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07 July 2009


Comments of the Strategic Automotive Radar frequency Allocation Group

The Strategic Automotive Radar frequency Allocation Group (SARA) is an industrial group of the main automotive car manufacturers and suppliers cooperating on frequency management for automotive radar worldwide. SARA highly welcomes regulation RSS-220 and offers the following information in support of its adoption.

Section 4 of RSS-220 establishes provisions for vehicular radar devices using UWB Short Range Radar (UWB SRR). UWB SRR is the basis for a wide number of vehicle safety applications, using object detection around vehicles. UWB SRR installed in front of a vehicle - often in combination with Long Range Radar (at 77 GHz, known as radar for Adaptive Cruise Control) - allows a bouquet of Active Safety applications (such as collision warning and mitigation) as well as of Passive Safety applications (such as tightening seat belts before a crash might occur).

UWB SRR also supports autonomous emergency braking, which is being implemented in first car lines. Autonomous emergency braking is able to reduce impact speed at crashes significantly and reduce the risk of fatalities and injuries. First studies showed that UWB SRR used for this purpose could avoid 53% of all rear-end crashes. The Swedish Road Administration as well as the German Insurers Accident Research group very recently showed the high safety benefit of

1 SARA members: BMW, Daimler, Fiat, Ford, Volvo, GM, Opel, Saab, Jaguar, LADA, Porsche/Volkswagen/Audi/Seat/Skoda, Autoliv, Bosch, Continental, Delphi, Hella, Infineon, InnoSent, Mitsubishi Electric, Rehau, s.m.s., Takata-Petri, TRW/Autocruise, UMS, Visteon. See our web site at www.sara-group.org.
autonomous braking and recommended the rapid deployment of this technology into the car fleet.²

The emission characteristics for vehicular radar devices in RSS-220 are consistent with the UWB regulation in the United States, which is very important for the automotive industry, because it supports harmonization that brings costs down and makes the technology affordable for the customer.

SARA members are very eager to provide the benefits of automotive safety applications to Canadians based on UWB SRR. For this reason we strongly support the full implementation of RSS-220 as well as other regulatory measures that can foster the introduction of this technology on the Canadian market.

With kind regards,

\[ Signature \]

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² These findings were described in submissions to the 21st International Technical Conference on the Enhanced Safety of Vehicles, June 15-18, 2009. Stuttgart, Germany. SARA would be pleased to supply copies on request of these and other safety findings associated with UWB SRR.