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Ergonomics of human-system interaction —

Part 520:
Ergonomics aspect of activity-based working (ABW)

Ergonomie de l'interaction homme-système —

Partie 520: Aspects ergonomiques du travail basé sur l'activité (ABW)

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Foreword

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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).

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

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 rapid advancement of information and communication technologies (ICT), including mobile phones, mobile computers, and wireless connections, has led to a significant transformation in the workplace. Traditional constraints on the working environment have been eased, offering people increased flexibility to select their workspaces based on the tasks at hand. This freedom to choose a working environment suited to specific activities has reshaped how and where work is done, allowing people to work from home, remote locations, or other spaces that best support their needs.

In addition to these technological advancements, the COVID-19 pandemic further accelerated this shift by challenging conventional fixed-position work models. As a result, many individuals adapted to working from home or other non-traditional settings, reinforcing flexibility in the selection of work environments.

This shift away from traditional office arrangements, in which management assigns fixed workstations, presents both opportunities and challenges. While increased freedom in choosing work environments can enhance autonomy and productivity, it also introduces the possibility that selected environments are potentially not always ergonomically suitable for specific tasks, potentially leading to discomfort or long-term health issues.

This document explores the concept of activity-based working (ABW) and examines ergonomic considerations relevant to this flexible work paradigm. It describes how various aspects of the work environment — such as sound, lighting, air quality, posture, and workstation components — can influence well-being and productivity in ABW settings.

Effective implementation of ABW is often associated with a shared understanding of its underlying principles within an organization. In the absence of commonly understood guidelines or shared intent, individuals can interpret flexibility differently, which can lead to fragmented or inconsistent practices.

NOTE This document is intended to address general work environments. Its content can potentially not be sufficient for safety-critical or highly specialized applications, where additional or more specific ergonomic considerations are typically required.

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Ergonomics of human-system interaction —

Part 520:
Ergonomics aspect of activity-based working (ABW)

1 Scope

This document provides an overview of activity-based working (ABW) from an ergonomics perspective. It describes historical and recent changes in working arrangements, particularly regarding location and flexibility, and examines the emergence and current state of ABW. The document presents examples of how organizations categorize business activities in the context of ABW and discusses ergonomic considerations relevant to these work settings.

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 terminology 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
activity
<business> purposeful action carried out by an organization, whether for profit or not, in pursuit of its mission or goals

Note 1 to entry: This general term encompasses all types of organized activities performed by entities including private companies, public institutions, and non-profit organizations. Such activities can include operations, investment, communication, and service delivery, and are aimed at fulfilling organizational objectives.

3.2
work
purposeful human *activity* (3.1) involving physical or cognitive *tasks* (3.3), or both, conducted individually or collaboratively, to achieve defined goals within an organizational context

Note 1 to entry: No single definition of "work" exists in the ISO 9241 series. This definition aligns with the concept of a work system as referenced in ISO 6385 and office-related tasks in ISO 9241-2.

3.3
task
set of *activities* (3.1) undertaken in order to achieve a specific goal

Note 1 to entry: These activities can be physical, perceptual, or cognitive, or a combination of these.

Note 2 to entry: While goals are independent of the means used to achieve them, tasks describe the particular means of achieving goals.

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