Kuvaritega kontoritöö ergonoomianõuded. Osa 17: Blanketi täitmise dialoogid

Ergonomic requirements for office work with visual display terminals (VDTs) - Part 17: Form filling dialogues

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 9241-17:2000 sisaldab Euroopa standardi EN ISO 9241-17:1998 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 9241-17:2000 consists of the English text of the European standard EN ISO 9241-17:1998.
Käesolev dokument on jõustatud 20.03.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 20.03.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: Standard ISO 9241-17 annab tinglikke soovitusi dialoogide, sisend- ja väljundprogrammide väljatöötamiseks arvutidialoogide jaoks, kus kasutatakse tüüpiliste kontoriülesannete täitmiseks blankette ja dialoogiaknaid.	**Scope:**

ICS 13.180, 35.180

Võtmesõnad: andmeterminal, arvuti välisseadmed, ergonoomia, jõudlus, kasutusnõuded, kontoriseadmed, kuvamisseadmed, tehnilised andmed, tekstitöötlus

EUROPEAN STANDARD
NORME EUROPÉENNE
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EN ISO 9241-17

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English version

Ergonomic requirements for office work with visual display terminals (VDTs)
Part 17: Form filling dialogues
(ISO 9241-17 : 1998)

Exigences ergonomiques pour travail
de bureau avec terminaux à écrans
de visualisation (TEV) – Partie 17:
Dialogues de type remplissage de
formulaires (ISO 9241-17 : 1998)

Ergonomische Anforderungen für
Bürotätigkeiten mit Bildschirm-
geräten – Teil 17: Dialogführung
mittels Bildschirmformularen
(ISO 9241-17 : 1998)

This European Standard was approved by CEN on 1998-06-15.

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Up-to-date lists and bibliographical references concerning such national stand-
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and the United Kingdom.

CEN

European Committee for Standardization
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Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

International Standard

ISO 9241-17 : 1998 Ergonomic requirements for office work with visual display terminals (VDTs) – Part 17:
Form filling dialogues,

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 February 1999 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 9241-17 : 1998 was approved by CEN as a European Standard without any modification.

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

Contents

Introduction

ISO 9241 is a multipart standard that deals with both the hardware and software ergonomic aspects of the use of VDTs. The description of the parts, their interrelationships, and a description of the expected users of the parts is provided in ISO 9241-1:1992, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 1: General introduction.*

This part of ISO 9241 is concerned with the ergonomic design of form filling dialogues. In form filling dialogues, users fill in, select entries for, or modify labelled fields on an area of the screen display.

This part of ISO 9241 serves the following types of users:

a) The user interface designer, who will apply this part of ISO 9241 during the development process.

b) The designer of printed forms which serve as source documents.

c) The buyer, who will reference this part of ISO 9241 during the product procurement process.

d) Evaluators responsible for ensuring products meet the recommendations in this part of ISO 9241.

e) Designers of user interface development tools to be used by interface designers.

f) End users who will gain from the potential benefits provided by this part of ISO 9241.

This part of ISO 9241 consists of a number of conditional recommendations concerning form filling dialogues. Conditional recommendations are recommendations which should be met only within the specific context for which they are relevant (e.g, particular kinds of users, tasks, environments, technology). These conditional recommendations were developed primarily by reviewing the existing relevant literature and empirical evidence, then generalizing and formulating this work into recommendations for use by the interface designer and/or evaluator. Sources for the individual recommendations are listed in Informative Annex B.

Designers using this part of ISO 9241 need to know that they are developing an interface that will meet the recommendations provided in this part. Likewise, buyers and evaluators need a means to determine how a product matches the recommendations in this part of ISO 9241. It is not intended that every recommendation should be applied, only those that are relevant. Informative Annex A provides an example of a procedure for evaluating the applicability of and adherence to the conditional

recommendations provided in this part of ISO 9241. Design objectives are provided prior to each of the major clauses to focus on the intent of the recommendations within the clause.

