

SLOVENSKI STANDARD SIST EN ISO 15007-1:2015

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Nadomešča:

SIST EN ISO 15007-1:2003

Cestna vozila - Merjenje voznikovega vizualnega obnašanja glede na prometne informacije in nadzorne sisteme - 1. del: Definicije in parametri (ISO 15007-1:2014)

Road vehicles - Measurement of driver visual behaviour with respect to transport information and control systems - Part 1: Definitions and parameters (ISO 15007-1:2014)

Straßenfahrzeuge - Messung zum visuellen Verhalten des Fahrers in Bezug zu Transportinformationen und Regelsystemen - Teil 1: Definitionen und Parameter (ISO 15007-1:2014)

SIST EN ISO 15007-1:2015

Véhicules routiers - Mesurage du comportement visuel du conducteur en relation avec les systèmes de commande et d'information du transport de la Définition et paramètres (ISO 15007-1:2014)

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Vgrajeni računalniški sistemi computer systems

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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English Version

Road vehicles - Measurement of driver visual behaviour with respect to transport information and control systems - Part 1: Definitions and parameters (ISO 15007-1:2014)

Véhicules routiers - Mesurage du comportement visuel du conducteur en relation avec les systèmes de commande et d'information du transport - Partie 1: Définitions et paramètres (ISO 15007-1:2014)

Straßenfahrzeuge - Messung zum visuellen Verhalten des Fahrers in Bezug zu Transportinformationen und Regelsystemen - Teil 1: Definitionen und Parameter (ISO 15007-1:2014)

This European Standard was approved by CEN on 20 September 2014.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 15007-1:2014 (E)

Contents	Page
Foreword	2

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EN ISO 15007-1:2014 (E)

Foreword

This document (EN ISO 15007-1:2014) has been prepared by Technical Committee ISO/TC 22 "Road vehicles" in collaboration with Technical Committee CEN/TC 278 "Intelligent transport systems" 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 May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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

This document supersedes EN ISO 15007-1:2002.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 15007-1:2014 has been approved by CEN as EN ISO 15007-1:2014 without any modification. (standards.iteh.ai)

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INTERNATIONAL STANDARD

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Second edition 2014-11-01

Road vehicles — Measurement of driver visual behaviour with respect to transport information and control systems —

Part 1:

iTeh STANDARD PREVIEW

Véhicules routiers — Mesurage du comportement visuel du conducteur en relation avec les systèmes de commande et d'information 15007 17005

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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
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Con	tents	Page
	vord	
Introd	luction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Definition of measures and metrics 4.1 Basic Direct Measures 4.2 Glance Metrics Derived From Basic Measures	5
5	Data collection and analysis	7
6	Data presentation	7
Annex	x A (informative) Supporting Figures to explain terms and definitions	9
Biblio	graphy	13

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ISO 15007-1:2014(E)

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.

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

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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 22, Road vehicles, Subcommittee SC 13, Ergonomics applicable to road vehicles.

SIST EN ISO 15007-1:2015

This second edition cancels and replaces the first/edition/(ISO 15007-132002), of which it constitutes a minor revision.

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ISO 15007 consists of the following parts, under the general title *Road vehicles* — *Measurement of driver visual behaviour with respect to transport information and control systems*:

- Part 1: Definitions and parameters
- *Part 2: Equipment and procedure* [Technical Specification]

Introduction

Vision provides the primary source of information available to a driver. Information is gathered by looking at objects and events and this in turn affords control and navigation of the vehicle in the road traffic environment. Assessment of a driver's visual behaviour provides a method of quantifying the driver's visual allocation to the roadway or in-vehicle information sources (see Reference [1]).

Transport Information and Control Systems (TICS) applications for vehicles may have visual displays that can present a range of driver-selected information. If these visual displays have associated controls (e.g. to select a zoom level or menu option) then these associated hand-control activities may also be visually guided and become part of the visual behaviour associated with a display/TICS application. For this reason it may be important to consider not only the visual behaviour in relation to information display, but also the duration and frequency of glances following driver controlled actions.

Comparisons between specific vehicle systems have been made more difficult because the studies were conducted in different environments using different experimental techniques, different measurement definitions, and different analysis methods.

ISO 15007 has been developed to give guidance on the terms and measurements relating to the collection and analysis of driver visual behaviour data. This approach aims to assess how drivers respond to vehicle design, the road environment, or other driver-related tasks in both real and simulated road conditions. More specifically, the approach of this standard is based on the assumption that efficient processing of visual information is essential to the performance of the driving task.

ISO 15007-1 defines key terms and parameters applied in the analysis of driver visual behaviour focused on glance and glance related measurements. ISO 15007-2 gives guidelines on equipment and procedures for analysis of driver visual behaviour. ndards.iteh.ai

Practical assessments of drivers in real or simulated environments are conducted to quantify the allocation of visual behaviour to specified areas of interest. Visual behaviour may be quantified by the location, duration and frequency of glances to a specified area of interest in the visual scene (and, over time, between areas of interest). This approach often uses commonly available eye tracking and/or video-recording equipment. However, it does not preclude the use of more sophisticated technologies which may elicit additional driver visual behaviour information.

Results from such assessments should enable comparison of the relative influence of the TICS use with reference conditions.