

UNITED STATES OF AMERICA
PRELIMINARY VIEWS FOR WRC-15

Agenda Item 1.18: to consider a primary allocation to the radiolocation service for automotive applications in the 77.5-78.0 GHz frequency band in accordance with Resolution **654 (WRC-12)**

BACKGROUND: Resolution **654 (WRC-12)** calls for WRC-15 to consider a primary allocation to the radiolocation service in the 77.5-78 GHz frequency band for automotive applications, based on appropriate technical, operational and regulatory studies, including sharing studies with services operating in the band and compatibility studies in nearby bands. The resolution also calls for evaluation of Intelligent Transportation System (ITS) safety-related applications that would benefit from global or regional harmonization.

The worldwide automotive industry is developing vehicular radar systems that would operate in portions of the 76-81 GHz band for safety and operational purposes. Such systems may contribute substantially to road safety, diminishing the increasing incidence of traffic fatalities and injuries due to driver distraction. Similar systems in the automotive industry operate around 24 GHz, but are expected to move out of this band by 2013.

The primary amateur and amateur-satellite allocation in the 77.5-78 GHz band was relocated from 75.5-76 GHz by action of WRC-03. The band is shared with the secondary radio astronomy and space research (space-to-Earth) services. Additionally, radio astronomy observatories worldwide, including the Atacama Large Millimeter Array, built through an international collaboration, observe in the 76-81 GHz band. No. **5.149** states that, in this band, “administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference.” The ITU-R studies will need to consider sharing and compatibility with these services.

U.S. VIEW: The United States supports ITU-R sharing, compatibility and regulatory studies between vehicular radars and all services that operate in the 76-81 GHz region of the spectrum. Based on the outcome of those studies, the United States will consider supporting a primary allocation to the radiolocation service in the 77.5-78 GHz band for automotive radars.