



BSI Standards Publication

**Intelligent transport systems — Lane change  
decision aid systems (LCDAS) — Performance  
requirements and test procedures**

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## National foreword

This British Standard is the UK implementation of ISO 17387:2026. It supersedes BS ISO 17387:2008, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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**Intelligent transport systems —  
Lane change decision aid  
systems (LCDAS) — Performance  
requirements and test procedures**

*Systèmes de transport intelligents — Systèmes d'aide à la  
décision de changement de voie (LCDAS) — Exigences de  
performances et méthodes d'essai*

**ISO 17387**

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**Second edition  
2026-02**

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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

This second edition cancels and replaces the first edition (ISO 17387:2008), which has been technically revised.

The main changes are as follows:

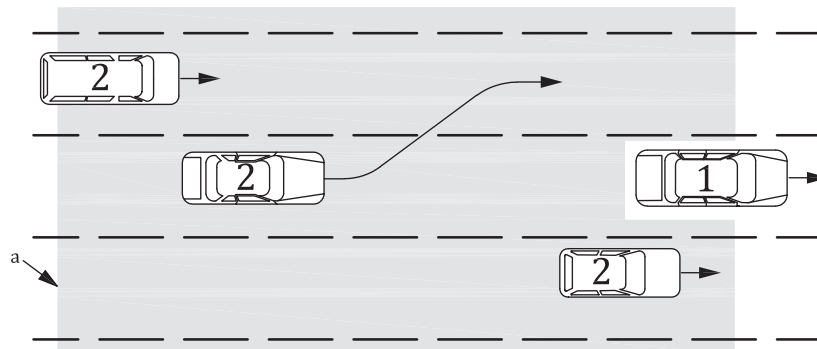
- the target vehicle closing speed classification and target vehicle closing speed classification for road curvature have been modified;
- the test procedure for closing vehicle warning function has been modified;
- the blind spot warning test for target vehicle moving laterally has been modified;
- the definition of the reference point for driver's eye position has been simplified.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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Lane change decision aid systems (LCDAS) warn the driver against collisions that can occur due to a lane change manoeuvre. LCDAS are intended to supplement the vehicle's interior and exterior rear-view mirrors; they are not intended to eliminate the need for such mirrors. LCDAS are intended to detect vehicles in the adjacent lanes to the rear and sides of the subject vehicle (see [Figure 1](#)). When the subject vehicle driver indicates the desire to make a lane change, the system evaluates the situation and warns the driver if a lane change is not recommended. The absence of a warning does not guarantee that the driver can safely make a lane change manoeuvre. The system will not take any automatic action to prevent possible collisions. Responsibility for the safe operation of the vehicle remains with the driver.

**NOTE** Many figures in this document show vehicles on roadways with lane markings. This is not intended to imply that lane marking recognition or lane detection is required for an LCDAS. The lane markings are drawn for reference only.



**Key**

1 subject vehicle

2 target vehicles

a The shaded area illustrates the concept of one possible system. The actual requirements are given in [Clause 5](#).

**Figure 1 — LCDAS concept**

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# Intelligent transport systems — Lane change decision aid systems (LCDAS) — Performance requirements and test procedures

## 1 Scope

This document specifies system requirements and test methods for lane change decision aid systems (LCDAS). LCDAS are intended to warn the driver of the subject vehicle against potential collisions with vehicles either to the side or to the rear in the adjacent lanes of the subject vehicle and moving in the same direction as the subject vehicle for lane change manoeuvres. This document addresses LCDAS for use on forward-moving cars, vans and straight trucks.

This document does not address LCDAS for use on motorcycles or articulated vehicles such as tractor/trailer combinations and articulated buses.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

### 3.1

#### **subject vehicle**

vehicle equipped with the system in question and related to the topic of discussion

### 3.2

#### **target vehicle**

<lane change decision aid systems> any vehicle that is closing in on the subject vehicle from behind, or any vehicle that is located in one of the adjacent zones

### 3.3

#### **coverage zone**

entire area to be monitored by the lane change decision aid system (LCDAS), consisting of a specific subset of the following zones: left adjacent zone, right adjacent zone, left rear zone and right rear zone

Note 1 to entry: A target vehicle located within the coverage zone will thus be detected by the system.

### 3.4

#### **adjacent zone**

zone to the left and right of the subject vehicle

Note 1 to entry: See [Figure 2](#). This figure shows the zone concept only. Actual requirements are given in [5.2](#).