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Intelligent transport systems — Curve speed warning systems (CSWS) — Performance requirements and test procedures

Systèmes intelligents de transport — Systèmes d'alerte de vitesse excessive en approche de virage (CSWS) — Exigences de performance et modes opératoires d'essai



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Foreword

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 204, *Intelligent transport systems*.

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Introduction

The main function of Curve Speed Warning Systems (CSWS) is to warn the driver against the danger caused by maintaining excessive speed to negotiate an upcoming curved road. The system computes the current location of the vehicle with respect to the upcoming curved road of interest and determines a warning threshold speed, below which the vehicle can safely negotiate the upcoming curves. If the vehicle speed exceeds the warning threshold speed, the system provides a warning to the driver, prompting the driver to react and lower the subject vehicle speed to a level suitable for negotiating the curved road ahead. The CSWS scope does not include automated intervention features or means for controlling the vehicle to match a desired speed.

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Intelligent transport systems — Curve speed warning systems (CSWS) — Performance requirements and test procedures

1 Scope

This International Standard contains the basic warning strategy, minimum functionality requirements, basic driver interface elements, minimum requirements for diagnostics and reaction to failure, and performance test procedures for Curve Speed Warning Systems (CSWS). CSWS warns the driver against the danger caused by maintaining excessive speed to negotiate the upcoming curved roads, so that the driver may reduce the speed. The system does not include the means to control the vehicle to meet the desired speed. The responsibility for safe operation of the vehicle always remains with the driver.

This International Standard applies to vehicles with four or more wheels.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1
subject vehicle
vehicle equipped with the CSWS and related to the topic of discussion

2.2
subject vehicle speed
longitudinal component of the subject vehicle velocity

2.3
system states
one of several stages or phases of system operation

Note 1 to entry: See Figure 1.

2.3.1
CSWS off state
state in which CSWS is off

Note 1 to entry: This state has one of the following three causes: the driver has selected the off condition, the ignition is off, or the CSWS is in failure.

2.3.2
CSWS on state
state in which CSWS is on

Note 1 to entry: This state is either in unavailable state or in available state.

2.3.3
CSWS unavailable state
system is in on state and the system has inadequate information

Note 1 to entry: The system cannot make a decision whether the warning criteria are met or not because of fault in GNSS device, lack of map data, or other reasons.

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