First Look: Federal Motor Vehicle Safety Standards; V2V Communications

NHTSA proposes to mandate standardized vehicle-to-vehicle (V2V) communications for new light vehicles

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for the 01/12/2017 version of the NPRM.

WHAT IT DOES

The National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT) proposes to establish a new Federal Motor Vehicle Safety Standard (FMVSS), No. 150, to mandate vehicle-to-vehicle (V2V) communications for new light vehicles and to standardize the message and format of V2V transmissions. This will create an information environment in which vehicle and device manufacturers can create and implement applications to improve safety, mobility, and the environment. Without a mandate to require and standardize V2V communications, the agency believes that manufacturers will not be able to move forward in an efficient way and that a critical mass of equipped vehicles would take many years to develop, if ever. Implementation of the new standard will enable vehicle manufacturers to develop safety applications that employ V2V communications as an input, two of which are estimated to prevent hundreds of thousands of crashes and prevent over one thousand fatalities annually.

The proposal contains V2V communication performance requirements predicated on the use of on-board dedicated short-range radio communication (DSRC) devices to transmit Basic Safety Messages (BSM) about a vehicle's speed, heading, brake status, and other vehicle information to surrounding vehicles, and receive the same information from them.

In the longer-term, the agency believes that this fusion of V2V and vehicle-resident technologies will advance the further development of vehicle automation systems, including the potential for truly self-driving vehicles.

Comments for this NPRM were collected through April 12, 2017.

This First Look was adapted from the Federal Register announcement.

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