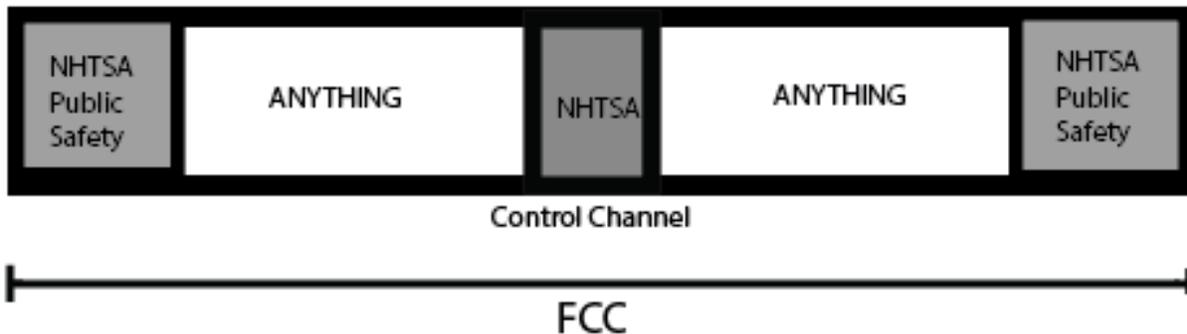


UNDERSTANDING THE DIFFERENCE BETWEEN NHTSA AND THE FCC'S DEFINITIONS OF DSRC

Dynamic Short-Range Communications (DSRC) is a technology meant to allow vehicles to communicate with one another, and with infrastructure, to facilitate both safety-of-life applications (crash avoidance, emergency braking, congestion management) and commercial uses (mobile payments, location-based services, advertising, data collection, etc.). DSRC-equipped cars would talk to one another to reduce collisions and ease congestion, ensuring the roadways are used efficiently and that driver mistakes don't lead to accidents, injuries, and deaths.

However, from a legal and policy standpoint, **the term DSRC currently refers to two different things, depending on which agency you're asking.** The two agencies of jurisdiction - the National Highway Safety Transportation Administration (NHTSA) and the Federal Communications Commission (FCC) - have overlapping definitions, but NHTSA's jurisdiction is less extensive than the FCC's.



At NHTSA, DSRC focuses entirely on the safety-related communications technology that will be used to facilitate safety and congestion management. The mandatory installation of DSRC units is contemplated by NHTSA in rules which are pending; those rules include robust cybersecurity and privacy-by-design, but only apply to the safety applications of DSRC spectrum. The auto industry is pushing hard to support mandating the technology in order to facilitate their non-safety-related business aspirations.

At the FCC, on the other hand, DSRC refers to the full range of uses of the 5.9 GHz band. All 75 MHz - the two 10 MHz channels dedicated to time-sensitive safety messages, the 10 MHz control channel, and the remaining 45 MHz which is available for the auto industry's exclusive use for either safety of life purposes, or whatever other commercial purpose they see fit to deploy.

NHTSA's Role, While Important, is Narrower Than The FCC's, and Therefore Insufficient to Adequately Protect Consumers

Right now, NHTSA is proposing a rule requiring that all new cars sold in the US be equipped with DSRC units. NHTSA is responsible for regulating the precise safety technologies which use the 5.9 GHz band to facilitate vehicle-to-vehicle and vehicle-to-

infrastructure communications. NHTSA DSRC is the stuff that's subject to their proposed mandate - safety-focused technology designed to save lives using a small portion of the 5.9 GHz band. It includes cybersecurity and privacy-by-design, but only for those narrow portions of the band dedicated to safety purposes.

While NHTSA DSRC has some weaknesses (it does nothing to keep pedestrians or non-DSRC-equipped cars safe, and won't be functional until critical mass of equipped vehicles are on the road), it at least addresses cybersecurity, privacy, and commercialization concerns. It doesn't allow commercial use, owing to its focus on safety. It contains privacy and cybersecurity-by-design provisions, ensuring that, at the least, the mandatory deployment of NHTSA DSRC won't make the already troubling state of automobile cybersecurity any worse.

The FCC, responsible for the whole 5.9 GHz band, has unique authority and obligation to protect the public by governing use of the 5.9 GHz band

As the agency that handles spectrum allocation nationwide, the FCC is responsible for the entirety of the 75 MHz of spectrum which makes up the 5.9 GHz band. The FCC's service rules for the band serve as the backdrop against which NHTSA's DSRC standards are deployed. Those service rules govern basics of the safety services - power levels for transmitters, for example, as well as the backwards-compatibility requirement that ensures DSRC units deployed across various model years will all be able to talk to one another - as well as any noncommercial services deployed in the majority of the band, which is not reserved exclusively for safety purposes.

The current service rules are inadequate to address the very real cybersecurity and consumer privacy threats posed by mandating car connectivity technologies directly tied to safety-critical systems like acceleration, braking, and steering. The 5.9 GHz band **SHOULD NOT** be the only band allocated for public safety that permits such commercial exploitation. Permitting such exploitation under the guise of public safety is a startling deviation from prudent public interest spectrum policy.

It is imperative that the FCC act to ensure that the safety and privacy of consumers is protected, and that commercial interests are not allowed to enjoy a spectrum windfall under the guise of protecting the public. Public Knowledge has laid the groundwork by asking the FCC to prevent the auto industry from running roughshod over consumers without adequate protections. Congress must support the Commission in securing these protections for the drivers and passengers of the next generation of connected cars.