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

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| In the Matter of | ) | |
| | ) | |
| Amendment of the Commission's Rules Regarding Dedicated Short-Range Communication Services in the 5.850-5.925 GHz Band (5.9 GHz Band) | ) | WT Docket No. 01-90 |
| | ) | |
| 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 | ) | ET Docket No. 98-95<br>RM-9096 |

**COMMENTS OF THE**

**NATIONAL ASSOCIATION OF TELECOMMUNICATIONS OFFICERS AND ADVISORS**

**NATIONAL LEAGUE OF CITIES**

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## SUMMARY

Local Governments believe that it is important to remember that the primary goal of the ITS program is to use advanced electronics technology, such as DSRC (Dedicated Short-Range Communications), in the nations surface transportation infrastructure to improve traveler safety, decrease congestion, facilitate the reduction of air pollution and conserve fuel. The purpose it is not to sell this spectrum to industry in order to raise money for the government, or to create industry profit. While such use may be necessary and appropriate in other contexts, in the context of ITS, such uses must remain subservient to the primary goal of improved transportation and related public safety. Any secondary use of this spectrum must be immediately terminated if needed by primary applications. Likewise, any interference caused to primary users by secondary users must lead to a cessation of secondary use until the cause of the interference is removed. We believe that ITS America's recommendations in this matter should be adopted, in most cases.

Local Governments support the recommendation of ITS America with respect to the deletion of the word "non-voice" from the definition of DSRC and the change of "commerical environments" to "private environments." We support the definition of "public safety" as one consistent with the exemption found in Section 309(j)(2) of the Act and that contained in Section 337(f)(1). We recommend that any non-public safety DSRC operations be allowed **only** on a secondary basis.

Local Governments support the use of the ASTM-DSRC standard for the 5.9 GHz band and concur that Layers 1 and 2 should be adopted. We recommend that ten-megahertz of spectrum be reserved from both channels 175 and 181.

Local Governments believe that licensing Road Side Units (RSU) by geographic area is preferable, and that users be licensed by geopolitical areas, such as State, metropolitan, or district area. Further, Local Governments support the concept of State-level agency or regional planning committee responsibility for licensing. We also believe that national guidelines would be appropriate for licensing purposes. :Local Governments recommend that On Board Units (OBU) be licensed under Part 15 and that RSU licensees should have the right to operate an unlimited number of OBUs. It is essential that all DSRC equipment must be interoperable and that all uses must be licensed.

Local Governments believe that Fixed Satellite Service earth station deployment should be prior coordinated with DSRC, as well as all new government radar installations. DSRC should be exempt from the Commission's competitive bidding authority and secondary licensing in this band should be done through State or regional authorities.

Local Governments believe that DSRC services should be treated with the utmost care to ensure that safety of life is never at risk.

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**NATIONAL LEAGUE OF CITIES**

The National Association of Telecommunications Officers and Advisors (NATOA) and the National League of Cities (NLC) (collectively Local Governments) submit these comments in response to the Federal Communications Commission's (the "Commission's") Notice of Proposed Rulemaking and Order in the above captioned matter.[1]

[1] *In the Matter of Amendment of the Commission's Rules Regarding Dedicated Short-Range Communication Services in the 5.850-5.925 GHz Band; 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 98-95, Notice of Proposed Rulemaking and Order, FCC 02-302, rel. November 15, 2002 (NPRM & Order).

NATOA is a professional association made up of individuals and organizations responsible for (or advising those responsible for) telecommunications policies and services in local governments throughout the Country. NATOA's mission is to support and serve the telecommunications interest and needs of local governments.

NLC represents more than 18,000 communities and is the oldest and largest national organization representing municipal governments. Founded in 1924, NLC strengthens local government through research, information sharing, and advocacy on behalf of hometown America.

## I. DSRC Service

Local Governments believe that it is important to remember that the primary goal of the ITS program is to use advanced electronics technology, such as DSRC (Dedicated Short-Range Communications), in the nations surface transportation infrastructure to improve traveler safety, decrease congestion, facilitate the reduction of air pollution and conserve fuel. It is not to sell this spectrum to industry in order to raise money for the government, or to create industry profit. While there is nothing inherently wrong with raising money or making profit, these desires must remain subservient to the primary goal of improved transportation and related public safety. Any secondary use of this spectrum must be immediately terminated if needed by primary applications. Likewise, any interference caused to primary users by secondary users must lead to a cessation of secondary use until the cause of the interference is removed. We believe that ITS America's recommendations in this matter should be adopted, in most cases.

