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

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 RM-9096

REPLY COMMENTS OF QUALCOMM INCORPORATED

QUALCOMM Incorporated hereby submits these reply comments in response to the Commission's Notice of Proposed Rulemaking ("NPRM"), WT Docket No. 01-90 and ET Docket No. 98-95 (rel. Nov. 15, 2002), seeking public comment on proposed service rules for the use of the 5.850-5.925 GHz band ("5.9 GHz band") for Dedicated Short-Range Communications ("DSRC") in the Intelligent Transportation System ("ITS") radio service. QUALCOMM agrees with the Commission and other commenting parties in the proceeding that wireless communications capabilities have the potential to improve vehicle safety and efficiency in a significant way. Specifically, QUALCOMM believes that permitting DSRC applications in the 5.9 GHz band will further enhance the ability of the public safety community to communicate effectively with rapidly moving vehicles and provide a wide variety of ITS applications.

QUALCOMM is a world leader in developing, delivering, and enabling innovative digital wireless communications products and services based on its digital technologies. QUALCOMM is dedicated to growing the wireless industry through technology licensing, chipsets and system

software, satellite-based systems, and new innovations in wireless data products and applications. QUALCOMM's code division multiple access ("CDMA") technology has been licensed to more than 95 leading communications manufacturers worldwide. Due to its unsurpassed voice quality, system capacity, privacy and flexibility, CDMA is the recognized global standard for next-generation, digital wireless communications products and services.

Of particular relevance to this proceeding is the use of CDMA-based technologies for a wide variety of public-safety and commercial ITS applications, including wireless GPS-assisted position location, fleet management, hazardous material tracking, and asset tracking. For the past 15 years, QUALCOMM has been working with the transportation industry and public safety community to integrate wireless telecommunications technologies into transportation solutions to:

- Improve driver safety (for both commercial and non-commercial vehicles)
- Improve commercial vehicle operational efficiency
- Increase commercial vehicle load security
- Increase worker and fleet productivity
- Manage vehicle and driver performance.

QUALCOMM's GPS-assisted position location solution, which has been integrated into commercial cellular and PCS handsets operating in the 800 and 1900 MHz bands, is currently being used by wireless carriers across the United States to report E911 calls to public safety answering points (PSAPs), as well as to provide a wide variety of location-based ITS applications, such as roadside assistance, driving directions, traveler information services, etc. In addition, QUALCOMM also operates one of the world's largest satellite-based, two-way data and position tracking networks, which is used by the transportation industry and known as OmniTRACS. There are currently over 450,000 OmniTRACS units operating in the Ku-band in over 30 countries worldwide, providing real-time information management solutions to both commercial and government users to improve transportation efficiency, safety, and profitability. With this

experience in providing ITS applications in a variety of commercial and public safety environments, QUALCOMM would like to offer our perspectives on the questions posed by the Commission regarding the use of the 5.9 GHz band for DSRC ITS applications.

First, QUALCOMM agrees with the Commission and the majority of commenters that DSRC in the 5.9 GHz band should be used primarily for public safety purposes. As outlined above, there are a number of other frequency bands, including those used by commercial mobile radio service providers, that are already being used extensively for myriad commercial ITS applications. The provisioning of public safety ITS applications, on the other hand, will likely benefit from the availability of dedicated spectrum in the 5.9 GHz range.

Second, QUALCOMM agrees with the Commission's statements in the NPRM regarding the importance of technology-neutrality and leaving the selection of technology to licensees. As QUALCOMM has noted in several proceedings before the Commission, the FCC's flexible use policies have enabled commercial wireless service providers to respond to market demands by selecting the appropriate technology and by upgrading their existing systems with the latest technology enhancements. Such flexible use policies encourage innovation, foster competition, and facilitate deployment of new services, including ITS applications, to consumers across the country. QUALCOMM encourages the Commission to maintain its flexible use and technology neutral policies, which should continue to spur additional investment in the delivery of both commercial and public safety ITS applications.

At the same time, QUALCOMM recognizes the significant amount of work to date that has gone into the development of the ASTM DSRC Standard for use in the 5.9 GHz band, and the benefits that are anticipated from nationwide interoperability for DSRC applications. To this end, QUALCOMM recommends that the focus of the ongoing standardization effort be to develop higher layer and application interoperability specifications, rather than lower-level interoperability,

which can be achieved in a number of different ways (such as through the use of multi-mode devices). Only with consistent upper layers and application protocols can true service interoperability be achieved. Given that the standardization work on the upper layers is in its early stages, lower layer specification development is still ongoing, and unresolved issues remain (for example, specifications for security protocol, control channel operation, and overall system operation), QUALCOMM agrees with those commenters that believe that it is premature at this time to mandate the use of the ASTM DSRC Standard and the associated band plan proposed by ITS America until such time as a full set of system specifications have been developed.

QUALCOMM would like to thank the Commission for this opportunity to share information regarding the various types of ITS applications that are currently being provided by commercial wireless service providers using both satellite and terrestrial networks. We anticipate that the use of the 5.9 GHz band for public safety DSRC ITS applications will further improve vehicle safety and efficiency on our nation's surface transportation system.

Respectfully submitted,

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