



NSAI
Standards

Irish Standard
I.S. EN 17161:2019

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

I.S. EN 17161:2019

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 17161:2019 is the adopted Irish version of the European Document EN 17161:2019, 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

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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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Contents

Page

European foreword.....	5
Introduction	6
1 Scope	9
2 Normative references	9
3 Terms and definitions	9
4 Context of the organization – Design for All approach	12
4.1 Accessibility following a Design for All approach	12
4.2 Understanding the organization and its context	12
4.3 Understanding the needs and expectations of interested parties	14
4.4 Determining the scope of the Design for All approach within the organization.....	14
4.5 Integration with established process systems	14
5 Leadership	15
5.1 Leadership and commitment.....	15
5.2 Policy	16
5.3 Organisational roles, responsibilities and authorities.....	17
6 Planning.....	17
6.1 Actions to address risks and opportunities.....	17
6.2 Design for All approach objectives and planning to achieve them	18
6.3 Planning for changes.....	18
7 Support	19
7.1 Resources	19
7.2 Competence.....	19
7.3 Awareness.....	20
7.4 Communication.....	20
7.5 Documented information.....	20
8 Operation	21
8.1 Operation planning and control	21
8.2 Design and development of products and services	21
8.2.1 Planning to extend the range of users	21
8.2.2 Identifying the intended users	21
8.2.3 Requirements to extend the range of users.....	22
8.2.4 Realization.....	23
8.2.5 Evaluation	24
8.3 User involvement.....	24
8.4 End-to-end chain in relation to accessibility.....	25
8.5 Control of and communication with external suppliers	26
9 Performance evaluation	26
9.1 Monitoring, measurement, analysis and evaluation	26
9.1.1 General.....	26
9.1.2 User feedback.....	27
9.1.3 Analysis and evaluation.....	27
9.2 Internal audit.....	28
9.3 Management.....	28

10	Improvement.....	29
	Annex A (informative) Accessibility, Design for All approach and Human Rights.....	30
A.1	Introduction.....	30
A.2	The core mind-set of the Design for All approach	30
A.3	Human Rights and Design for All approach	30
A.4	Sustainable development with a Design for All approach	31
A.5	Access, understand and use	31
A.6	Examples of Design for All approaches.....	32
	Annex B (informative) User involvement	33
B.1	Introduction.....	33
B.2	Benefits of involving users	33
B.3	Identifying and understanding current and potential users.....	33
B.3.1	Potential users.....	33
B.3.2	Demographic statistics	34
B.4	Planning and performing user involvement.....	34
B.4.1	General	34
B.4.2	Schedule for user involvement	35
B.4.3	Arrangements	35
B.4.4	User feedback and market surveys.....	35
B.4.5	Ethics of user involvement	36
B.4.6	End-to-end documentation	36
	Annex C (informative) Design activities within projects.....	37
C.1	Introduction.....	37
C.2	Activities and their inputs	37
C.3	User input to activities.....	39
C.4	Understand and identify the users and the context of use (8.2.2).....	40
C.4.1	Scoping	40
C.4.2	The importance of users (8.3).....	40
C.4.3	User groups (8.2.2).....	40
C.5	Requirements specification (8.2.3).....	40
C.6	Produce solutions to meet the user requirements (8.2.4)	41
C.6.1	High level approach	41
C.6.2	Developing the solution	41
C.6.3	Detailed design decisions	42
C.6.4	Evaluation as design progress	42
C.6.5	Iteration	42

EN 17161:2019 (E)

C.7	Evaluation (8.2.5).....	42
C.7.1	Evaluation from the earliest stages	42
C.7.2	Focus on evaluation from the user's perspective	42
C.7.3	Iteration and feedback.....	42
C.7.4	Conformity assessment.....	43
Annex D (informative)	List of requirements	44
D.1	Introduction	44
D.2	List: requirements	44
D.3	List: documented information.....	49
Annex E (informative)	Non exhaustive list of standards and guidance relevant to 'Accessibility following a Design for All approach in products, goods and services'	51
E.1	Introduction	51
E.2	Standards and guidance.....	51
Bibliography	52

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.

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.

