

DOCKET FILE COPY ORIGINAL

RECEIVED & INSPECTED

MAR 24 2003

FCC - MAILROOM



STATE OF DELAWARE  
DEPARTMENT OF TRANSPORTATION  
800 BAY ROAD  
P.O. BOX 778  
DOVER, DELAWARE 19903

NATHAN HAYWARD III  
SECRETARY

March 14, 2003

Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554

RE: Comments of Delaware Department of Transportation  
In the Matter of Amendment of the Commission's Rules Regarding Dedicated  
Short-Range Communications in the 5.850 - 5.925 GHz Band (5.9 GHz Band), WT  
Docket No. 01-90

While the IAG and the IBTTA have submitted responses to the proposed designation of frequencies in the 5.9 GHz band for Intelligent Transportation Services (ITS), and DelDOT concurs with these responses, we feel that the issue is important enough to submit an additional response on behalf of the agency as a separate entity.

As all aspects of transportation continually transform as new technologies develop, it is extremely important that we, as government agencies serving the traveling public, not only stay on top of these changes, but anticipate future developments that could move our transportation services into the next level of technological sophistication. Electronic Toll Collection, through use of transponders, has already revolutionized several aspects of road-based transit. Regionally formed associations between toll collecting agencies have allowed for the merging of services throughout a regional area. While this has been a tremendous step forward in many ways, including traffic flow, reduced emissions, and public safety, the "regionality" of the current system, as well as its limitations inherent in the current technology, calls for a much more universal and expandable solution. The migration of the current 915 MHz license to a faster 5.9 GHz DSRC is essential in the journey towards an interoperable, expandable, versatile system. DelDOT supports this migration fully, with the restrictions and suggestions outlined below:

- Licensing, rules, and communication standards will need to be in place to ensure a "checks and balances" between public/safety oriented use and private usage.

No. of Copies rec'd 0  
List ABCDE

Opening up the spectrum to include non-public DSRC operations in this new band is imperative to ensure the fast development of the technology needed to communicate within the band itself. Private/ for profit entities have the **funds** and resources that are necessary to push the development, testing, and installation of new technology into the every day sphere. Private usage will also **speed** up the need for the technology to be deemed “standard issue” and to make it available for a fair price on the market.

By inviting private, non-public safety related activity into this spectrum, some restrictions will need to be in place to protect the “first priority status” of a public service and safety related messaging system.

- ***License Roadside Units (RSU) by site***

Licensing RSUs would allow for site-specific usage, and sharing the site with another RSU would be prohibited **unless** a guarantee could be made that the **RSUs** would not interfere with each other. **Site-specific** RSUs ensure that safety related messages do not take secondary **status to** private messaging.

Site-specific RSUs would **also** enable operations to **track** usage, compile data from this usage, and monitor usage demands.

Toll Agencies should have a “blanket license” **so** that there can be interoperability and communication between toll **roads**.

- ***Licensing of On Board Units (OBUs) associated with fixed systems under the RSU license***

Licensed Toll Agencies do this now under the 915 MHz band, and it would be important to continue this licensing method with the 5.9GHz band. By controlling the transmissions **through** the **RSU**, potential interference between the RSU and OBU is lessened.

Any OBUs that **are** not associated with fixed systems should not fall under licensing restrictions other **than** those that maintain the integrity of public service messaging **as** a “first priority” standard.

- **Definition of Public Safety**

- An acknowledgement that public safety **as defined** is not limited to **fire**, ambulance, and police services is needed. Toll Agencies **and other** transportation entities function to ensure the safety of travel on our nation’s roadways by **warning** the public of potential **hazards** on the **road**. With **this** new technology and increased ability to get travel **warnings** out to drivers quickly, public safety will increase.

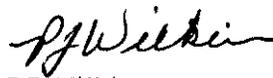
- **Push toward Interoperability**

- The long-term goal of our **migration** to the **5.9 GHz** band should be first and foremost interoperability within the **ETC** system. **So** called “**Open Roads,**” where interoperable OBUs and **RSUs** would be standard could revolutionize the toll taking industry. Every detail from **traffic** flow to system administration would be linked in a nation-wide, and potentially

international (Mexico and Canada) operation. **This** could eliminate region-by-region incompatibility that the traveling public currently faces. It would also enable **us** to link the technology to other ITS equipment such **as** variable message **signs**.

It will take time and a great deal of **coordination among** the participating agencies and resources to accomplish such a far-reaching, long-term goal. Because of **this**, DelDOT believes that it is important that toll agencies should be able to **function** in both **bands** (915 MHz and **5.9 GHz**) until the public and private sector can develop, test, and implement the new technology and successfully migrate completely to the 5.9GHz band. This “dual migration” would ensure that safety continues to be the **main** focus of all transportation agencies.

Sincerely,



PJ Wilkins

Toll Operations Administrator

PJW:jls

cc: Nathan Hayward III, Secretary, Department of Transportation  
Carolann Wicks, Chief Engineer, DelDOT  
James R. McNinch III, Director, Maintenance and Operations  
Gene Donaldson, TMC