### *A. Voice vs. Non-Voice.*

The Commission seeks comment on ITS America's recommendation that the word "non-voice" be deleted from the definition of DSRC. As noted by ITS America's July Ex Parte Comments indicate, it is expected that the OBU would be capable of converting certain types of data transmissions into voice messages using a variety of methods. Local Governments supports the deletion of the word “non-voice” from the definition of DSRC, as some warnings may be verbal in nature, even if digitally generated.

### *B. Commercial vs. Private Environments.*

Local Governments support ITS America's recommendation for changing “commercial environments” to “private environments”. Local Governments believe that the 5.9 GHz band should be primarily used for ITS and public safety communications. Any private or commercial applications should be allowed only on a secondary basis with the primary public applications having immediate over-ride priority for spectrum use. Further, no private application should be allowed to cause interference to public safety applications.

## II. Eligibility

### *A. Public Safety Uses.*

Again, Local Governments support the primary use of the 5.9 GHz band for ITS and public safety, and directly link ITS and public safety into the same category of use. As with some public safety spectrum, there may be substantial portions of time where there is little spectrum use needed. This would allow for private or commercial use on a

secondary basis during public safety down times. However, public safety use should take immediate priority over any other use in the band as safety of life may depend upon it. Secondary use should only be allowed as technologies emerge which will allow guaranteed primary/secondary user status of public safety spectrum. Local Governments believe that effective traffic management is in fact a critical public safety issue.

***B. Public Safety Radio Services.***

Local Governments support the definition of "public safety" for the purposes of ITS radio services as one consistent with the public safety radio services exemption found in Section 309(j)(2) of the Act. Further, Local Governments support the definition of public safety contained in Section 337(f)(1) and believes that it should be used to define the use of this spectrum until such time as technology would allow for private usage on a purely secondary basis, as stated above.

***C. Non-Public Safety Uses.***

While permitting private radio licensees to use the spectrum may very well create an incentive for vendors to quickly and economically develop the technology necessary for the numerous DSRC applications contemplated for the 5.9 GHz band, we do not want to swamp the spectrum with users so that it could no longer be used effectively for public safety purposes. Local Governments again recommend that any non-public safety DSRC operations allowed be **only** on a secondary basis, which would not diminish the primary public safety usage for which the band was designated.

Local Governments support any definition of “private services” that keeps the usage on a not for hire, or profit basis. Again, we believe that any private usage must

only be allowed on a strictly enforced secondary basis that does not interfere with the primary public safety usage.

## III. Interoperability

### *A. ASTM-DSRC Standard.*

The Commission seeks comment on whether all DSRC operations and equipment using the band should conform to the ASTM-DSRC Standard. Local Governments believe that all equipment being used for DSRC must be interoperable. There should be no possibility that equipment being used by any private, or secondary, licensee could create interference with public safety applications. Again, any public safety use must take immediate priority over any secondary use.

### *B. Adoption of Standard*

With respect to standards, Local Governments support one standard for both public safety and non-public safety operations. The standard should be flexible enough to allow for technical innovation, but it should not allow for interference of public safety DSRC applications.

ASTM-DSRC appears to be an appropriate standard for the 5.9 GHz band, if it determines the manner in which the control channel is accessed. Local Governments concur that Layers 1 and 2 should be adopted. We further recommend that equipment performance requirements be adopted to minimize the possibility of interference from such equipment. Local Governments agree that the Commission should ensure that any standards developer must make the rights to the standard universally available without

cost or discrimination in order to allow for technical innovation and competition among providers.

## IV. Band Plan

### *A. Spectrum Reservation.*

Local Governments believe that it would be prudent to reserve ten-megahertz of spectrum from both channels 175 and 181 for future DSRC based ITS applications.

### *B. Mutually Exclusive Applications*

While there may be the possibility of mutually exclusive applications in the 5.9 GHz band, there should be no instance where any of the band allocated to public safety functions would not be available for public safety use as needed. Again, even if initial band assignments allow for segregation on public and private uses, public use must be allowed to move into any private service bands on a priority use basis.

## V. Licensing Plan

### *A. Road Side Units.*

Local Governments believe that licensing Road Side Units (RSUs) by geographic area would be preferable to site-by-site licensing which seems quite cumbersome. The licenses should be on a primary and secondary user basis, with public safety always being the primary license holder. However, it must be mandatory that private users cannot interfere with public safety applications, and any private application that causes interference must be shut down until the interference problem is corrected.