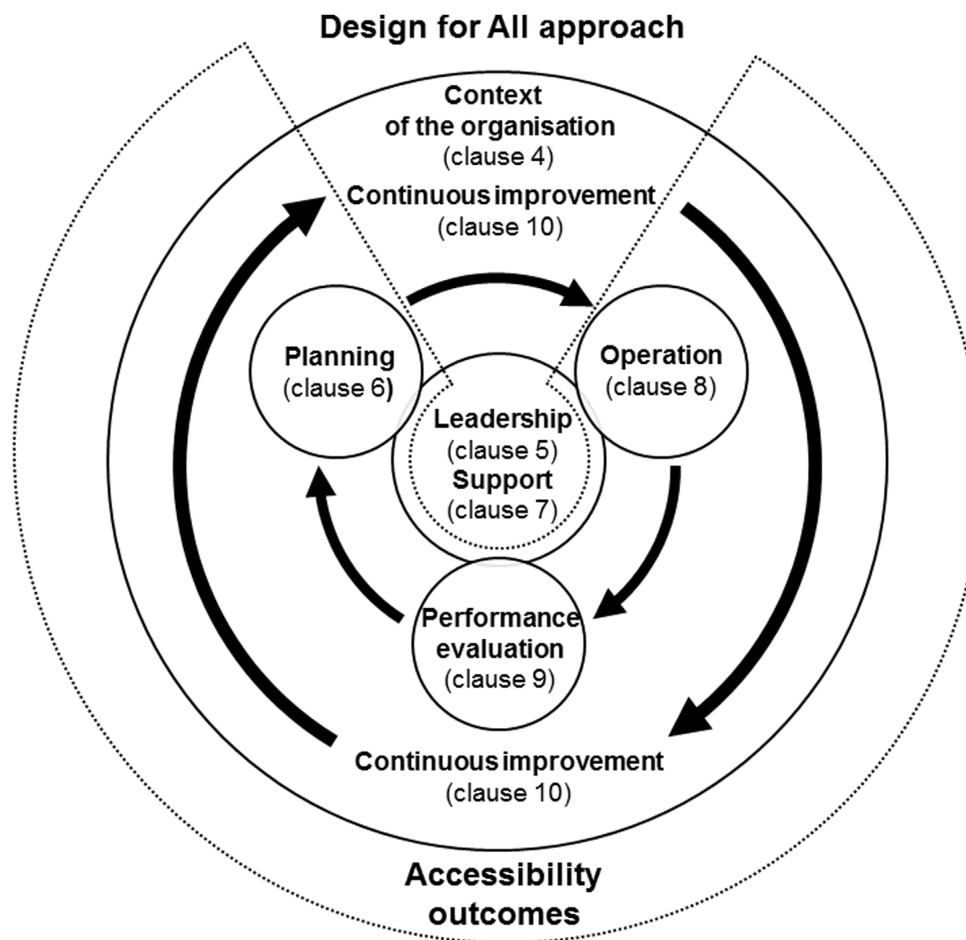


Figure 1 — Integrating a Design for All approach into the continuous processes for design, development and provision of products, goods and services

NOTE 3 Figure 1 shows a diagram of the interrelations between the processes, procedures and activities in this standard to achieve Accessibility outcomes based on the application of a Design for All approach. It consists of concentric circles showing the various layers of these interrelating elements.

On top of the diagram there is the Design for All approach. From there, the viewer's eye is drawn to "Leadership" (Clause 5) and "Support" (Clause 7) in the centre. "Planning" (Clause 6), "Operation" (Clause 8) and "Performance evaluation" (Clause 9) are connected to and arranged in a circle around this centre. This cluster of elements is framed by an outer circle labelled "Continuous improvement" (Clause 10) and embedded in a layer labelled "Context of the organisation" (Clause 4). From the centre, where it has been absorbed, the Design for All approach is spread across all illustrated components to result in Accessibility outcomes at the bottom.

The Design for All approach described in this document does not imply uniformity of the design of products, goods, and services.

1 Scope

This document specifies requirements that enable an organization to design, develop and provide products, goods and services so that they can be accessed, understood and used by the widest range of users, including persons with disabilities.

This document specifies requirements and recommendations that enables an organization to extend their range of users by identifying diverse needs, characteristics, capabilities, and preferences, by directly or indirectly involving users, and by using knowledge about accessibility in its procedures and processes.

This document specifies requirements that can enable an organization to meet applicable statutory and regulatory requirements as related to the accessibility of its products, goods and services.

The requirements set out in this document are generic and are intended to be applicable to all relevant parts of all organisations, regardless of type, size or products, goods and services provided.

This document promotes accessibility following a Design for All approach in mainstream products goods and services and interoperability of these with assistive technologies.

This document does not provide technical design specifications and does not imply uniformity in design or functionality of products, goods and services.

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:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

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: EN ISO 9241-112:2017, 3.15 [5]]

3.2

assistive technology

equipment, product system, hardware, software or service that is used to increase, maintain or improve capabilities of individuals

Note 1 to entry: Assistive technology is an umbrella term that is broader than assistive products.

Note 2 to entry: Assistive technology can include assistive services, and professional services needed for assessment, recommendation and provision.

[SOURCE: CEN-CENELEC Guide 6:2014, 2.16 [13]]

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