

Ergonomics of human-system interaction - Part 210: Human-centred design for interactive systems

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Ergonomics of human-system interaction - Part 210: Human-centred design for interactive systems (ISO 9241-210:2010)

Ergonomie de l'interaction homme-système - Partie 210:
Conception centrée sur l'opérateur humain pour les
systèmes interactifs (ISO 9241-210:2010)

Ergonomie der Mensch-System-Interaktion - Teil 210:
Prozess zur Gestaltung gebrauchstauglicher interaktiver
Systeme (ISO 9241-210:2010)

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Foreword

The text of ISO 9241-210:2010 has been prepared by Technical Committee ISO/TC 159 "Ergonomics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 9241-210:2010 by Technical Committee CEN/TC 122 "Ergonomics" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2011, and conflicting national standards shall be withdrawn at the latest by April 2011.

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Endorsement notice

The text of ISO 9241-210:2010 has been approved by CEN as a EN ISO 9241-210:2010 without any modification.

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Introduction

Human-centred design is an approach to interactive systems development that aims to make systems usable and useful by focusing on the users, their needs and requirements, and by applying human factors/ergonomics, and usability knowledge and techniques. This approach enhances effectiveness and efficiency, improves human well-being, user satisfaction, accessibility and sustainability; and counteracts possible adverse effects of use on human health, safety and performance.

There is a substantial body of human factors/ergonomics and usability knowledge about how human-centred design can be organized and used effectively. This part of ISO 9241 aims to make this information available to help those responsible for managing hardware and software design and re-design processes to identify and plan effective and timely human-centred design activities.

The human-centred approach to design described in this part of ISO 9241 complements existing systems design approaches. It can be incorporated in approaches as diverse as object-oriented, waterfall and rapid application development.

The principles of human-centred design and the related activities have not changed substantially since ISO 13407 was produced and have been validated by ten years of application. This part of ISO 9241 reflects this by making requirements as well as recommendations.

Ergonomics of human–system interaction —

Part 210:

Human-centred design for interactive systems

1 Scope

This part of ISO 9241 provides requirements and recommendations for human-centred design principles and activities throughout the life cycle of computer-based interactive systems. It is intended to be used by those managing design processes, and is concerned with ways in which both hardware and software components of interactive systems can enhance human–system interaction.

NOTE 1 Computer-based interactive systems vary in scale and complexity. Examples include off-the-shelf (shrink-wrap) software products, custom office systems, process control systems, automated banking systems, Web sites and applications, and consumer products such as vending machines, mobile phones and digital television. Throughout this part of ISO 9241, such systems are generally referred to as products, systems or services although, for simplicity, sometimes only one term is used.

This part of ISO 9241 provides an overview of human-centred design activities. It does not provide detailed coverage of the methods and techniques required for human-centred design, nor does it address health or safety aspects in detail. Although it addresses the planning and management of human-centred design, it does not address all aspects of project management.

The information in this part of ISO 9241 is intended for use by those responsible for planning and managing projects that design and develop interactive systems. It therefore addresses technical human factors and ergonomics issues only to the extent necessary to allow such individuals to understand their relevance and importance in the design process as a whole. It also provides a framework for human factors and usability professionals involved in human-centred design. Detailed human factors/ergonomics, usability and accessibility issues are dealt with more fully in a number of standards including other parts of ISO 9241 (see Annex A) and ISO 6385, which sets out the broad principles of ergonomics.

The requirements and recommendations in this part of ISO 9241 can benefit all parties involved in human-centred design and development. Annex B provides a checklist that can be used to support claims of conformance with this part of ISO 9241.

NOTE 2 Annex A and the Bibliography contain information about relevant related standards.

2 Terms and definitions

For this document, the following terms and definitions apply.

2.1

accessibility

⟨interactive systems⟩ usability of a product, service, environment or facility by people with the widest range of capabilities

[ISO 9241-171]