

SURFACE VEHICLE INFORMATION REPORT

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Definition of Road Vehicle Hands-Free Operation of a Person-to-Person Wireless Communication System or Device

RATIONALE

The purpose of this information report is to provide a comprehensive definition of *hands-free*, applied solely to the conversational portion of person-to-person wireless communications systems or devices for application in road vehicles.

Note: The limitation of the present definition to “person-to-person” wireless communications reflects awareness that future Intelligent Transportation System applications described in the literature will entail certain applications, such as those involving electronic payment for tolls or parking, for example, that require additional manual operations on the part of drivers to, for example, select a particular credit/debit card and then confirm/agree to the payment. Such applications do not involve person-to-person wireless communications, and thus require special considerations that are not within the scope of this document.

According to Dictionary.com, “hands-free” means “not requiring the hands for operation, esp. a telephone.” In a sampling of state laws in the U.S. pertaining to cellular telephone usage while driving, use of the term *hands-free* is restricted solely to the function of engaging in conversation (i.e., speaking and listening) while using cellular telephone without the use of either hand. Actions related to the use of a cellular telephone or other portable device while driving include locating the device, picking it up, locating a hands-free accessory, placing it on the head or in the ear, looking up a cellular telephone number, dialing a cellular telephone number, answering a cellular telephone, texting, etc.

The intent of this document is to define hands-free including all actions necessary to accomplish wireless communications while driving. Limiting the scope of this definition to person-to-person wireless communications focuses on the mitigation of driver distraction. Such systems and devices have been in common use for more than 10 years and are widely used by drivers, and thus there exists sufficient research data to support the development of policies and programs aimed at mitigating negative effects on driving safety. This limitation is also intended to avoid inhibiting future innovation in interface designs for new and evolving telematics features and functions.

This document is intended to be technology-neutral and, as such, does not address what technology is used to accomplish a hands-free state. As noted above in regard to payment applications, there may be current or future systems, devices, or interfaces that are not hands-free according to this definition and that nevertheless meet industry, government, and legal standards and guidelines for safe use while driving. This definition is therefore not an adequate basis for determining which device or function uses avoid increased risk while driving.

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1. SCOPE

This Information Report contains a definition of *road vehicle hands-free operation*. This definition applies to driver inputs to a wireless communications device used for person-to-person wireless communications while driving. This report applies to both original equipment manufacturers' and aftermarket devices.

The definition does not apply to outputs, e.g., visual or haptic feedback, from a communication system or device, regardless of the modality of human-machine interface. It also does not apply to parallel or redundant manual control operating modes.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

SAE J287 Driver Hand Control Reach

2.2 Related Publications

The following publications are provided for information purposes only and are not a required part of this SAE Technical Report.

2.2.1 A representative state law is: New Jersey State Law P.L.2003, c.310 (C.39:4-97.3-1.a.), http://www.njleg.state.nj.us/2006/Bills/AL07/198_.HTM

2.2.2 Hands-free. (no date). Dictionary.com Unabridged. Retrieved March 21, 2013, from Dictionary.com website: <http://dictionary.reference.com/browse/hands-free>

3. DEFINITIONS

3.1 SINGLE STEP MANUAL INPUT (SSMI)

Single, distinct input needed from the driver to operate a manual control that starts, acknowledges, accepts, interrupts and/or ends a wireless communications session. The term *SSMI Unit* refers to a device capable of accepting such an input.

NOTE 1: Examples include a single press (or press and hold) of a button, a single touch on a touch pad, or a single gesture.

NOTE 2: This is commonly referred to as "push-to-talk."

3.2 PERSON-TO-PERSON WIRELESS COMMUNICATION SYSTEM OR DEVICE

An in-vehicle (i.e., integrated into the vehicle) system or portable device that enables two or more persons to engage in free-form conversation either via voice or via speech-to-text/text-to-speech conversion.

NOTE: Person-to-person wireless communications do not include pre-formed messages sent automatically, such as an automatic message sent to a caller indicating that the recipient is busy driving and will call back later).