BS EN ISO 9241-20:2021

BSI Standards Publication

Ergonomics of human-system interaction

Part 20: An ergonomic approach to accessibility within the ISO 9241 series

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National foreword

This British Standard is the UK implementation of EN ISO 9241-20:2021. It is identical to ISO 9241-20:2021. It supersedes BS EN ISO 9241-20:2009, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee IST/15, Software and systems engineering.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Ergonomie de l'interaction homme-système - Partie 20 : Approche ergonomique de l'accessibilité dans la série ISO 9241 (ISO 9241-20:2021)

Ergonomie der Mensch-System-Interaktion - Teil 20: Ein ergonomischer Ansatz für die Barrierefreiheit innerhalb der ISO 9241-Reihe (ISO 9241-20:2021)

This European Standard was approved by CEN on 25 October 2021.

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European foreword

This document (EN ISO 9241-20:2021) has been prepared by Technical Committee ISO/TC 159 "Ergonomics" in collaboration with 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of an identical text or by endorsement, at the latest by June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

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

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Endorsement notice

The text of ISO 9241-20:2021 has been approved by CEN as EN ISO 9241-20:2021 without any modification.

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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 9241-20:2008), which has been technically revised.

The main changes are as follows:

— The guidance in the previous edition has been replaced by references to many different standards that now contain applicable guidance.

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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Introduction

The ISO 9241 series provides ergonomic guidance that contributes to the accessibility of interactive systems to meet the needs of users.

Two parts of ISO 9241 particularly address accessibility: ISO 9241-171 and ISO 9241-971. In addition, a number of parts in the ISO 9241 series integrate guidance supporting accessibility.

Accessibility in the design of products, systems and services is important to ensure that they are usable by the widest possible range of users. Designed solutions that support accessibility result from the understanding and implementation of user requirements, including those user requirements specific to accessibility.

Ergonomic principles and human-centred design activities contained in the ISO 9241 series provide a basis for identifying user accessibility needs and deriving user requirements specific to accessibility.

This document identifies standards within the ISO 9241 series and in other related standards that contain guidance related to accessibility.

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Ergonomics of human-system interaction —

Part 20: An ergonomic approach to accessibility within the ISO 9241 series

1 Scope

This document provides:

a) an introduction to the importance of accessibility to human-system interaction;

b) a discussion of the relationship of principles within the ISO 9241 series and accessibility;

c) descriptions of activities related to the processes in ISO 9241-210 that focus on accessibility;

d) references to standards relevant to the accessibility of interactive systems.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
accessibility
extent to which products, systems, services, environments and facilities can be used by people from a population with the widest range of user needs, characteristics and capabilities to achieve identified goals in identified contexts of use

Note 1 to entry: Context of use includes direct use or use supported by assistive technologies.

[SOURCE: ISO 9241-112:2017, 3.15]

3.2
usability
extent to which a system, product or service can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use

Note 1 to entry: The "specified" users, goals and context of use refer to the particular combination of users, goals and context of use for which usability is being considered.

Note 2 to entry: The word "usability" is also used as a qualifier to refer to the design knowledge, competencies, activities and design attributes that contribute to usability, such as usability expertise, usability professional, usability engineering, usability method, usability evaluation, usability heuristic.

[SOURCE: ISO 9241-11:2018, 3.1.1]

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