
**Intelligent transport systems — Lane
departure warning systems —
Performance requirements and test
procedures**

*Systèmes intelligents de transport — Systèmes d'avertissement de
départ de ruelle — Exigences de performance et méthodes d'essai*



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Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
4 Specifications and requirements	5
4.1 System functions	5
4.2 System classification	6
4.3 Requirements	6
4.4 Optional functions	8
5 Test method.....	9
5.1 Test environment conditions.....	9
5.2 Test course conditions.....	9
5.3 Test vehicle conditions	9
5.4 Test system installation and configuration.....	9
5.5 Test procedure	9
5.6 Criteria for passing the tests	11
Annex A (informative) National road markings	13
Bibliography	19

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 17361 was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

Introduction

Lane departure warning systems (LDWSs) are based on fundamental traffic rules. The main focus of an LDWS is to help the driver keep the vehicle in the lane on highways and highway-like roads. Accordingly, a warning is issued to alert the driver in case of lane departure caused by, for example, inattention. LDWSs are not intended to issue warnings with respect to collisions with other vehicles or to control vehicle motions.

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Intelligent transport systems — Lane departure warning systems — Performance requirements and test procedures

1 Scope

This International Standard specifies the definition of the system, classification, functions, human-machine interface (HMI) and test methods for lane departure warning systems. These are in-vehicle systems that can warn the driver of a lane departure on highways and highway-like roads. The subject system, which may utilize optical, electromagnetic, GPS or other sensor technologies, issues a warning consistent with the visible lane markings. The issuance of warnings at roadway sections having temporary or irregular lane markings (such as roadwork zones) is not within the scope of this International Standard. This International Standard applies to passenger cars, commercial vehicles and buses. The system will not take any automatic action to prevent possible lane departures. Responsibility for the safe operation of the vehicle remains with the driver.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 15037-1, *Road vehicles — Vehicle dynamics test methods — Part 1: General conditions for passenger cars*

ISO 15037-2, *Road vehicles — Vehicle dynamics test methods — Part 2: General conditions for heavy vehicles and buses*

3 Terms and definitions

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

3.1

lane

area of roadway that a vehicle would be expected to travel along in the absence of any obstruction without the driver's desire to change the path of travel

3.2

visible lane marking

delineators intentionally placed on the borderline of the lane that are directly visible by the driver while driving (i.e. not covered by snow, etc.)

NOTE Annex A gives country-specific visible lane-marking definitions.

3.3

incidental visible road feature

visible patterns on the road surface that were not explicitly intended to delineate the boundaries of the lane but which are indicative of the position of the lane

NOTE These include such features as pavement seams or edges, kerbs, and tracks or ruts left by previous vehicles.