public.

Site Specific Licensing

The Roadside Units which make up a part of the DSRC system should be licensed on a site specific basis for the reasons expressed earlier. The mobile and portable units should be licensed by rule. Licensing the millions of such devices, based on limited geographic areas of operation, would represent a nearly unmanageable task and could require greater resources than the FCC currently expends for the total Private Land Mobile Radio Services.

Channelization

The channelization plan which was submitted by the Intelligent Transportation Society of America (ITSA) should be adopted. That plan is a result of the deliberations and tests conducted by representatives of all sectors who have an interest in transportation. This group recognized that the application of advanced technologies can improve safety, increase efficiency and result in other improvements for the nation's surface transportation system.

Definition of Operations

We agree with **ITSA** that the word "non-voice" be deleted from the definition of DSRC

Private Internal Systems

Both private and public-safety operations should be allowed to operate in the DSRC Service and frequency band. The existence of both public-safety and private users in the Private Land Mobile Radio Service has been mutually beneficial to both groups. With respect to DSRC systems and operations, Private DSRC operations should be licensed on a “secondary” basis to Public-Safety operations. That is, a Private user would be responsible for eliminating interference to Public Safety operations.

Clarification of Terms

The phrase, “and commercial environs,” should be replaced with the phrase, “and private environs.” Additionally, the phrase, “of public and commercial,” should be deleted from Section 90.7 and Section 90.371(a) of the Commission’s *Rules*.

Public Safety Definition

The definition of *Public Safety* at Section 337(f)(1) of the Communications Act of 1945 accurately describes the public-safety agencies and operations that are eligible to hold licenses for DSRC systems.

Eligibility

Private Radio licensees should be allowed to construct and operate DSRC systems. These systems must meet the definition as listed in the *Code of Federal Regulations*, Volume 47, Section 101.1305 which is the definition of *private internal services*.

ASTM E2213-02 Standard

At a minimum, Layers 1 and 2 of **ASTM's** DSRC standard E2213-02 should be required for all DSRC equipment. By requiring the **ASTM** standard the Commission would offer a level of stability for manufacturers. Without such a requirement, many manufacturers may be reluctant to invest in the infrastructure necessary to produce equipment only to be replaced by newer, non-compatible equipment. The effect will be to spur the development of the DSRC radio service.

Band Plan

The **ITSA** band plan is the result of an open process involving representatives of public-safety, manufacturers, academia and consultants. **It** represents the best possible plan for the utilization of the DSRC services.

Licensing

Licensing all public-safety DSRC operations to the State-level agency responsible for administering the transportation infrastructure would be advantageous in that it would ensure that the licensed agency would be responsible for, and knowledgeable, concerning DSRC services. **AASHTO** is the only frequency coordinator which has shown any interest in DSRC. No other Public-Safety frequency coordinator has attended any of the DSRC standards writing group meetings or offered any input to the activities of the group. State transportation agencies currently hold private land mobile radio service licenses. They could license DSRC systems in the same manner,

The comparisons of DSRC and the 700 MHz Public Safety spectrum is not appropriate. First of all, few states have accepted the responsibility for being the licensee

for the 700 MHz state frequencies. In some states, one of the existing agencies applied for, and received the license, only to discover that one or more other state agencies applied for the license also.

DSRC systems are primarily for transportation operations and management. The benefits of these systems will be provided to all Public-Safety disciplines. The systems will be constructed near major highways and operated by transportation agencies including toll road authorities. The 700 and 800 MHz Regional Planning Committees have not, at this time, shown any interest in DSRC. It is unreasonable to expect these committees to acquire the necessary understanding of DSRC systems to be able to adequately plan for the allocation of channels within the timeframe necessary to afford rapid deployment of DSRC systems. The licensing approach for DSRC should mirror the Private Land Mobile Radio Services.

The Regional Planning Committee approach is the slowest licensing scheme currently utilized by the FCC. The agencies and private users of DSRC systems should not be subjected to the delays inherent with the Regional Planning Committee process. The record in the 700 MHz rulemaking proceeding contained numerous complaints about the Regional Planning Committee process. The Commission should not repeat the mistake it made in the 700 and 800 MHz rulemaking with respect to the DSRC service.

On Board Units

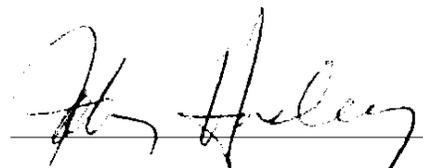
The most efficient licensing methodology for OBU's is to license them by rule. Since automobiles have no restricted areas of operation, it is not feasible to license OBU units with geographic areas of operation, as is the case with private land mobile radio systems.

CONCLUSION

The Intelligent Transportation Systems including, but not limited to DSRC, offers the best chance for improvements to the nation's surface transportation system. The provision of the latest information to the traveling public will enhance their safety and allow timely decisions reducing traffic congestion and its associated negative impact.

AASHTO, respectfully requests that the Commission considers the comments and act accordingly as it proceeds in the development of Rules regarding the DSRC Services.

Respectfully submitted,
American Association of State Highway and
Transportation Officials, Special Committee
on Wireless Technology

By: 
John Horsley, Executive Director
American Association of State
Highway and Transportation Officials