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Ergonomics of human-system interaction

Part 311: Application of ISO 9241-307: LCD screens for workstations

bsi.

National foreword

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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 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 4, *Ergonomics of human-system interaction*.

This first edition cancels and replaces ISO 9241-3:1992.

A list of all parts in the ISO 9241 series can be found on the ISO website.

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.

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Introduction

The ISO 9241-30x family of standards has replaced ISO 9241-3[1)], ISO 9241-7[1)], ISO 9241-8[1)], ISO 13406-1[1)] and ISO 13406-2[1)]. The overall goal of the restructuring was to design a modular standard enabling an easy way of adding new intended contexts of use, new measurement methods or new technologies in the ISO 9241-30x family of standards.

The ISO 9241-30x family of standards consists of seven individual standards. Table 1 gives an overview (for details see the standards themselves).

This document refers to ISO 9241-307. It helps explain the transition from the earlier structure of the related standards to the current structure. It will be revised or withdrawn following the revision of ISO 9241-307.

Table 1 — Overview of the ISO 9241-30x family of standards

Part of ISO 9241-30x	Title and explanation
ISO 9241-300	Introduction to electronic visual display requirements — This part introduces the ISO 9241-30x family of standards and explains the modular structure.
ISO 9241-302	Terminology for electronic visual displays — This part explains the terms and definitions used in the series.
ISO 9241-303	Requirements for electronic visual displays — This part establishes fundamental image-quality requirements on a generic basis. For assessing its requirements, a testing method is needed regarding its technology, task and environment.
ISO 9241-304	User performance test methods for electronic visual displays — This part provides guidance for assessing the visual ergonomics of display technologies with user performance test methods.
ISO 9241-305	Optical laboratory test methods for electronic visual displays — This part contains test methods for measurement of the requirements given in ISO 9241-303.
[a] ISO test charts for the visual assessment of the display output by yes/no question are available from: https://standards.iso.org/iso/9241/306/ed-2/index.html https://standards.iso.org/iso/9241/306/ed-2/AE09/AE09F0PX.PDF (achromatic, 2 MB) https://standards.iso.org/iso/9241/306/ed-2/AE18/AE18F0PX.PDF (chromatic, 14 MB)	

1) Cancelled and replaced by ISO 9241-302, ISO 9241-303, ISO 9241-304, ISO 9241-305, ISO 9241-307 and ISO 9241-311.

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Part of ISO 9241-30x	Title and explanation
ISO 9241-306	Field assessment methods for electronic visual displays — This part describes simplified optical, geometrical and visual assessment methods that can be used for on-site measurements at visual display workstations.[a]
ISO 9241-307	Analysis and compliance test methods for electronic visual displays — This part establishes test methods for the analysis of a variety of visual display technologies, tasks and environments. It refers to the general requirements given in ISO 9241-303 and test methods given in ISO 9241-305 for assessment of conformity for different (display-) technologies and the anticipated contexts of use.

[a] ISO test charts for the visual assessment of the display output by yes/no question are available from:

https://standards.iso.org/iso/9241/306/ed-2/index.html

https://standards.iso.org/iso/9241/306/ed-2/AE09/AE09F0PX.PDF (achromatic, 2 MB)

https://standards.iso.org/iso/9241/306/ed-2/AE18/AE18F0PX.PDF (chromatic, 14 MB)

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TECHNICAL REPORT **ISO/TR 9241-311:2022**

Ergonomics of human-system interaction —

Part 311:
Application of ISO 9241-307: LCD screens for workstations

1 Scope

This document provides information relating to the specification of liquid crystal display (LCD) screens at visual display workstations in indoor locations, in accordance with ISO 9241-307:2008, 5.2. The information is limited to LCD screens, since these are typically used at workstations.

The information is intended to support managerial decision makers (e.g. procurement operators, companies' safety committees, occupational safety and health professionals) who are responsible for the acquisition of visual displays.

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.

ISO 9241-302:2008, *Ergonomics of human-system interaction — Part 302: Terminology for electronic visual displays*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9241-302 and the following 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
artificial information
visualization of objects and scenes that do not have originals in our world in monochrome (including achromatic) and/or multicolour (including full-colour) presentation

EXAMPLE Text (i.e. alphanumeric characters), graphical signs, symbols.

Note 1 to entry: See ISO 9241-307:2008, Table 38.

3.2
reality information
imaging of objects and scenes that do have existing originals in our world in monochrome (including achromatic) and/or multicolour (including full-colour) presentation

EXAMPLE Faces, people, landscapes.

Note 1 to entry: See ISO 9241-307:2008, Table 38.

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