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TECHNICAL REPORT

Multimedia systems and equipment for vehicles – Compact Driving Simulator (CDS) –
Part 1: General

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MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES – COMPACT DRIVING SIMULATOR (CDS) –

Part 1: General

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IEC TR 63583-1 has been prepared by technical area 17: Multimedia systems and equipment for vehicles, of IEC technical committee 100: Audio, video and multimedia systems and equipment. It is a Technical Report.

The text of this Technical Report is based on the following documents:

Draft	Report on voting
100/4266/DTR	100/4324/RVDTR

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Technical Report is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 63583 series, published under the general title *Multimedia systems and equipment for vehicles – Compact driving simulator (CDS)*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

A driving simulator is a simulator for the driving of cars and other ground vehicles.

Driving simulators are used for entertainment as well as in the training of driver's education courses taught in educational institutions and private businesses. They are also used for research purposes in the area of human factors and medical research, to monitor driver behaviour, performance, and attention. In the car industry, they are used to design and evaluate new vehicles or new advanced driver assistance systems.

There are many kinds of simulators, such as ambulance simulators, car simulators, modular-design simulators, multi-station driving simulators, truck simulators, bus simulators, and physical simulators. This document focuses on the car simulator, which is used to train and test novice drivers in all the skills required to pass a driver's license road test as well as hazard perception and crash risk mitigation. A driving simulator is one of the representative areas for the application of systems integration technology. It includes computer-simulated education and training processes and provides for repetitive and empirical learning in immersive virtual environments.

There are several kinds of driving simulators, such as mini-driving simulators (MDS), compact driving simulators (CDS), and VR-based driving simulators (VDS).

The IEC 63583 series consists of two parts:

Part 1: General

Part 2: XR-based CDS[1].

In this document, a general description of CDS is given.

[1] Under development.

MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES – COMPACT DRIVING SIMULATOR (CDS) –

Part 1: General

1 Scope

This part of IEC TR 63583, which is a technical report, specifies the system overview of the compact driving simulator (CDS), which is a virtual education and training system and a compact version of a driving simulator.

2 Normative references

There are no normative references in this document.