

Irish Standard I.S. EN ISO 9241-20:2009

Ergonomics of human-system interaction - Part 20: Accessibility guidelines for information/communication technology (ICT) equipment and services (ISO 9241-20:2008)

© NSAI 2009

No copying without NSAI permission except as permitted by copyright law.

# I.S. EN ISO 9241-20:2009

Dublin 9

Incorporating amendments/co	orrigenda issued since p	ublication:		
This document replaces:	This document is L EN ISO 9241-20:2		Publish 21 Janu	<i>ed:</i> Jary, 2009
This document was published under the authority of the NS and comes into effect on: 27 February, 2009	d SAI			ICS number: 13.180 35.180
	T +353 1 807 3800 F +353 1 807 3838	Sales: T +353 1 8 F +353 1 8		Price Code: O

Údarás um Chaighdeáin Náisiúnta na hÉireann

W standards.ie

E standards@nsai.ie

W NSAl.ie

# **EUROPEAN STANDARD**

# **EN ISO 9241-20**

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

January 2009

ICS 13.180; 35.180

#### **English Version**

Ergonomics of human-system interaction - Part 20: Accessibility guidelines for information/communication technology (ICT) equipment and services (ISO 9241-20:2008)

Ergonomie de l'interaction homme-système - Partie 20: Lignes directrices sur l'accessibilité de l'équipement et des services des technologies de l'information et de la communication (TIC) (ISO 9241-20:2008) Ergonomie der Mensch-System-Interaktion - Teil 20: Leitlinien für die Zugänglichkeit der Geräte und Dienste in der Informations- und Kommunikationstechnologie (ISO 9241-20:2008)

This European Standard was approved by CEN on 29 December 2008.

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 CEN Management Centre or to any CEN member.

This European Standard exists 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

# EN ISO 9241-20:2009 (E)

Contents	Page
Foreword	3

EN ISO 9241-20:2009 (E)

# **Foreword**

The text of ISO 9241-20:2008 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 9241-20:2009 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 July 2009, and conflicting national standards shall be withdrawn at the latest by July 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

#### **Endorsement notice**

The text of ISO 9241-20:2008 has been approved by CEN as a EN ISO 9241-20:2009 without any modification.

This is a free page sample. Access the full version online.

# I.S. EN ISO 9241-20:2009

This page is intentionally left BLANK.

This is a free page sample. Access the full version online.

# I.S. EN ISO 9241-20:2009 INTERNATIONAL STANDARD

ISO 9241-20

> First edition 2008-03-01

# Ergonomics of human-system interaction —

Part 20:

Accessibility guidelines for information/communication technology (ICT) equipment and services

Ergonomie de l'interaction homme-système —

Partie 20: Lignes directrices sur l'accessibilité de l'équipement et des services des technologies de l'information et de la communication (TIC)



## ISO 9241-20:2008(E)

#### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



### **COPYRIGHT PROTECTED DOCUMENT**

#### © ISO 2008

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

# **Contents**

Page

Forewo	ord	iv		
Introduction				
1	Scope	. 1		
2	Normative references	. 1		
3	Terms and definitions	. 2		
4 4.1 4.2 4.3 4.4	Application	. 3 . 4 . 4		
5 5.1 5.2 5.3	Accessibility  General  Context(s) of use and accessibility  Process	. 7 . 7		
6 6.1 6.2	Recommendations related to managing development	. 8		
7 7.1 7.2 7.3 7.4 7.5 7.6	Recommendations related to user characteristics  General	. 8 11 12 14 14		
8 8.1 8.2 8.3	Recommendations related to task characteristics  Performing tasks based on context of use  Providing alternative ways of performing tasks  Performing maintenance and other non-task related operations	17 18		
9 9.1 9.2 9.3 9.4 9.5	Recommendations related to equipment and service characteristics	18 20 20 21		
10 10.1 10.2 10.3	Recommendations related to environmental characteristics  Operating in a range of environments  Designing environments  Impacting the environment	22 22		
Annex	A (informative) Overview of the ISO 9241 series	24		
Annex	B (informative) Sample checklist for assessing applicability and conformance of ICT equipment and services	28		
Annex	C (informative) User needs	33		
Bibliog	ıraphy	42		

## **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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 9241-20 was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 4, *Ergonomics of human-system interaction*.

ISO 9241 consists of the following parts, under the general title *Ergonomic requirements for office work with visual display terminals (VDTs)*:

- Part 1: General introduction
- Part 2: Guidance on task requirements
- Part 3: Visual display requirements
- Part 4: Keyboard requirements
- Part 5: Workstation layout and postural requirements
- Part 6: Guidance on the work environment
- Part 7: Requirements for display with reflections
- Part 8: Requirements for displayed colours
- Part 9: Requirements for non-keyboard input devices
- Part 11: Guidance on usability
- Part 12: Presentation of information
- Part 13: User guidance
- Part 14: Menu dialogues
- Part 15: Command dialogues
- Part 16: Direct manipulation dialogues

ISO 9241-20:2008(E)

— Part 17: Form filling dialogues

Guidance on software individualization is to form the subject of a future part 129.

ISO 9241 also consists of the following parts, under the general title *Ergonomics of human-system interaction*:

- Part 20: Accessibility guidelines for information/communication technology (ICT) equipment and services
- Part 110: Dialogue principles
- Part 151: Guidance on World Wide Web user interfaces
- Part 171: Guidance on software accessibility
- Part 300: Introduction to electronic visual display requirements
- Part 302: Terminology for electronic visual displays
- Part 303: Requirements for electronic visual displays
- Part 304: User performance test methods
- Part 305: Optical laboratory test methods for electronic visual displays
- Part 306: Field assessment methods for electronic visual displays
- Part 307: Analysis and compliance test methods for electronic visual displays
- Part 308: Surface-conduction electron-emitter displays (SED) [Technical Report]
- Part 400: Principles and requirements for physical input devices
- Part 410: Design criteria for physical input devices
- Part 920: Guidance on tactile and haptic interactions

Framework for tactile and haptic interaction is to form the subject of a future part 910.



This is a free preview	<ul> <li>Purchase the entire</li> </ul>	e publication at the link below:
------------------------	---	----------------------------------

**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation