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**Multimedia systems and equipment for vehicles – Surround view system –
Part 4: Application for camera monitor systems**

**Systèmes et équipements multimédias pour véhicules – Système de vision
panoramique –
Partie 4: Application des systèmes à caméra et moniteur**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES –
SURROUND VIEW SYSTEM –****Part 4: Application for camera monitor systems**

FOREWORD

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IEC 63033-4 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 an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
100/3723/FDIS	100/3750/RVD

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 International Standard is English.

A list of all parts in the IEC 63033 series, published under the general title *Multimedia systems and equipment for vehicles – Surround view system*, can be found on the IEC website.

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/standardsdev/publications.

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INTRODUCTION

To install a CMS (Camera Monitor System) in a vehicle, it must comply with UN Regulation No. 46. The current CMS only shows one camera image on one display. This document specifies which composite images generated from the multiple cameras of the surround view system specified in IEC 63033-1 comprise the FOV, and which display requirements specified in UN Regulation No. 46 apply.

MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES – SURROUND VIEW SYSTEM –

Part 4: Application for camera monitor systems

1 Scope

This document specifies which composite images generated from the multiple cameras of the surround view system specified in IEC 63033-1 comprise the FOV, and which display requirements specified in UN Regulation No. 46 apply.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

UN Regulation No. 46, *Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regards to the installation of these devices*

3 Terms, definitions and abbreviated terms

No terms and definitions are listed in this document.

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

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

3.1 Abbreviated terms

FOV field of view

4 System model

The system model of surround view system is described in Figure 1. The surround view system shall generate multiple camera composite images and/or single camera images, using cameras that are mounted on the outside the vehicle. The views to be generated by this system shall capture the fields of view specified in Clause 5. This system shall generate multiple views according to the fields of view to be secured.