

# SVENSK STANDARD

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**Universell utformning – Tillgänglighet genom universell utformning för produkter, varor och tjänster – utvidga spektrumet av användare**

**Design for All – Accessibility following a Design for All approach in products, goods and services – Extending the range of users**

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EUROPEAN STANDARD

EN 17161

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 01.120; 11.180.01; 13.180

English version

## Design for All - Accessibility following a Design for All approach in products, goods and services - Extending the range of users

Conception pour tous - Accessibilité selon une approche Conception pour tous des produits, des biens et des services - Élargissement de l'éventail d'utilisateurs

Barrierefreiheit von Produkten, Waren und Dienstleistungen nach einem "Design für alle"-Ansatz - Erweiterung des Nutzerkreises

This European Standard was approved by CEN on 26 November 2018.

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## **European foreword**

This document (EN 17161:2019) has been prepared by Technical Committee CEN/CLC/JTC 12 “Design for All”, the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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.

This document has been prepared under standardization request M/473, given to CEN and CENELEC by the European Commission, to include accessibility following a ‘Design for All’ approach in relevant standardization activities for products, goods and services.

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

## SS-EN 17161:2019 (E)

### Introduction

A Design for All approach takes account of human diversity to extend the range of users. This approach inspires innovation in organisations so that management value an inclusive and non-stigmatizing mind-set and supports a culture, which prioritises people. The Design for All approach and innovation ensure optimal practices and activities, so that operations have the best tools and resources in place to enable them to achieve accessible products, goods and services, i.e. what this document refers to as 'accessibility outcomes'.

Accessibility seeks to prevent and remove barriers, ensuring that persons with disabilities have access to products, goods and services on an equal basis with others.

Accessibility as an outcome from integrating a Design for All approach throughout the whole organization can maximize the range of potential users of products, goods and services. Extending the range of users can increase markets. It can also increase the proportion of the population, including persons with disabilities, able to participate fully and independently in society. The accessibility of products, goods and services realized by Design for All can benefit all users. Every organization can benefit from this approach.

NOTE 1 Terms such as “Design for All”, “Universal Design”, “accessible design”, “barrier-free design”, “inclusive design” and “transgenerational design” are often used interchangeably with the same meaning.

NOTE 2 The approach defined in this document covers all products, goods and services. To keep the text easy to read, the rest of this document will sometimes use the shorter phrase “products and services”. Wherever “products and services” is used, it is equivalent to, and should be interpreted as, “products, goods and services”.

Each individual user has their own profile of needs, characteristics, capabilities, and preferences, and this fact needs to be recognized when developing mainstream products and services. For most people their profile of capabilities changes substantially throughout the course of their life, as they advance from childhood to adulthood and then into old age. In addition, changing circumstances, accidents, disease and other life-changing events may lead to a significant change in needs, characteristics, sets of capabilities and preferences. Furthermore, the context of use of products, goods and services can influence users' needs, characteristics, capabilities, and preferences, and hence the degree of accessibility and usability. A Design for All approach acknowledges all these variations and circumstances and aims at meeting their requirements to the greatest extent possible.

This document describes the adoption, throughout the whole organization, of a process-driven Design for All approach in relation to all aspects of design, development, and manufacturing. Involvement of users, including persons with disabilities, all the way through is a central part of this approach. Accessible products and services are amongst the key outcomes.

The requirements and recommendations in this document can complement existing organisational management and operational processes in order to achieve accessibility outcomes. The product design and development process is usually part of a management system, such as EN ISO 9001, into which accessibility following a Design for All approach can be integrated.

This document defines the requirements in an order that is consistent with organisational planning and process management, i.e.:

- Understanding the context of the organization, the needs and expectations of interested parties, including people with disabilities, the integration of a Design for All approach within established systems and processes (Clause 4);
- Leadership, policy and responsibilities in support of a Design for All approach and the achievement of accessibility outcomes (Clause 5);
- The planning of Design for All objectives and how to achieve them (Clause 6);

- Organizing the support and other resources, including people and information needed to realize a Design for All approach and the delivery of accessibility outcomes (Clause 7);
- Operational processes related to meeting users' requirements, including persons with disabilities, and developing products and services across the entire end-to-end chain, in accordance with the Design for All approach (Clause 8);
- Processes to monitor, measure, analyse and evaluate the effectiveness and correctness of the Design for All approach and its accessibility outcomes (Clause 9);
- The continuous improvement of the Design for All approach (Clause 10).

Management of the processes and the approach as a whole can be achieved using "Plan-Do-Check-Act" (PDCA) or similar methodology. The normative clauses of this document broadly reflect the widely-used PDCA model. The PDCA cycle is a way to achieve continuous improvement in business, development and manufacturing processes. In the same way that a circle has no start or end, the PDCA method is also constant and unbroken.

Figure 1 illustrates how the processes and requirements set out in Clauses 4 to 10 are related and interconnected and how continuous improvement is achieved through repeated cycles of design and implementation. The figure makes it clear that committed leadership as well as the provision of adequate support and resources are central to achieving the right outcomes.