1. Licensing Areas.

Local Governments believe that it does make sense to license public safety users by geopolitical areas, such as State, metropolitan, or district area. It also makes sense to license private users by metropolitan statistical area and rural service areas. It does not seem to make sense to have national licensing, because it is unlikely that a provider will be able to provide coverage to the entire nation. This is currently a problem with cellular and PCS providers and there is no reason to think that DSRC would be any different.

2. State-level or Regional Planning Responsibility.

Local Governments believe that having a State-level agency or regional planning committee responsible for licensing all DSRC operations in the 5.9 GHz band makes sense, if there is a funding mechanism available to help meet related expenses. It is suggested that license fees go to the State or regional licensing agency in return for their administrative services. Existing agencies, such as State DOTs or existing public service licensing agencies for the 700 and 800 MHz bands would be obvious administrators. State agencies should be given the first opportunity to act as licensing agencies with regional planning committees given subsequent opportunities, as Statewide oversight would be optimal for these applications.

3. National Guidelines.

Further, we believe it may be wise for national guidelines to be established so that licensing is handled in a similar manner across the country. While eligible

entities should not be unduly restricted, such guidelines can ensure that they are not allowed to interfere with public safety applications in any way.

### *B. On Board Units.*

Local Governments recommend that On Board Units (OBUs) not associated with a specific fixed system be licensed under Part 15 and that RSU licensees should have the right to operate an unlimited number of OBUs in connection with its system. We believe that all DSRC equipment must be interoperable, and that all uses must be licensed. This will keep the band free of interference and always available for primary public safety use. If possible, it would make sense that all OBUs be able to access any RSU, and private access be controlled through software programming.

Local Governments do not believe that DSRC service should be licensed by rule. While some of the DSRC functions may fall under the definition of Radio Control Service, we believe that all uses should be licensed to avoid possible interference problems. We do not believe that DSRC meets the definition of Citizens Band Radio Service, as the general public should not use it for voice communications.

### *C. Treatment of Incumbent Services.*

Fixed Satellite Service (FSS) earth station deployment should be prior coordinated with DSRC operations. If, as DOT indicates, FSS uplinks create interference for several hundred miles, then the siting of a new uplink could create a hole in existing DSRC communications resulting in severe safety of life issues. It would be necessary to mitigate and plan for any interference from new FSS installations once DSRC is in use.

It seems plain that Section 90.371(b) requires new government radar installations deployed subsequent to DSRC implementation to be coordinated with incumbent DSRC operations. That would include forestalling interference to the DSRC Control Channel, which is necessarily (and by definition) a part of DSRC operations. If, for some reason, Section 90.371(b) does not address this, as it seems to, it would be imperative that this issue be addressed or DSRC operations could be severely disrupted.

## VI. Grant of Licenses

As a public safety radio service, DSRC should be exempt from the Commission's competitive bidding authority. As stated in above, Local Governments believe that secondary licensing in this band should be done through State or regional authorities that would keep any licensing fees to offset administrative expenses.

## VII. Application, Licensing and Processing Rules

Construction or Coverage/Service Requirements; License Term; Renewal Expectancy. Local Governments recommend licensing by geographic area and not by site. In either case it makes sense to allow a long period, such as ten years, to establish and operate the service. A shorter period of time would seem to provide a disincentive to rolling out a new service. Licensees should be required to provide "substantial service" in the license area within a set time period to provide public safety throughout the area.

## VIII. Technical Rules

Emission Limits and Antenna Height. Local Governments have no specific recommendations as to emission limits or antenna height, other than to recommend

greater height and power be allowed in rural areas where greater coverage area is needed, and interference is less likely.

## IX. Canadian and Mexican Coordination

Local Governments support using the same technical restrictions at national borders as between service areas. It is just as important for noninterference rules to be applied with our neighbors as it is with ourselves. Public safety knows no boundaries.

## X. Competitive Bidding Procedures

Local Governments have no comment at present on the procedures outlined in the Notice.

## XI. Other Matters

Intelligent Transportation Radio Service. Local Governments support modifying Section 90.350 to refer to the nation's “surface” transportation infrastructure.

Respectfully submitted on behalf of

National League of Cities and

National Association of Telecommunications Officers and Advisors (NATOA)

By Libby Beaty
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