SLOVENSKI STANDARD
SIST EN ISO 17287:2003

01-oktober-2003

Cestna vozila - Ergonomski vidiki transportnih informacij in kontrolnih sistemov – Postopki za ocenjevanje primernosti uporabe med vožnjo (ISO 17287:2003)

Road vehicles - Ergonomic aspects of transport information and control systems - Procedure for assessing suitability for use while driving (ISO 17287:2003)

Straßenfahrzeuge -Ergonomische Aspekte von Fahrerinformations- und Assistenzsystemen - Verfahren zur Bewertung der Gebrauchstauglichkeit beim Führen eines Kraftfahrzeuges (ISO 17287:2003)

Véhicules routiers - Aspects ergonomiques des systemes de commande et d'information du transport - Procédure d'évaluation de leur adéquation pour une utilisation pendant la conduite (ISO 17287:2003)

Ta slovenski standard je istoveten z: **EN ISO 17287:2003**

ICS:

13.180	Ergonomija	Ergonomics
43.040.30	Prikazovalne in kontrolne naprave	Indicating and control devices

SIST EN ISO 17287:2003 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 17287

April 2003

ICS 13.180; 43.040.15

English version

Road vehicles - Ergonomic aspects of transport information and control systems - Procedure for assessing suitability for use while driving (ISO 17287:2003)

Véhicules routiers - Aspects ergonomiques des systèmes de commande et d'information du transport - Procédure d'évaluation de leur adéquation pour une utilisation pendant la conduite (ISO 17287:2003)

Straßenfahrzeuge -Ergonomische Aspekte von Fahrer-informations- und -assistenzsystemen - Verfahren zur Bewertung der Gebrauchstauglichkeit beim Führen eines Kraftfahrzeuges (ISO 17287:2003)

This European Standard was approved by CEN on 17 March 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

CORRECTED 2003-07-16

Foreword

This document (EN ISO 17287:2003) has been prepared by Technical Committee ISO/TC 22 "Road vehicles" in collaboration with Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 17287:2003 has been approved by CEN as EN ISO 17287:2003 without any modifications.

NOTE Normative references to International Standards are listed in Annex ZA (normative).

Annex ZA
(normative)

Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

Publication	Year	Title	EN	Year
ISO 15005	2002	Road vehicles - Ergonomic aspects of transport information and control systems - Dialogue management principles and compliance procedures	EN ISO 15005	2002
ISO 15008	2003	Road vehicles - Ergonomic aspects of transport information and control systems - Specifications and compliance procedures for in-vehicle visual presentation	EN ISO 15008	2003

INTERNATIONAL STANDARD

ISO 17287

First edition
2003-04-01

Road vehicles — Ergonomic aspects of transport information and control systems — Procedure for assessing suitability for use while driving

Véhicules routiers — Aspects ergonomiques des systèmes de commande et d'information du transport — Procédure d'évaluation de leur adéquation pour une utilisation pendant la conduite

Reference number
ISO 17287:2003(E)

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 17287 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 13, *Ergonomics applicable to road vehicles*.

0 Introduction

0.1 General

This International Standard arises from the increasing availability of transport information and control systems (TICS) to support the driver in the primary driving tasks and in other secondary tasks. Drivers require ease of use and high functionality and do not expect this to lead to unsafe driving situations (in use as intended by the manufacturer, or during malfunction).

0.2 Assessment of suitability of TICS

The suitability of TICS is assessed on the basis of compatibility with the primary driving task and is concerned with those aspects of usability which relate most closely to the driver's performance. In particular, suitability focuses on

— interference (with the driving task),

— controllability,

— efficiency, and

— ease of use while learning about the system.

The first three aspects (which are not necessarily mutually exclusive) relate closely to the primary driving task. The fourth is also important, as some features of TICS may be used infrequently, or by drivers who are initially unfamiliar with the systems. Other aspects of usability, such as satisfaction, are less important in assessing the suitability of TICS for use while driving as they are more specific to individual manufacturers and their product profiles, and do not relate so closely to the driver's performance in undertaking the primary driving task.

The importance of the four identified components in an overall assessment of suitability will vary between TICS.

Suitability is a property of TICS and not of their components. It is assessed on the basis of the interaction between the driver and the TICS within the driving environment, and suitability needs to take into account driver's behavioural adaptation induced by the TICS.

This International Standard concerns the process of assessment of a specific TICS product and is intended to ensure that its suitability is considered, assessed and documented as part of the design and development process. It does not attempt to prescribe all the actions that should be taken to assess or ensure suitability. The scope and detail of an assessment is a matter for users of this document. Informative annexes provide examples of aspects of the suitability assessment process.

0.3 Application

This International Standard is intended to assist the assessment of the suitability of TICS in advance of widespread system deployment. It can be used when components from different suppliers are proposed or assembled for use in the in-vehicle environment. The trend of integration of in-vehicle systems is likely to increase the need to consider the impact of multiple and integrated in-vehicle systems and this document could also be applicable to non-TICS functions.

This International Standard is intended for use by manufacturers or by others concerned with assessing the suitability of TICS for use while driving. It is assumed that the users will have some knowledge of automotive human factors.

This International Standard can be used by manufacturers as part of their own quality processes. The design and implementation of procedures to ensure that TICS suitability is assessed and documented will be influenced by the varying needs of an organization, its objectives, the products and services supplied and existing processes and practices employed.

It is not the purpose of this International Standard to enforce uniformity of TICS. It is independent of the type of vehicle, complexity of TICS, level of integration within a vehicle or the specific TICS application or implementation. It is applicable to all TICS, including, for example, those intended for use by drivers with special needs.

Road vehicles — Ergonomic aspects of transport information and control systems — Procedure for assessing suitability for use while driving

1 Scope

This International Standard specifies a procedure for assessing whether specific TICS (transport information and control systems), or a combination of TICS with other in-vehicle systems, are suitable for use by drivers while driving. It addresses

— user-oriented TICS description and context of use,

— TICS task description and analysis,

— the assessment process, and

— documentation.

The TICS description and context of use includes consideration of improper use, reasonably foreseeable misuse and TICS failure. The TICS description, analysis and assessment include a process for identifying and addressing suitability issues.

This International Standard does not recommend specific variables for assessing suitability nor does it define criteria for establishing the suitability of use of a TICS table while driving.

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 15005, *Road vehicles — Ergonomic aspects of transport information and control systems — Dialogue management principles and compliance procedures*

ISO 15008, *Road vehicles — Ergonomic aspects of transport information and control systems — Specifications and compliance procedures for in-vehicle visual presentation*

3 Terms and definitions

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