

DEPARTMENT OF TRANSPORTATION

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*Flex your power!
Be energy efficient!*

August 17, 2012

Mr. David Turetsky, Chief
Federal Communications Commission
Public Safety and Homeland Security Bureau
445 12th Street SW
Washington, DC 20554

Dear Mr. Turetsky:

As the Director of the California Department of Transportation (Caltrans), I am sending this letter to express opposition to the proposal to share the radio frequency spectrum allocated for dedicated short-range communications (DSRC) with commercial, nontransportation users.

As you know, in October 1999 the Federal Communications Commission (FCC) completed the rulemaking process and allocated 75 MHz of spectrum (5.850–5.925 GHz) in the 5.9 GHz band for DSRC to be used by the Intelligent Transportation Systems (ITS) community to improve transportation safety and mobility. In the years since that decision, public and private sector entities nationwide, including Caltrans, have spent millions of dollars to research and develop DSRC technologies for use in transportation. This research and development has taken place under the leadership of the U.S. Department of Transportation (USDOT) through its connected vehicle research program.

Some DSRC applications for public safety and traffic management being developed under the connected vehicle research program include the following:

- Cooperative forward collision warning
- Intersection collision avoidance
- Electronic toll collection and parking systems
- Commercial vehicle clearance and safety systems
- Transit signal priority
- Vehicle rollover warning
- Highway-rail intersection warning
- Cooperative adaptive cruise control

The USDOT estimates that widespread deployment of connected vehicle technologies based on DSRC could prevent or reduce the impact of 81 percent of unimpaired vehicle crashes that occur today, representing the next big leap in the goal of reducing roadway fatalities and injuries.

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Utilizing DSRC will help achieve the objective of preventing vehicle crashes and their estimated \$230 billion in annual societal economic impact.

DSRC meets all the current and future needs of the transportation industry, and it satisfies all the technical requirements necessary to enable the challenging safety and mobility applications envisioned for its use. It is capable of high-speed data communications between vehicles operating at highway speeds, and between vehicles and the roadside, over a range of up to 1,000 meters. DSRC provides a reliable communications channel that has high availability and low latency, allowing vehicle safety systems to be designed that warn of hazardous situations in milliseconds so drivers can make informed decisions that avoid crashes. Unlike other low-power, short-range transmitting technologies in the United States, such as Wi-Fi, the FCC rulemaking gives DSRC a recognized legal status with valuable protections against radio interference from other users.

However, if this proposed shared use is allowed by the FCC, then some of the major advantages of DSRC as it stands today, such as protection from interference and high availability of the channel for safety broadcasts, will be lost to the ITS community and the safety and mobility applications will not be as effective as they would be otherwise. As a major transportation stakeholder in the United States, Caltrans is opposed to any proposal to share the spectrum outside of the intent of the original 1999 rulemaking.

Caltrans, along with its public and private partners, is extremely concerned that sharing the DSRC spectrum with nontransportation users would jeopardize critical safety applications for which there are high expectations and in which millions of dollars in research and development have been invested. I urge the FCC to preserve the current usage of the DSRC band solely for the purpose of transportation to ensure that the next generation of drivers can enjoy safer roads and endure fewer roadway crashes than our generation.

For more information about Caltrans' ITS research and our position on this shared DSRC proposal, please contact Greg Larson, chief of the Office of Traffic Operations Research, at (916) 657-4369 or by e-mail sent to <greg_larson@dot.ca.gov>.

Sincerely,



MALCOLM DOUGHERTY
Director

c: Marlene Dortch, Secretary, FCC
David Furth, Deputy Chief, Public Safety and Homeland Security Bureau, FCC
Greg Larson, Chief, Office of Traffic Operations Research,
Division of Research and Innovation, Caltrans

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Steve Takigawa, Deputy Director, Maintenance and Operations
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