



ISO 9241-112

**Ergonomics of human-system
interaction —**

Part 112:
**Principles for the presentation of
information**

Ergonomie de l'interaction homme-système —

Partie 112: Principes relatifs à la présentation de l'information

**Second edition
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This document was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 4, *Ergonomics of human-system interaction*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 122, *Ergonomics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 9241-112:2017), which has been technically revised.

The main changes are as follows:

- the terms and definitions have been updated;
- the guidance has been updated.

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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This document presents principles for the presentation of information that apply to the design and evaluation of user interfaces in addition to the interaction principles contained in ISO 9241-110.

The application and use of the principles and general recommendations presented in this document results in a variety of benefits to users of interactive user interfaces, including improvements in speed, accuracy, mental effort and user experience. They also help prevent users from experiencing usability problems with presented information. Examples of such problems include the following:

- users do not detect information, although the information is present;
- users are distracted from information they are focusing on by other information;
- users cannot discriminate between pieces of information, since they appear to be identical;
- users misinterpret information since the meaning of the information is ambiguous;
- users expend unnecessary time in understanding information since the information presented is unnecessarily lengthy;
- users do not understand information due to unknown conventions used in the information presented.

The principles and general recommendations covered in this document will help to avoid misinterpretations by providing guidance on the appropriate and effective presentation of information. The guidance in this document does not deal with the identification of the specific information to be presented.

This document contains general recommendations that apply across modalities. ISO 9241-125 provides detailed recommendations relating to the design and evaluation of visual user interfaces.

This document focuses on software aspects of the presentation of information and does not include guidance on the hardware-controlled physical characteristics of information presented in different modalities (such as those identified ISO 9241-303).

The guidance in this document for presenting information is aimed at helping the user to accomplish tasks. This guidance is not aimed at the presentation of information for other reasons (e.g. corporate branding or advertising).

It is intended for the following types of users:

- user interface designers, who will apply the guidance during the development process;
- software, system, and service developers, who will apply the guidance during the design and implementation of system functionality;
- evaluators, who are responsible for ensuring that products meet the recommendations;
- designers of user interface development tools and style guides to be used by user interface designers;
- project managers, who are responsible for managing development processes;
- buyers, who will reference this document during product procurement.