The application of this part of ISO 9241 is expected to improve the overall quality of the form filling dialogue, but this standard (like any other standard) will not guarantee the quality of the interface. Quality depends on specific usability criteria as set by the user, buyer or other form filling dialogue consumer which may include specifications based on this part of ISO 9241.

It should be noted that ISO 9241-10 describes dialogue principles that are relevant for the design of form filling dialogues. These principles should provide the designer and evaluator with additional information concerning the ergonomic rationale for the various recommendations in this part of ISO 9241 and, therefore, assist in making tradeoffs. However, it may be necessary to base tradeoffs on other considerations as well.

1 Scope

This part of ISO 9241 provides conditional recommendations on dialogue design, input design and output design for computer dialogues in which form filling and dialogue boxes are used to accomplish typical office tasks. **Form filling dialogues** are dialogues in which the user fills in, selects entries for, or modifies labelled fields on a "form" or a dialogue box presented by the system. Often the system then creates, or updates the database associated with the form. Form filling entries typically are in the form of typed input (abbreviations, or full names) or selections from available option lists. This part of ISO 9241 pertains to form filling dialogues generated through both VDT character-based and bit-mapped screen displays (often referred to as "GUIs") and input through keyboards and optional pointing devices (eg. mice). In addition, this part includes the use of non-text methods for providing forms entries (e.g. list boxes) and pertains to dialogue boxes which utilize form filling dialogue techniques. It should be noted that some of the recommendations in this part of ISO 9241 are based on Western Language conventions. For other languages, the recommendations may need to be modified to fit the readability considerations inherent in these languages. These recommendations can be utilized throughout the development process (e.g., as guidance for designers during design, as a basis for heuristic evaluation, as guidance for usability testing) and in the procurement process.

Interface design depends upon the task, the user, the environment, and the available technology. Consequently, this part of ISO 9241 cannot be applied without a knowledge of the design and use context of the interface and it is not intended to be used as a prescriptive set of rules to be applied in their entirety (see ISO 9241-11). Rather, it assumes that the designer has proper information available concerning task and user requirements and understands the use of available technology (this may require consultation with a qualified ergonomics professional as well as empirical testing with real users).

The recommendations relate to the three major design components of user interfaces, i.e., dialogue, input, and output.

Dialogue design determines the way in which a user is guided by the system to make inputs and influences the amount of control the user has over the dialogue. Form filling dialogues should be designed to support the user in his/her actual work without creating additional work caused by system peculiarities as well as enabling the user to become well-informed and to remain in control of the flow of work (also, see ISO 9241-10 which deals with dialogue principles). Dialogue design is covered in this part of ISO 9241 in terms of designing form filling structures, providing feedback mechanisms and providing appropriate navigation methods.

Input design is concerned with how input devices can be applied to facilitate the entry and modification of form fields. One or more devices such as an alphanumeric keyboard, function keys, pointing devices and voice (other devices are not excluded) can be provided depending on the task at hand and dialogue requirements, as well as on individual preferences. This part of ISO 9241 provides conditional recommendations for text entry, choice entry, and control using various input devices.

Output design is concerned with how data is to be presented consistently and distinctly on the screen display. This part of ISO 9241 provides conditional recommendations for the output design of form filling dialogues in terms of the content and placement of fields and groups of fields (also see ISO 9241-12 for general information on the presentation of information).

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 9241. At the time of publication, the editions indicated were 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 editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 9241-2:1992, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 2: Guidance on task requirements.*

ISO 9241-10:1996, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 10: Dialogue principles.*

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

ISO 9241-12:—[1]), *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 12: Presentation of information.*

ISO 9241-13:1998, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 13: User guidance.*

ISO 9241-14:1997, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 14: Menu dialogues.*

ISO 9241-16:—[1]), *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 16: Direct manipulation dialogues.*

3 Definitions

For the purposes of this part of ISO 9241, the following definitions apply.

3.1 entry field: Type of field in a form in which data is entered. Entry fields may be optional fields or required fields.

3.2 field: Area on a screen display in which data is entered or presented.

3.3 form: Structured display with labelled fields that the user reads, fills in, selects entries for (e.g., through choice buttons or radio buttons), or modifies.

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1) To be published.