

As set forth in accompanying Form 442, Ford Motor Company respectfully requests authorization under the Federal Communication Commission's Program Experimental Radio License rules to conduct experiments at privately held locations under Ford's exclusive control as outlined below. Granting this application will promote innovation and development of standards in the area of V2X communications systems.

Ford meets each of the program license eligibility criteria set forth in Part 5 of the Commission's rules. Ford Motor Company is one of the leading American multinational automakers and is highly regarded for manufacturing quality automobiles with highest level of safety features in the industry.

Ford has established institutional processes to monitor and effectively manage a wide variety of large scale research projects. These processes include systematic approaches and responsible authorities to closely coordinate each step of experimentation authorized subsequent to registration in the Experiments Notification Systems.

Ford envisions a world of connected vehicles where seamless connectivity among vehicles, infrastructure, network, and pedestrians will enhance road safety and will save human lives. Over the last decade, Ford has devoted a large amount of resources to develop the Wi-Fi based V2X technology. The Wi-Fi based V2X radio technology has been systematically and comprehensively tested both in house and as part of the CAMP automakers consortium. Ford, therefore, has the required in-house expertise and adequate engineering know how to plan and execute comprehensive RF testing in controlled environment.

In a more recent development, Ford has expressed interests in 3GPP based Cellular-V2X technology and is willing to conduct lab and field trials to validate the performance of the technology for direct V2V communications.

In addition to designing and testing wireless V2V technology, Ford is also experienced with various other wireless technologies. For example, a large percentage of Ford vehicles are equipped with factory installed LTE modem for cellular connectivity. Recently, Ford has announced that starting 2019, each and every Ford vehicle will be integrated with 4G cellular modem. Several other wireless communication technologies, like Bluetooth, Wi-Fi, Satellite, et al. are widely used in Ford vehicles to provide GPS positioning, infotainment services, and driver safety enhancements. Ford regularly conducts experiments on above wireless technologies which are operating in different licensed spectrum bands

Ford will conduct all tests authorized under its experimental program license at facilities which are either exclusively Ford property and/or privately-operated test locations which are under Ford's exclusive control during the experimentations.

In this application, Ford specifically requests authorization for a program license to enable experimentation in (1) Ford's real-property facilities included within the polygon bounded by the following coordinates and/or (2) privately operated test facilities (for Ford exclusive use during the experimentation) included within the polygon bounded by the following coordinates.