

## **Kuvaritega kontoritöö ergonoomianõuded. Osa 11: Suunised kasutatavuse kohta**

Ergonomic requirements for office work with visual display terminals (VDTs) - Part 11: Guidance on usability

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 9241-11:2000 sisaldab Euroopa standardi EN ISO 9241-11:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 9241-11:2000 consists of the English text of the European standard EN ISO 9241-11:1998.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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**ICS** 13.180, 35.180

**Võtmesõnad:** (tagasi)peegeldumine, andmeterminal, arvuti välisseadmed, ergonoomia, kontoriseadmed, kuvamisseadmed, tehnilised andmed, tekstitöötlus

ICS 13.180; 35.180

Descriptors: Visual display terminals, VDU, usability.

**English version**

**Ergonomic requirements for office work with visual  
display terminals (VDTs)**

Part 11: Guidance on usability  
(ISO 9241-11 : 1998)

Exigences ergonomiques pour travail  
de bureau avec terminaux à écrans de  
visualisation (TEV) – Partie 11: Lignes  
directrices relatives à l'utilisabilité  
(ISO 9241-11 : 1998)

Ergonomische Anforderungen für Bü-  
rotätigkeiten mit Bildschirmgeräten –  
Teil 11: Anforderungen an die  
Gebrauchstauglichkeit – Leitsätze  
(ISO 9241-11 : 1998)

This European Standard was approved by CEN on 1998-03-05.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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## Foreword

International Standard

ISO 9241-11 : 1998 Ergonomic requirements for office work with visual display terminals (VDTs) – Part 11:  
Guidance on usability,

which was prepared by ISO/TC 159 'Ergonomics' of the International Organization for Standardization, has been adopted by CEN/CS as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by September 1998 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 9241-11 : 1998 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

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## Introduction

The objective of designing and evaluating visual display terminals for usability is to enable users to achieve goals and meet needs in a particular context of use. ISO 9241-11 explains the benefits of measuring usability in terms of user performance and satisfaction. These are measured by the extent to which the intended goals of use are achieved, the resources that have to be expended to achieve the intended goals, and the extent to which the user finds the use of the product acceptable.

ISO 9241-11 emphasizes that visual display terminal usability is dependent on the context of use and that the level of usability achieved will depend on the specific circumstances in which a product is used. The context of use consists of the users, tasks, equipment (hardware, software and materials), and the physical and social environments which may all influence the usability of a product in a work system. Measures of user performance and satisfaction assess the overall work system, and, when a product is the focus of concern, these measures provide information about the usability of that product in the particular context of use provided by the rest of the work system. The effects of changes in other components of the work system, such as the amount of user training, or the improvement of the lighting, can also be measured by user performance and satisfaction.

The term usability is sometimes used to refer more narrowly to the attributes of a product which make it easier to use (see Annex D). Requirements and recommendations relating to the attributes of the hardware, software and environment which contribute to visual display terminal usability, and the ergonomic principles underlying them, are provided in other parts of ISO 9241.

## 1 Scope

ISO 9241-11 defines usability and explains how to identify the information which is necessary to take into account when specifying or evaluating usability of a visual display terminal in terms of measures of user performance and satisfaction. Guidance is given on how to describe the context of use of the product (hardware, software or service) and the relevant measures of usability in an explicit way. The guidance is given in the form of general principles and techniques, rather than in the form of requirements to use specific methods.

The guidance in ISO 9241-11 can be used in procurement, design, development, evaluation, and communication of information about usability. ISO 9241-11 includes guidance on how the usability of a product can be specified and evaluated. It applies both to products intended for general application and products being acquired for or being developed within a specific organization.

ISO 9241-11 also explains how measures of user performance and satisfaction can be used to measure how any component of a work system affects the whole work system in use.

The guidance includes procedures for measuring usability but does not detail all the activities to be undertaken. Specification of detailed user-based methods of measurement is beyond the scope of ISO 9241-11, but further information can be found in Annex B and the bibliography in Annex E.

ISO 9241-11 applies to office work with visual display terminals. It can also apply in other situations where a user is interacting with a product to achieve goals. ISO 9241 parts 12 to 17 provide conditional recommendations which are applicable in specific contexts of use. The guidance in this Part of ISO 9241 can be used in conjunction with ISO 9241 Parts 12 to 17 in order to help identify the applicability of individual recommendations.

ISO 9241-11 focuses on usability and does not provide comprehensive coverage of all objectives of ergonomic design referred to in ISO 6385. However, design for usability will contribute positively to ergonomic objectives, such as the reduction of possible adverse effects of use on human health, safety and performance.

ISO 9241-11 does not cover the processes of system development. Human-centred design processes for interactive systems are described in ISO 13407.

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 9241. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 9241 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6385:1981, *Ergonomic requirements in the design of work systems*.