

STN	Dopravné služby Komunikácia so zákazníkmi v službách osobnej dopravy Univerzálny prístup k dizajnu	STN EN 17478 95 2010
------------	---	--

Transport Services - Customer communications for passenger transport services - A Universal Design approach

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/22

Obsahuje: EN 17478:2021

134631

EUROPEAN STANDARD

EN 17478

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2021

ICS 03.220.01; 35.240.60

English Version

Transport Services - Customer communications for passenger transport services - A Universal Design approach

Services de transport - Communications destinées aux
clients de services de transport collectif - Une approche
de conception universelle

Dienstleistungen im Transportwesen -
Kundenkommunikation für Dienstleistungen im
Personenverkehr - Ein Universal Design-Ansatz

This European Standard was approved by CEN on 3 October 2021.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 17478:2021 (E)

Contents	Page
European foreword.....	5
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Applying a Universal Design approach	9
4.1 General.....	9
4.2 Understanding Universal Design.....	10
4.3 Realizing an organisational commitment to a Universal Design approach.....	10
4.4 Using the Universal Design Principle and Guidelines.....	10
5 User characteristics, capabilities and preferences	11
6 Requirements for communication following a Universal Design approach.....	11
6.1 General.....	11
6.2 Written Communication	13
6.3 Verbal communication.....	13
6.4 Digital communication.....	14
6.4.1 General.....	14
6.4.2 Web-based communication.....	14
6.4.3 Non-web electronic documents	14
6.4.4 Text and Instant Messaging communications.....	14
6.4.5 Telephone-based systems.....	14
7 Evaluation of the application of a Universal Design approach	15
7.1 General.....	15
7.2 Monitoring and measuring	15
7.3 Analysis and evaluation.....	16
Annex A (informative) Business aspects of Universal Design.....	17
A.1 The demographic case.....	17
A.2 The legal case.....	17
A.3 The business case.....	17
Annex B (informative) The 7 Principles and 29 Guidelines of Universal Design	19
B.1 Principle 1: Equitable Use	19
B.2 Principle 2: Flexibility in Use	19
B.3 Principle 3: Simple and Intuitive Use.....	19
B.4 Principle 4: Perceptible Information	20
B.5 Principle 5: Tolerance for Error	20
B.6 Principle 6: Low Physical Effort	20
B.7 Principle 7: Size and Space for Approach and Use	21
Annex C (informative) User characteristics, capabilities and preferences.....	22

C.1	General	22
C.2	Resources about user characteristics and capabilities	22
C.3	Expert Knowledge	23
C.4	Direct engagement with users	23
Annex D (informative)	Tables for using the Universal Design Principles and Guidelines in passenger transport services communication design	26
Annex E (informative)	Tables mapping the Universal Design Principles and Guidelines to the design guidance in Annexes F, G and H	30
E.1	General	30
E.2	Purpose and structure of the tables	30
E.3	Content of the Tables	31
E.4	Order of the Tables	31
Annex F (informative)	Written communication	47
F.1	General	47
F.2	Written communication content	47
F.2.1	Text	47
F.2.2	Dates, numbers and percentages	47
F.2.3	Graphics	48
F.3	Design, layout and formatting	48
F.4	Paper and binding	49
F.5	Form Design	49
F.6	Signage Guidance	49
F.6.1	Content	49
F.6.2	Design	50
F.6.3	Tactile markings	50
F.6.4	Positioning	50
F.6.5	Colours, images, graphs and visuals	50
Annex G (informative)	Verbal communication	51
G.1	General	51
G.2	Personal conversation	51
G.3	Auditory announcements	52
Annex H (informative)	Digital communication	53
H.1	General	53
H.2	Websites	53
H.2.1	General	53
H.2.2	Writing for the web	53
H.2.3	Design	54

EN 17478:2021 (E)

H.2.4	Links.....	54
H.2.5	Structure.....	54
H.2.6	Website navigation.....	54
H.2.7	Online forms.....	54
H.2.8	Time-out messages.....	55
H.2.9	Search.....	55
H.2.10	Images and multimedia	55
H.3	Mobile web content and apps	56
H.4	Emails and newsletters	56
H.5	Electronic documents	56
H.6	Telephone Based Systems.....	57
H.7	Text and Instant Messaging Communication	57
H.8	Social Media Guidance.....	58
	Bibliography.....	59

European foreword

This document (EN 17478:2021) has been prepared by Technical Committee CEN/TC 320 “Transport - Logistics and services”, 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 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.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 17478:2021 (E)**Introduction**

Transport is fundamental to our economy and society. Mobility is vital for the internal market and for the quality of life of citizens as they enjoy their freedom to travel. One of the critical success factors for mobility is the possibility that information relating to travel can be accessed, understood and used. This relies on the availability of accessible and usable, adequate and interoperable multi-modal trip information for planning and making a journey.

Ineffective user communications in many situations result in a number of users unable to travel independently. Providing services that can be easily accessed, understood and used benefits a wide range of users including young persons, persons with disabilities, older persons and persons who cannot read for various reasons (for example, due to not being a user of the language used, intellectual disability, or illiteracy) who are an important part of the users of the public transportation means. The rationale for Universal Design is that user communications are more accessible and usable by the widest range of users, without the need for additional adaptation or specialized design. It should be possible to use assistive devices when needed.

Procurement and in particular public procurement can play a key role in ensuring a sustainable and inclusive society. It is a requirement in the public procurement process to take into account accessibility criteria for persons with disabilities or design for all users in the transport sector¹. Applying a Universal Design approach can support meeting these requirements and extend the range of users and support innovation and sustainable development.

The term 'user' is used throughout this document. A 'user', in the context of this document, is a person who interacts with communications provided by transport services providers. It includes; a person who avails of a transport service (a passenger or a customer); a person who will potentially avail of a transport service; a person acting on behalf of another person who will (potentially) avail of a transport service; and a person interacting with transport communications for other reasons (such as to determine when a person who is availing of a transport service arrives at a station). Therefore the term 'user' is broader than the term 'customer' – it could be any member of the public

'User communications' does not include communications within a transport services provider's organization, nor communications between transport services providers and contractors or state agencies.

Communication, in the context of this document, includes one-way communication – (the provision of) information.

¹ Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC

1 Scope

This document specifies requirements and recommendations for the planning, design, development and provision of user communications related to passenger transport so that these communications can be accessed, understood and used by the widest range of users, including persons with disabilities and older persons.

These requirements and recommendations enable an organization to extend its range of users by identifying diverse characteristics, capabilities, and preferences.

The requirements specified in this standard are applicable to but not limited to passenger transport service providers including air-, bus, rail-, and waterborne passenger transport services.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 17161:2019, *Design for All - Accessibility following a Design for All approach in products, goods and services - Extending the range of users*

EN 301549:2021, *Accessibility requirements for ICT products and services*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN