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ICS

English version

## Accessibility of support services for products and services

Accessibilité des services d'assistance pour les produits  
et services

Barrierefreiheit von Unterstützungsdiensten für  
Produkte und Dienstleistungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/CLC/JTC 12.

If this draft becomes a European Standard, CEN and CENELEC 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.

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KOPIA FRÅN SIG FÖR REMISSBETÄNDNING  
 ENDAST FÖR INTERNT BRUK  
 FÅR EJ KOPIERAS ELLER SPRIDAS

## **European foreword**

This document (prEN 18340:2026) has been prepared by Technical Committee CEN/CLC JTC 12 “Design for All”, the secretariat of which is held by SIS.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Five other standards to be harmonized standards have been requested from the European standardization organisations, CEN, CENELEC and ETSI in support of the European Accessibility Act (EAA), Directive (EU) 2019/882. The different aspects of the EAA accessibility requirements are covered in these standards. The documents are interrelated and interdependent.

These standards are:

- EN 17161, Design for All approach -Managing accessibility of products and services.
- EN 17210, Accessibility of the built environment.
- EN 301549, Accessibility requirements for ICT products and services.
- EN 18340:2026, Accessibility of information presented in non-digital forms on and about products and services.
- ETSI TS 103 919, Accessibility and interoperability of emergency communications and (for) the answering of emergency communications by the public safety answering points (PSAPs) (including to the single European Emergency number 112).

## 0 Introduction

### 0.1 General

This document sets out accessibility requirements for a support service.

The main objective of a support service with the responsibility to communicate about accessibility in products and services is to effectively communicate with users that have accessibility needs. The European Accessibility Act (EAA), Directive (EU) 2019/882, emphasises the importance of providing accessibility information for existing or potential users on products and services and includes accessibility requirements on those products and services.

This document sets out specifications and solutions for such a support service. These solutions are developed to fulfil the accessibility requirements of the EAA, according to Mandate M/587. Mandate M/587 refers to a standard for a support service that ensures the information provided about the accessibility of products and services is accessible and communicated in accessible modes of communication.

M/587 refers to the possibilities to use the standard on support services when applying accessibility requirements in other Union acts.

This document can be used by all organisations to make information and communication accessible for the widest range of user needs.

### 0.2 Purpose of the support service

Users contact a support service when information is needed about products and services. A support service could be a help desk, call centre, technical support or training service or a combination of these services. The support service has the responsibility to explain how to access, understand and use products and services, as well as how they are provided for and developed to fulfil accessibility requirements.

### 0.3 Communication in accessible modes

An accessible support service provides different channels to enable communication with the user, for example by voice or text. The communication can be either by human contact or automated support systems or a combination of both.

It improves the usability of the support service and the experience of the user to be able to choose between a human contact or an automated contact. Moreover, it is important to inform users when they are interacting with a human or an automated system.

### 0.4 Accessible information

Information provided through a support service can be presented in digital and non-digital forms. Regardless of the form, the information be presented according to the requirements that are specified in EN 301549 on ICT products and information in digital form, EN 18340, on information in non-digital form and EN 17210 on accessibility and usability in the built environment.

This document specifies requirements of accessibility in the interaction face to face with users.

### 0.5 Operations and management of accessible support service

This document provides requirements on how to manage the support service, ensure competence in accessibility, how to handle complaints and how to receive feedback.

Competence in accessibility includes disability awareness across the range of functionalities, associated barriers, terminology, applicable legislation and disability etiquette.

Annex C provides valuable information in relation to the lived experience of persons with disabilities engaging with a support service.

## 1 Scope

This document specifies requirements for an accessible support service. This includes general information about the products and services, including information on their accessibility.

This document provides requirements for an accessible support service designed so that information and communication can be accessed, understood and used.

Support services include but are not limited to help desks, call centres, technical support and training services. This document applies to support services that are provided digitally or face to face.

NOTE 1 Where relay services are referred to in this document, relay services are a means to communicate in the provision of support services.

NOTE 2 A support service or part of a support service provided directly and those that have been outsourced are included.

This document is applicable for all organisations of all sizes and across all sectors.

## 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.

prEN 301549:2026, *Accessibility requirements for ICT products and services*

prEN 17161:2026, *Design for All approach — Managing accessibility of products and services*

prEN 17210:2026, *Accessibility and usability of the built environment — Requirements and recommendations*

## 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 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, definition 3.15]

**3.2****accessibility outcomes**

outputs from an organisation's policies, processes and activities that result in products and services that the widest range of users can access, understand and use

[SOURCE: EN 17161:2019, definition 3.2]

**3.3****agent**

person working for a support service, whose primary role is the handling of customer contacts

Note 1 to entry: Examples of customer contacts are calls, e-mails, fax, and web inquiries.

Note 2 to entry: The role of an agent can vary from contact handling to complex problem-solving activities.

[SOURCE: EN 15838:2009, definition 3.1]

**3.4****artificial intelligence system****AI system**

engineered system that generates outputs such as content, forecasts, recommendations or decisions for a given set of human-defined objectives

Note 1 to entry: The engineered system can use various techniques and approaches related to artificial intelligence to develop a model to represent data, knowledge, processes, etc. which can be used to conduct tasks.

Note 2 to entry: AI systems are designed to operate with varying levels of automation.

[SOURCE: ISO/IEC 22989:2022, definition 3.1.4]

**3.5****audit**

systematic, independent and documented process for obtaining objective evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled

Note 1 to entry: The fundamental elements of an audit include the determination of the conformity of an object according to a procedure carried out by personnel not being responsible for the object audited.

Note 2 to entry: An audit can be an internal audit (first party), or an external audit (second party or third party)

Note 3 to entry: Internal audits, sometimes called first-party audits, are conducted by, or on behalf of, the organization (3.6) itself for management review and other internal purposes, and can form the basis for an organization's declaration of conformity. Independence can be demonstrated by the freedom from responsibility for the activity being audited.

Note 4 to entry: External audits include those generally called second and third-party audits. Second party audits are conducted by parties having an interest in the organization, such as customers or by other persons on their behalf. Third-party audits are conducted by external, independent auditing organizations such as those providing certification/registration of conformity or governmental agencies.

Note 5 to entry: third party audits are those that are carried out by a person or body that is recognized as being independent of the parties involved, as concerns the issue in question

[SOURCE: ISO 9000:2015, definition 3.13.1; & NOTE 5 (new) ISO 29400:20203.157]

### 3.6

#### **automated support system**

feature of a support service which can interpret, process and respond to user input without the intervention of a human support service agent.

Note 1 to entry: Automated support systems can comprise rule-based systems and/or artificial intelligence (AI) systems.

Note 2 to entry: Users can interact with automated systems through various communications technologies. These can include voice-based technologies such as a multi-choice menu delivered by Interactive Voice Response (IVR) over telephone and text-based technologies, such as an AI-powered chatbot.

### 3.7

#### **competence**

ability to apply knowledge and skills to achieve intended results

[SOURCE: ISO 55001:2024, 3.9]

### 3.8

#### **continual improvement**

recurring activity to enhance performance

[SOURCE: ISO 9000:2015, definition 3.3.2 without notes]

### 3.9

#### **easy-to-understand language**

any language variety which enhances comprehensibility

Note 1 to entry: Easy-to-understand language includes plain language, easy language and any intermediate variety. These varieties share many recommendations, but the extent of comprehensibility is different as they address different user needs.

[SOURCE: ISO/IEC 23859:2023, 3.1.1 modified]

### 3.10

#### **end-to-end chain**

sequence of information, processes and activities that enable a user to discover, acquire, use, maintain and dispose of a product, good or service, including post-sale support and warranty fulfilment

EXAMPLE 1 In order to make a train journey, a user obtains information about train times and facilities (pre-sale), purchases a ticket, accesses departure and destination stations and facilities, boards, uses and leaves the train and may require support or complaint (post-sale) services.

EXAMPLE 2 A user buying a new television, researches the market, finds a supplier, buys the television, arranges delivery, installs, connects and configures it, uses it, and gets it repaired, updated or disposed of, as, necessary.

[SOURCE: EN 17161:2019, definition 3.5]

**3.11****organisation**

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives

Note 1 to entry: The concept of organization includes, but is not limited to, sole-trader, company, corporation, firm, enterprise, authority, partnership, association, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

[SOURCE: EN 17161:2019, definition 3.7]

**3.12****real-time text****RTT**

form of text conversation in point-to-point situations or in multipoint conferencing where the text being entered is sent in such a way that the communication is perceived by the user as being continuous on a character-by-character basis

Note 1 to entry: Users will perceive communication as continuous if the delay between text being created by the sender and received by the recipient is less than 1 s. However, the actual delay will be dependent on the communications network.

Note 2 to entry: The creation of text will differ between systems where text is entered on a word-by-word basis (e.g. speech-to-text and predictive-text based systems) and systems where each character is separately generated (e.g. typing on a physical keyboard).

Note 3 to entry: Although RTT may often be "perceived by the user" as being sent character-by-character, none of the RTT standards require this to be the case. They assume accumulation of characters before sending and only require that no character is held for more than 500 ms after it is created before the accumulated text is sent. An accumulation time of 300 ms or less is recommended.

Note 4 to entry: It is already common for autonomous ICT to be at one end of continuous bidirectional voice communication. The RTT requirements in the present document ensure that there will be RTT communication wherever there is real-time bidirectional voice communication, even when there is an autonomous ICT at one end.

[SOURCE: prEN 301549:2026]

**3.13****relay service**

electronic communications service which enable bidirectional communication between remote end-users of different modes of communication (for example text, sign, speech) by providing conversion between those modes of communication, or by providing the needed cognitive support for end-users during the communication, by a human operator or automatic means

[SOURCE: prEN 301549:2026]

**3.14****total conversation**

bidirectional symmetric real time transfer of motion video, real-time text (3.9) and voice between users in two or more locations

[SOURCE: prEN 301549:2026]

### **3.15**

#### **user**

person who interacts with a system, product or service

Note 1 to entry: The person who uses a service provided by a system, such as a customer in a shop or passenger on a train, can be considered a user.

[SOURCE: ISO 27500:2017, definition 3.12]

### **3.16**

#### **user accessibility need**

user need related to features or attributes that are necessary for a system to be accessible

Note 1 to entry: User accessibility needs vary over time and across contexts of use.

[SOURCE: CEN CENELEC Guide 6 definition 2.4]

## **4 Support service**

### **4.1 General**

A support service is often the first link for the user of an organisation's products and services. The users need information to enable them to use the product and service or to decide if they will purchase them as a potential user.

A support service that has responsibilities to inform about the accessibility of products and services needs to have all the information on accessibility available to be communicated to diverse users. Figure 1 below outlines the types of support services.

Information provided by a support service includes:

- a) usage information on the product;
- b) packaging and information provided on the packaging, and information about opening, closing, use and disposal of the product;
- c) the instructions for products on the installation and maintenance, storage and disposal and where this information is available;
- d) the instructions on the use of the product including the functions, how to activate them and their interoperability with assistive technology;
- e) where the instructions of use are available either through using the product, on the product itself or through other means such as on a website;
- f) about the functioning of the service;
- g) information about the service's accessibility functions and features, and its interoperability with assistive devices and facilities;
- h) where products are used in the provision of services, and how products are linked to the service.

In order to present accessible information and communicate in accessible modes, an organisation can design, develop and operate an accessible support service.

To operate a support service for an accessible outcome, it is important that an organisation acquires the knowledge about the accessible features of their products/services, and how to use accessible communication channels.

The interactions of an accessible support service result in the provision of solutions without barriers that can give an overall positive experience for the user.

#### 4.2 Functions of a support service

Every organisation has its own relationship with their users. Therefore, the need for a support service differs among organisations. Depending on how the support service is organised, different communication channels are used.

Typical examples of these communication channels include:

- in-person interaction -communication in a face to face interaction with users to provide information;
- telephone – communication and provision of information;
- automated interactive communication systems -communication and provision of information
- email – digital communication and provision of information;
- social media- provision of information;
- SMS/text-based- digital communication and provision of information;
- online self-service (downloading support information and instructions from a web service)- provision of information.

#### 4.3 Accessible support service operations

When planning for a support service that provides for diverse user needs in accessible modes, it is important to work in all available communication channels and be aware of their different technical solutions for an accessible outcome.

A support service is comprised of several functions, all of which work together to create an accessible service. This includes the means of communication, the provision of information, testing, management, knowledge and competence, complaints, and verification.

When designing, developing and operating an accessible support service, the organisation can take account of the diversity of users in accordance with EN17161.

To ensure the accessibility of a support service, the organisation can verify that:

- the communication channels are in accessible modes in accordance with clause 5.
- the presentation of information provided by the support service is accessible in accordance with clause 6.
- the support service is managed to optimise accessibility across the operations of its service in accordance with clause 7.
- information is provided to the user in accordance with clause 8.

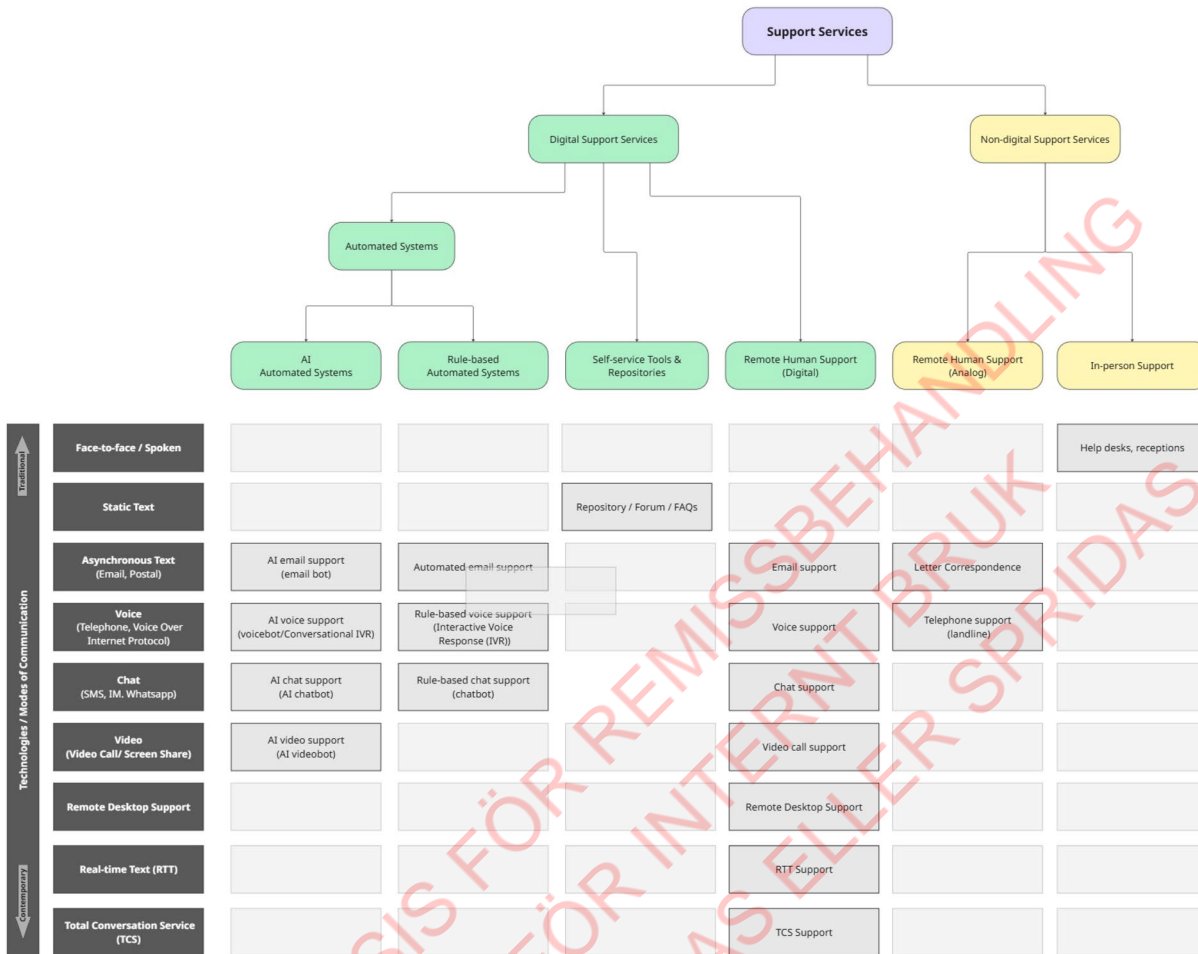


Figure 1 — Types of support services

Figure 1 illustrates the relationships between various types of support services and various communication technologies through which users can access support services. The figure is composed of a tree diagram and a table underneath the tree diagram.

The tree diagram in the figure illustrates the distinction between various digital and non-digital support services (where automated support systems is a subset of digital support services).

The table is composed of a number of rows and columns and illustrates some examples of common communications technologies as they relate to various types of support services.

## 5 Requirements for communication

### 5.1 Modes of communication

In the support service communication are in different channels. Accessibility can be achieved in one means or channels or in a combination of channels. The channels can be both digital and automated and presented in other ways, such as through the means of voice or visuals, including written words.

NOTE 1 A communication channel is a way of reaching a support service. These channels can also be described as different modes or means.

Combinations of non-digital and digital forms can be used to present information through more than one sensory channel.

NOTE 2 Communication can be either synchronous or asynchronous. Synchronous communication examples are face to face, telephone, instant messaging, real time text (RTT) and video. Asynchronous communication examples are email and recorded video messages.

NOTE 3 Provision of a digital solution can be an alternative to a non-digital means of communication and a non-digital solution can be an alternative to a digital means of communication.

In clause 5 there are accessibility requirements that enables users to access, perceive and understand what a support service provides regardless of what sensory channel is being addressed.

## 5.2 User interface

The user interfaces of the support service system shall be in accordance with EN 301 549.

### 5.3 Contacting the support service

The organisation shall provide information on all the different ways of communicating with the support service, including contact details on their website(s) and in their mobile application(s).

**5.3.1** The contact details shall be consistently available from one location, such as the header, footer, or main menu on a website.

**5.3.2** Access to the contact details of a support service shall not be impeded.

EXAMPLE Impediments include authentication, login, user identification

**5.3.3** The user shall be able to have contact with a human support agent.

### 5.4 Outsourced

A support service that is outsourced shall meet the requirements of the clauses of this document in relation to the provision of a support service, information and means of communication.

NOTE EN ISO 18295-2 provides information on outsourcing.

This shall be verified by checking if the organisation provided documented requirements as part of contractual arrangements /tender documents of how information is communicated across more than one sensory channel. This includes the presentation of information in accordance with clause 5 to the user of the product or service and competence of personnel according to clause 7.2.

### 5.5 End-to-end chain

**5.5.1** The channels of communication in the support service shall be accessible along the end-to-end chain in accordance with clause 5.2, 5.3 and 5.4.

EXAMPLE By providing accessible information in different ways it can be communicated in different communication channels and can be linked with one another, if needed. When the communication channels are accessible for the user needs and linked in an accessible way the end-to-end chain is accessible.

## 5.6 Voice communication

### 5.6.1 General

**5.6.1.1** The presentation of spoken information shall meet the requirements of 6.4.

## **prEN 18340:2026 (E)**

**5.6.1.2** In addition to 5.6.1.1 the support agent shall:

- a) speak slowly and clearly;
- b) be sensitive to the diverse communication needs of persons;
- c) ask one question at a time;
- d) offer the option of alternative channels of communication more appropriate or preferred by the user;
- e) give relevant important information in a logical sequence;
- f) listen carefully to what users say;
- g) confirm that the user has understood the information provided;
- h) allow the user time to take in information;
- i) speak to the user, not to the interpreter (for example in a relay service) or accompanying person;
- j) understand the ways in which the body communicates non-verbally.

NOTE 1 Verbal communication encompasses telephone-, loudspeaker-, face-to-face-, text relay- and video-communication, sign language and the ways in which the body communicates non-verbally.

NOTE 2 Non-verbal communication refers to gesture, posture, appearance, eye contact, physical contact, facial expression, proximity, orientation, and attire.

NOTE 3 A text relay service is a third-party system designed for use by people who are hard of hearing or deaf as a means of communication through an intermediary (relay services).

**5.6.1.3** In addition to 5.6.1.2 the support service shall:

- i) provide a suitable acoustic environment and limit background noise;
- ii) provide good lighting (luminance) so that gestures and facial expressions can be seen clearly;
- iii) provide interpretation from verbal information into sign language when requested when sign language interpretation is a part of a support service ;

NOTE In some countries there is a facility for remote mobile sign interpretation provided for people using sign language.

This shall be verified in accordance with clause 5.6.3.

## **5.6.2 Provision of Real-time text (RTT) connection and Total conversation service (TC)**

### **5.6.2.1 General**

There are a number of different types of relay service offering conversion between differing modes of communication. They include the following:

- text relay service;
- speech to speech relay service; and
- video relay service (for sign language).

NOTE 1 A relay service enables users of different modes of communication to interact by providing conversion between differing modes of communication.

NOTE 2 The aim of a relay service is to allow any user in any network, using one channel of communication, to communicate with another user using a different channel of communication in the same network or in any other network, via a relay service.

The support service shall either facilitate the use of Real-time-text (RTT) or have procedures, knowledge and training to manage a relay service for text users.

This shall be verified by the support service providing documented evidence that they:

- a) facilitate the use of RTT ;
- b) have procedures, competence and knowledge to manage a relay service for text users.

EXAMPLE RTT is used by people who are Deaf, DeafBlind and Hard of Hearing but can be used by everyone.

NOTE 1 EN 301 549 provides further information on RTT.

NOTE 2 In a relay service with Real-time text (RTT) the relay operator reads out the person's written text to the other party and then relays their spoken words back to the person through text .

NOTE 3 Persons who use RTT use it for conversations in the same way as persons who can talk and hear use voice communications (or Voice and RTT together). That is possible when the conversation flows word by word and is presented simultaneously sign by sign.

**5.6.2.2** If the support service is handling video communications, they shall have a Total Conversation (TC) service.

This shall be verified by the support service by providing documented evidence that they are or are not:

- a) handling video communication;
- b) handling video communication with TC service.

EXAMPLE In a video communication, a user who is hard of hearing but can speak may be able to read the lips of the support service agent and answer by using their voice and text. It is also possible to use gestures to make the conversation more understandable.

**5.6.2.3** The support service shall have a procedure describing what happens when the support service is contacted from a relay service for sign language.

NOTE A Video relay service (VRS) is a service that enables sign language users and voice telephone users to interact by providing conversion between sign language and speech in substantially real time.

This shall be verified by showing documented evidence of procedures, competence and knowledge to manage a relay service for sign language.

### **5.6.3 User feedback**

The support service shall facilitate the user to provide feedback on their experience of the interaction after each support service interaction.

### **5.6.4 Public announcements and voice recordings**

Public announcements and voice recordings shall be presented in an understandable way, in accordance with clause 6.4.

## 5.7 Written communication

The presentation of written information for communication shall be in accordance with clause 6 of this document.

Written communication encompasses written text, letters, numerals, pictograms, markings, document design, form design and signage.

## 5.8 Automated support system and combinations with other accessible modes

### 5.8.1 General

**5.8.1.1** Communication with automated support systems includes voice-based and text-based. They can either be written or ice, a combination of both or in combination with other accessible modes as described in clause 4 of this document.

**5.8.1.2** The user interfaces of the automated support system shall be in accordance with EN 301 549.

NOTE 1 Automated support systems can be part of a support service that is delivered by electronic communication systems, such as telephone systems, text and voice chatbot.

NOTE 2 Automated support systems can incorporate artificial intelligence (AI) technologies.

NOTE 3 Accessibility Standards Canada has developed a standard; CAN-ASC-6.2:2025 on Accessible and Equitable Artificial Intelligence Systems.

NOTE 4 Providing a keyboard and voice control support for the integration of voice recognition technology for users with motor impairments facilitates the navigability for chatbot interface.

NOTE 5 The provision of alternative text for images supports screen reader compatibility. High contrast improves readability for persons with low or no vision.

**5.8.1.3** The user shall be informed at the start of an interaction when a support system is an automated system.

**5.8.1.4** The user shall be informed during an interaction when the automated system is transferred to a human.

NOTE The support service could start with a support service agent who can transfer the call to an automated support system and vice versa.

**5.8.1.5** Automated support systems shall not close a conversation with a user without:

- Confirmation from the user to close the conversation; or
- exceeding an established timeframe for a response.

### 5.8.2 Voice-based and text-based automated system

**5.8.2.1** Voice-based and text-based automated support systems that a support service provides as communication channels shall meet the applicable requirements of prEN 301549:2026, clause 6.

**5.8.2.2** The information presented and content provided through automated systems shall be understandable in accordance with clause of 5.4 and 6.4, to enable the user to select the relevant option.

**5.8.2.3** Automated support systems shall meet the requirements for data quality in accordance with A.1.

This shall be verified by providing records of:

- a) documented requirements for data quality in accordance with A.2.1;
- b) evidence that relates to user accessibility needs in accordance with A.2.2;
- c) evidence that the terminology relevant to each disability has been incorporated into the system in accordance with A.2.3.

**5.8.2.4** The output of the automated support system shall meet the requirements of A.3.

This shall be verified by providing records of

- a) outputs of incorporated specific terminology accordance with A.3.1
- b) output of relevant terminology within the functional performance criteria in accordance with A.3.2.
- c) outputs of information related to user accessibility needs and requirements of relevant products and services in accordance with A.3.3.
- d) user testing of the automated support system in accordance with A.3.4.

**5.8.2.5** Voice-based automated support systems that facilitates a user to use electronic communication, shall:

- a) publish on its website, and when requested, details of its IVR or call routing where interactive voice response (IVR) or call-routing is provided in a non-digital form in accordance with clause 6;
- b) provide the number of options the user will be presented with at the start of the call;

NOTE Research indicates that the users are able to remember 4 options but a maximum of 6 without errors. [Miller, George.A. (1956) The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information: <https://web-archive.southampton.ac.uk/cogprints.org/730/1/miller.html#ref17> ]

- c) limit options to those most frequently used by users, minimizing subsequent lower levels per option;
- d) after the options have been presented the first time, notify the user that if a recognized choice is not made, the call will be automatically diverted to a support service agent;
- e) notify the user when they are being placed on hold and the expected holding/waiting time or their place in the queue;
- f) provide the user, while they are on hold, with frequent updates informing them that they are on hold and the expected holding/waiting time or their place in the queue; and
- g) when diverted to a support service agent, notify the user in accordance with clause 5.4.1.3 and 5.4.1.4.

This shall be verified by providing records that the voice-based automated support system is in accordance with a) to g).

## 6 Requirements for presentation of information about products and services

**6.1** When a support service presents information about the accessibility of the product and service, accessibility and compatibility features, electronic program guides and displays in a digital form it shall be in accordance with clause 12 of EN 301 549.

**6.2** When a support service presents information on and about products and services in a non-digital form (visual, tactile, auditory), it shall be in accordance with clause 5, 6 and 7 of EN (WIJTO12004).

**6.3** When a support service presents information about the accessibility and compatibility features of products and services in non-digital form, it shall be in accordance with clauses 5, 6 and 7.

Verify 6.2 and 6.3 by checking that the information is presented in accordance with clauses 5, 6 and 7:

- a) a visual form of information shall also be presented in at least a tactile or auditory form.
- b) a tactile form of information shall also be presented in at least a visual or auditory form.
- c) an auditory form of information shall also be presented in at least a visual or tactile form.

## 7 Operations of the support service

### 7.1 Management system

#### 7.1.1 General

The organisation shall implement a management system or equivalent which maintains consistency and continual improvement to ensure accessibility outcomes that meet the accessibility requirements of the support service.

EXAMPLE EN 17161 or ISO 9001

#### 7.1.2 Audits

**7.1.2.1** The organisation shall carry out audits of its support service operations according to clauses 7.1, 7.2, 7.4, 7.5 and 7.6.

**7.1.2.2** The outputs of the audits shall provide evidence that the information of the accessibility of the product and services is provided and the information is communicated in accessible modes in accordance with clause 5 and 6.

**7.1.2.3** the accessibility of the business premise of the support service is in accordance with clause 7.3.

**7.1.2.4** The provision of information to the user is in accordance with clause 8.

**7.1.2.5** Audits shall include those activities of the support service that are outsourced and services along the end-to-end chain.

**NOTE** Audits can be carried out by internal or external persons. Those carrying out the audits are independent and not responsible for the area/department/activity being audited.

**7.1.2.6** The audits shall be carried out at regular intervals, at least every 6 months.

**7.1.2.7** The organisation shall retain records of audits carried out.

### 7.1.3 Complaints handling

7.1.3.1 The organisation shall establish a process for handling complaints about:

- a) the accessibility of the support service.
- b) the accessibility of the products and services.

7.1.3.2 The process on how to make a complaint shall be in accordance with clause 5. That means that the process enables the user to access, perceive and understand the process regardless of the different sensory channels addressed.

7.1.3.3 The organisation shall provide users of its support service with clear and readily available information in accordance with clause 6, about where and how to complain and about how complaints are handled.

7.1.3.4 The organisation shall acknowledge all complaints and provide the user with appropriate feedback on the resolution and outcome in accordance with clause 5 and 6.

7.1.3.5 The complaints handling process shall be verified by the support service providing the information about the process of complaining and about how complaints are handled.

7.1.3.6 The communication and information about the complaints process shall be verified that it is in accordance with clause 5 and clause 6.

### 7.2 Competence on accessibility

7.2.1 A support service shall have the competence:

- a) to provide information about the accessibility features and functions of products and services;
- b) to provide information about the interoperability and compatibility of the product and services with assistive technologies;
- c) to operate in accessible modes of communication in accordance with clause 5;
- d) to present and communicate information in accordance with clause 6.

Verify a) and b) by checking if the information on accessibility and interoperability in relation to the products and/or services has been gathered to be used in the support service.

Verify c) and d) by the requirements specified in clause 5 and 6.

7.2.2 Support service personnel shall have the knowledge to meet the requirements of clause 7.2.1.

7.2.3 Support service personnel shall have the knowledge of:

- a) disability awareness, which includes, at a minimum, but is not limited to:
  - i. the range of disability across the following functionalities: vision, hearing, speech, mobility, cognition, psychological and social and combinations thereof.
  - ii. associated barriers;
  - iii. specific terminology attached to disabilities; and

- iv. applicable legislation.
- b) user accessibility requirements;
  - i of the products and services;
  - ii of the support service.
- c) disability etiquette which includes, at a minimum, but is not limited to best practices guiding interactions with users with disabilities.

Further guidance can be found in Annex C, which provides lived experience of barriers to support services and Annex D that can inform knowledge content.

Knowledge can also be acquired by utilising real case studies, personas and complaint/feedback received by the organization, so that personnel can learn from these.

This shall be verified by reviewing records to check for evidence of knowledge about:

- 1. disability awareness.
- 2. user accessibility requirements.
- 3. disability etiquette.

### **7.3 Support service located in a business premises**

**7.3.1** The built environment in a support service shall be in accordance with Annex A of EN 17210. In Annex A, the following keys are used and specified to require accessibility of the built environment when it relates to support service:

- a) use of related outdoor areas and facilities;
- b) approaches to buildings;
- c) use of entrances;
- d) use of paths in horizontal circulation and use of paths in vertical circulation;
- e) use of rooms by the public;
- f) use of equipment and facilities used in the provision of the service;
- g) use of toilets and sanitary facilities;
- h) use of exits, evacuation routes and concepts for emergency planning;
- i) communication and orientation via more than one sensory channel;
- j) use of facilities and buildings for their foreseeable purpose;
- k) protection from hazards in the environment indoors and outdoors.

**7.3.2** The following requirements shall be additional to 7.3.1 in the premises where a support service is located:

- a) information, on request on how to get to the location via the best accessible routes;
- b) information in accordance with clause 6 about the accessible features of the premise such as:
  - i. the provision of a hearing enhancement system;

- ii. the use of a video relay service and/or an in-person professional sign language interpreter;
  - iii. allowance for assistance dogs.
- c) provision of digital user interfaces in the premises in accordance with prEN 301549;
  - d) provisions for persons that are seeking support so they can see the face of the support service agent to be able to read lips and interpret facial expressions;
  - e) the presence of signage indicating availability and location of an induction loop or enhancement system shall be presented in accordance with clauses 5 and 7 and placed in a prominent position close to the entrance in accordance with prEN 17210:2026, Annex A.

NOTE 1 ETSI TR 101 767 V1.1.1 provides information on symbols to identify telecommunications facilities for deaf and hard of hearing people.

NOTE 2 EN 60118-4:2015, Annex C provides further information in relation to the provision of information to be provided to the hearing aid user.

This shall be verified by evidence that the support service provides information on request with respect to a) and b) above, physical evidence and/or records from a 3<sup>rd</sup> party control with respect to d).

## 7.4 Measuring Performance

### 7.4.1 General

Organisations shall track and measure performance of the support service that has responsibilities to inform about the accessibility of products and services.

It is important that the organisation ensures that accessibility outcomes meet the accessibility requirements of the support service by gathering and reviewing metrics, such as response time, resolution time, user feedback and satisfaction ratings. This can inform what is working and where there is room for improvement.

NOTE Response time refers to time taken to respond to the user. It is important that response time for accessibility information is equal to the response time for other information.

### 7.4.2 Feedback

The organisation shall gather user feedback to improve user experience of the support service and if communicated in accessible modes. This includes the accessibility of the support service in and of itself.

Sources of feedback include:

- I. user testing of automated support systems;
- II. users feedback from voice communication (automatic feedback collection data);
- III. user feedback from experiences with multiple support channels, such as phone, live chat, email, etc.;
- IV. internal audits;
- V. complaints.

Verify that records of user feedback on experiences with multiple support channels and complaints are maintained, analysed and inform continual improvement.

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Verify that the outputs from the audits ensure that accessibility outcomes meet the accessibility requirements of the support service.

NOTE 1 Examples of feedback of customer experiences can include user surveys, user feedback on delivered products and services, meetings with users, user testing, market-share analysis, compliments, warranty claims and dealer reports.

NOTE 2 User feedback can include both positive and negative information.

NOTE 3 The feedback can inform gaps in knowledge, exclusion of users with particular needs in the support service. This can prioritize areas for improvement.

### **7.5 Training of users**

When training is provided for the use of products and services, it shall be in accordance with clause 5 and 6, and the personnel performing the training shall have the necessary competence in accordance with 7.2.

### **7.6 Documentation of accessibility**

**7.6.1** Records shall be maintained of:

- a) what information is provided to users about the accessibility of products and services;
- b) records of support service personnel with respect to competence and knowledge in how to communicate and provide information;
- c) feedback and performance related to accessibility outcomes .

**7.6.2** The organisation shall determine and document the period of time for which the information required in 7.6.1 is to be retained.

## **8 Information for the user**

### **8.1 Requirement**

**8.1.1** The organisation shall provide information about the accessibility of the support service itself and the provided products or services and where the accessibility information on the product and services are located.

**8.1.2** The information shall be consistently available from one location such as the header, footer, or main menu of a website.

**8.1.3** The following information shall be provided in accordance with clause 6 and include:

- (a) a statement about the accessibility of the support service;

NOTE See Article 7 of Directive 2016/2102 and Commission Implementing Decision (EU) 2018/1523 on content of an accessibility statement.

- (b) required information about the accessibility of the products and service that are supported;

- (d) references to the relevant harmonised standards;

- (e) the internet address (url) where the EU declaration of conformity can be assessed;

- (f) how to make a complaint about the accessibility of the product or service or support service itself.

## **Annex A**

### **(normative)**

## **User accessibility criteria for a support service with automated support systems**

### **A.1 Automated support systems**

Automated support systems include rule based automated systems and artificial intelligence (AI) automated systems.

When a support service is planning for an automated support system, it is preferable to start the process with data quality and the design of content and follow up with the assessment of impacts and risk.

When a support service has automated support systems in use already, it is preferable to start to assess impacts and risks, and then reconsider the quality of the data and design.

### **A.2 Data quality**

**A.2.1** The support service shall define and document requirements for data quality and ensure that data used to develop and operate automated support systems meet accessibility requirements.

**A.2.2** The automated support system shall facilitate user accessibility needs that relate to each disability that could present across the functionalities of vision, hearing, speech, mobility, cognition, psychological and social, privacy and combinations thereof, as relevant to the interaction with the product or service

**A.2.3** The automated support system shall incorporate the language relevant to each disability across the functionalities of vision, hearing, speech, mobility, cognition, psychological and social and combinations thereof.

### **A.3 Output of content for automated support systems**

**A.3.1** The output of the automated support system shall incorporate the specific terminology related to each disability that could present across the functionalities of vision, hearing, speech, mobility, cognition, psychological and social and combinations thereof as relevant to the interaction with the product or service.

**A.3.2** The output of the automated support system shall incorporate the language relevant to disabilities across the functionalities of vision, hearing, speech, mobility and cognition .

**A.3.3** The output of the automated support system shall be capable of providing information relevant to the known user accessibility needs and the accessibility requirements of the relevant product or service which they are providing support for.

**A.3.4** Testing of the automated support system shall be carried out through the lifecycle by including users with accessibility needs in the testing in accordance with Annex B.

## **A.4 Impact assessment and risk assessment for automated support systems**

### **A.4.1 Impact assessment**

**A.4.1.1** Where the use of automated support systems are in use, the organisation shall assess and document the potential impacts of the systems to users with accessibility needs.

**A.4.1.2** The impact assessment shall cover the entire life cycle of the system and shall determine the potential consequences of the system's deployment, intended use and foreseeable misuse has on users with accessibility needs

**A.4.1.3** The result of the system impact assessment shall be documented.

### **A.4.2 Risk Assessment**

**A.4.2.1** The organization shall use the results of the impact assessment in the risk assessment process.

**A.4.2.2** The organisation shall carry out a risk assessment with respect to automated support systems, which assesses the potential consequences to the support service and users with accessibility needs that would result if the identified risks were to materialize.

**A.4.2.3** The result of the risk assessment shall be documented.

**A.4.2.4** The output of the impact assessment and risk assessment shall inform design or re-design of the whole or part of the support service and competence on accessibility .

### **A.4.3 Review**

**A.4.3.1** Impact assessments and risk assessments shall be carried out on a regular basis, including when there is a change to the product or service, legislation, organisational policies and procedures with respect to accessibility requirements.

## Annex B (normative)

### User testing of automated support systems

#### B.1 Selection of users for testing

B.1.1 The support service shall involve in user testing a group of users or potential users who represent a range of user accessibility needs.

NOTE Organisations of persons with disabilities can be a useful source for recruitment to guarantee a wider range of users

B.1.2 The selection of users shall be in accordance with prEN 17161:2026, 8.3.2.1.

Ethical requirements shall take into account the needs of diverse participants in terms of participation, provision of visual, tactile and auditory information, modes of communication and access to the built environment. If consent is required, an informed consent is not considered valid if the user is unable to fully access and understand it.

EXAMPLE 1 For instance, when participants are blind or partially sighted or have difficulties reading, an accessible electronic form is offered or an alternative oral version is provided and recorded.

EXAMPLE 2 Alternative signed informed consent forms are provided if requested.

EXAMPLE 3 Sign language is provided when sign language is required to take part in user testing.

Where participants who use sign language are taking part in, it is necessary to communicate with sign language in user testing

**B.1.3** When engaging and interacting with the participants, the support service shall take into account common disability etiquette.

**B.1.4** The support service shall consult with users of the product or service to identify objectives (outcomes) that individuals with a range of accessibility needs seek to achieve when interacting with automated support systems.

#### B.2 User testing requirements

**B.2.1** The support service shall test how successfully the user-testers (persons selected from a group of users) can achieve these objectives by requesting they complete a range of tasks using the automated support system.

Tasks shall include (but not be limited to):

- Initiating a support request through an automated support system
- Navigating the user interface (UI) of the automated support system.
- Recovering after an error or incorrect response from the system.
- Recovering after an error or pause on the part of the user

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- Accessing and navigating associated knowledge bases or content repositories.
- Providing personal or sensitive information to the system.
- Requesting accessible formats of support content.
- Switching languages or accessing multilingual support.
- Completing and closing a support request.
- Transitioning from an automated support system to a human support agent.
- Submitting feedback, surveys, or complaints related to a completed support interaction.

**B.2.2** The support service shall conduct user testing under conditions that simulate usage scenarios encountered by individuals with a range of accessibility needs. These conditions shall include, but are not limited to:

- Use of personal devices
- Use of assistive technologies
- Encountering technical issues such as latency and disconnections
- Environmental conditions of the user, including but not limited to, low-light settings, background noise, and use while in motion. (refer to non-digital).

NOTE Annex C and D.9 provide further guidance on barriers and use cases that can inform B.2.2

**B.2.3** A support service shall meet the following qualitative criteria:

- Users have clear control over automation (e.g., ability to request a human);
- Systems shall declare when interactions are automated and the limitations of the system;
- All prompts and responses shall use plain, consistent, and appropriate language;
- Escalation paths shall be visible and easily accessible;
- Decisions involving AI shall be explainable and contestable;
- Automated and human support channels shall provide similar quality of outcome.

**B.2.4** The support service shall document the user testing process, including:

- Objective and tasks tested and rationale for their selection.
- Results, failed tasks, observed issues or barriers,
- Required changes to be made in response to findings of the user testing.

## B.3 Iteration

**B.3.1** Re-testing shall be conducted following any significant design or system updates.

**B.3.2** Automated support systems shall be monitored for recurring misinterpretations or breakdowns.

**B.3.3** Regular re-evaluation shall be required post-release or at least every 12 months.

## **B.4 Recommended metrics and potential acceptance criteria**

### **B.4.1 Metrics**

The list below is not exhaustive but can inform useful metrics to determine if the user accessibility needs have been met.

- Task completion rate and time-on-task
- Error rate (user and system-generated)
- User satisfaction (via surveys or interviews)
- AI transparency rating (can users tell it's automated?)
- Escalation friction (number of steps or clicks to reach a human)
- Conversation clarity (are instructions and responses understandable?)
- Context carryover (does the system remember key details across steps/sessions?)
- Breakdown recovery (can users resolve issues after system failure?)

### **B.4.2 Potential acceptance criteria**

The list below is not exhaustive but can inform useful acceptance criteria to determine if the user accessibility needs have been met.

- $\geq 95\%$ ? of users complete core support tasks successfully
- $\leq 10\%$ ? of users encounter critical usability/accessibility barriers
- $\geq 80\%$ ? of users report satisfaction with ease of use and clarity
- $\leq 2$ ? misinterpretations or clarification loops per chatbot session (on average)
- $\geq 90\%$ ? of users complete tasks independently with automated support systems without human intervention
- $\leq 5\%$  of users report confusion about whether they're speaking to a human or a bot

## **B.5 Recommended documentation**

The following documentation is recommended to be retained in support of B.2.4.

- User testing plans, and task descriptions
- Full testing results, metrics, and user feedback
- Audio/video recordings (where consent is granted)

## Annex C (informative)

### Lived experience of persons with disabilities engaging with support services

#### C.1 Introduction

This annex summarises the responses collected through a targeted consultation with persons with lived experience and was conducted by the European Disability Forum (EDF) on user needs, barriers, and potential accessibility solutions related to a support service.

The examples of barriers and potential solutions presented was gathered directly from persons with lived experience, including organisations of persons with disabilities (OPDs), who bring first-hand knowledge and lived experience of accessibility challenges. This real-world perspective is critical to identifying both persistent barriers and practical, workable solutions that reflect the diversity of user needs.

Engagement with diverse users and participation of users in accordance with EN17161 is critical in understanding the barriers and requirements of users. By incorporating the voices of those most affected, this consultation ensures that future standards are grounded in reality, inclusive by design, and better equipped to support equal access to information in digital and non-digital forms provided by support services.

There are a number of tables in this Annex, which includes content on “Barriers related to support services” in C.2. and “Barriers related to information in non-digital form” in C.3. The presentation of information is set out under headings of functional performance such as usage without vision, usage with limited vision etc.

The tables are composed of 4 columns. In column 1, users with lived experience describe a barrier they have experienced, in column 2 what is the barrier for them, and in column 3 state their personal need to eliminate the barrier. Column 4 provides some suggestions of the common good practice design guidelines. It may provide some assistance in addressing the corresponding user needs of column 3 and may often provide an example of a suggested implementation. It is worth noting that there are many ways to address the particular user accessibility needs presented here. Column 4 only provides one or a few suggestion(s) among many and attempts to link to relevant design guidelines, which may help further resolve the user accessibility needs.

#### C.2 User needs related to a support service

**Table C.1 — Usage without vision**

Barriers	Design -shortcoming	User accessibility need	Possible applicable design guidance-
I cannot	because	I need	Suggestion(s) for addressing user needs
use automated chatbots using visual explanations	representation in other sensory channels is missing (tactile or auditory).	to be able to speak to a human.	Auditory channel to be provided by a real human, see clause 5 for

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility need</b>	<b>Possible applicable design guidance-</b>
based on frequently asked questions			multiple channel options to choose from.
find the way to support service in public spaces, such as an airport, a train station, or a bus terminal	tactile/ auditory way finding clues are not provided.	to have haptic markings on walls.	Haptic channel to be provided.
get help because help desk staff don't know how to help me	help desk staff are not trained to understand the support needs of persons with no vision.	the helpdesk person to understand my needs and respond to them.	Provide accessibility training to the helpdesk staff.

**Table C.2 — Usage limited vision**

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility need (possible solution)</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
get help from help desk staff	help desk staff is not trained to support persons with low vision.	the support staff to understand my needs (the needs of persons with low vision).	Provide training for support staff to raise awareness among help desk staff about the needs of individuals with low vision. See Annex D for guidance on gaining knowledge content.
see/ perceive information and help provided in written format	of inappropriate lighting, contrast, and environmental conditions.	to be able to adjust lighting and environmental settings.	Provide an adequate environment that is adjustable to low vision needs.

**Table C.3 — Usage without hearing**

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
contact support service	support service only accept contact by telephone.	to contact support service in another way, which does not rely on sound to be heard, for example a secure online chat with a human (no chatbots).	Provide an alternative channel, which is not using sound, for example, text.
use the relay service	relay service is not provided to the user.	the support service to provide relay service.	Provide one, or better yet, two alternative sensory channels (visual/haptic) to communicate. Provide relay service facilities. See 5.6.2 for solutions related to relay service
sign language interpretation	this service is not provided to the user.	Sign language interpretation to be able to communicate.	Provide an alternate format, that supports sign language interpretation.

Table C.4 — Usage with limited hearing

<b>Barriers</b>	<b>Design - shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
communicate with the service staff	service staff have a poor understanding of my accessibility needs.	staff to understand my accessibility needs as a person who is hard of hearing.	Staff competence and knowledge on disability awareness: make staff aware and understand the needs of persons who are hard of hearing
understand spoken voice, speaker announcements or other audio clearly	of poor audio/speaker quality.	good audio quality, for example of telephone/online systems).	Make sure audio (systems) are regularly tested and serviced to provide clear audio quality. Perform regular testing on these systems.

Table C.5 — Usage with limited speech

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
use speech recognition systems	they fail to meet all my accessibility needs. They do not account for a variety of speech diversity.	to have the option to speak with a person rather than interacting with automated service, and be provided with a way of communication that I can use to express my needs.	Provide an alternative channel (for example, visual) using text to communicate.
talk to a person or find the contact information to	automated machines do not understand different types of speech.	alternative options to communicate without using speech to express my needs,	Provide an alternative (visual) channel (for example,

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
be able to talk to a person		rather than speaking to automated service.	using text) to communicate.
communicate as I find it challenging to use voice technology	I suffer from aphasia. Likewise, users with DLD or other speech difficulties will experience the same challenges.	a means of communication that addresses my specific needs	Provide alternative ways of communication suitable for conditions like aphasia. DLD or other speech difficulties.

**Table C.6 — Usage with limited mobility, manipulation, strength, or reach**

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
manually operate and manipulate service because I have limited manual control and precision when performing manual tasks	there is a lack of understanding of the needs of persons with motor disabilities. Example: multiple sclerosis.	a real person to assist me to perform the manual tasks instead of an automated telephone service.	Provide alternatives to manual operation, either in the form of personal assistance or offer other modes of interaction, for example, voice-activated service.

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
access counters and cannot get close enough to the counter. I have difficulty writing on high counters	of the position and height of counters. Transaction windows provide a physical barrier between customer and service agent, which makes it challenging to pass documents, cards, etc., Counters often do not provide recesses for wheelchair users to get close enough to the counter and accommodate a wheelchair.	an in-person service or a counter which I can reach without difficulty from a seated position.	Counters should be low enough to reach or write on them in a seated position. Alternatively, provide height-adjustable solutions or different counter heights. For movement restricted persons there should always be chairs available to rest on and for stability and support.

Table C.7 — Usage with limited cognition

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
easily understand or follow what the support service staff is saying	support service staff do not speak in an easy-to-understand way, talk too fast or lack patience.	helpdesk support service staff to use simple language, be patient, and not rush me. Support service staff should be trained to support persons with intellectual disabilities.	Provide training on disability awareness and etiquette to support service staff to understand and cater to the needs of people with intellectual disabilities
easily use support service where I have to submit my	writing is challenging for me.	an alternative way of communication	Provide alternative communication to

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
support request in text form		to automated service.	automated service.
get immediate response of support service as needed	only asynchronous contact is provided. Example (media service) support is provided by SMS. While a real support person is available, it will take several days for the support person to answer my query.	to be presented with a limited number of menu choices for ease of use and being able to remember them. When using automatic telephone systems, I need to be provided with a choice of more than one sensory channel and the possibility to get personal contact quickly.	Limit the number of menu choices for ease of use. Provide information in more than one sensory channel. Have a menu option to contact a real human in real time.
use telephone services, which provide different choices	the help function is either not offered, not easily found, or not easily activated. In an automated support system, sentences are often too long to be remembered or comprehended. There are too many options to remember, and do not offer to speak to a service person.  There is too little time to comprehend all the options and make a choice. Often a time out is provided without the option to repeat the choices at a user selected pace.	an easy to find and easily activated 'help' function. sufficient time to digest information and respond.	Limit the number of options to prevent cognitive overload for the user. Let the user choose the duration of time the options are presented to the user, the pace of presentation, and the duration of time required to respond. There should be no timeout forcing the user to start over.  There should always be one menu option available to contact a person in real time.  If an automated support system is used, short phrases and a small number of options, including

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
			an option to speak to a person or receive a support call, should be included. The menu should also allow the user to go back and replay the options.

Table C.8 — General considerations, applicable to all functional limitations

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
I cannot	because	I need	Suggestion(s) for addressing user needs
use support service	there is only one way to communicate with the support service, which is not accessible to me.	multimodal contact options (phone, relay service, chat, email etc.).	provide at least one, if not two alternate formats for contact, which are accessible to the specified user.
use automated phone systems	they do not give me the option to speak to a person, nor do they provide quick and easy access to information.	multiple channels, that I can easily choose from and exit if they are not working as expected.	Provide at least one, if not two, alternate formats for system interaction, which are accessible to the specified user.
use the system	their support staff is lacking an understanding of the needs of persons with disabilities.	to locate phone numbers and understand how to contact support service using both printed and digital information.	Provide at least one, if not two, alternate formats for contacting support staff, which are accessible to a user with specific limitations. Use accessible design guidelines on how to present contact information to the user.
make the support staff	there is a lack of awareness of support	to communicate to the support staff	Provide training for support staff

aware and get them to understand and act on my specific needs	staff on accessibility needs.	and them to understand my particular needs and how to cater for them.	on accessibility and disability awareness and needs. Cultivate awareness among support staff for accessibility needs.
use my usual way to communicate with support staff	intermediaries assisting persons with disabilities are not accepted.	respectful, friendly agents and support staff who are willing to understand and have the time to communicate patiently.	Give the user appropriate time, provide the possibility to let the user self-pace the time needed for the support request.
use AI-generated support service	it is not tailored to persons with disabilities. Often, it is not transparent to me if support service is based on AI, There is no easily accessible alternative option to interact with a human if AI does not work for me.	to be able to easily choose an option that provides an alternative to AI, i.e., to speak with a real person instead.	Provide alternative menu options, only one click away, to connect with a real person. Organisations need to develop an understanding of the accessibility needs of users. One way to do this is to reach out to organisations of people with disabilities to establish a mutual understanding.
use digital support, for example chatbots	they require digital and writing skills that I do not possess.	support service to be compatible with assistive technologies and relay service I use, without the need for digital competency and writing skills.	Provide training to management and support staff on what assistive technologies are being used. Identify how to make a support service compatible and technically implement accessible solutions.
access support service at any time I need to.	the availability and reliability of a support	to have access to intermediaries any time I contact support service to	Make sure that the support system or service allows for contact and use of

	service over time is limited.	support me, not just during certain service hours.	intermediaries at any time support is required.
access information easily	there is no consistency in the way travel information is delivered.	a consistent way in how information is provided to me, which is not constantly or randomly being changed but always provides the same format.	Information and directions should be provided at multiple points of interaction to help navigate to a place.
use online support service	there is a lack of digital accessibility in online support service.	online support service should be accessible to me, and where not possible, I need to have an option to connect to a person instead. For example, with automated phone systems, I would like to skip the menu and stay online to be connected to a person.	Provide alternate forma to online communication, specifically, provide an option to speak to a real person.
interact sufficiently with support service	I am often asked to interact using text, verbally, or to perform numeric choices. It isn't very clear to me, for example in e-commerce, how to contact the support service.	someone to provide me with a follow-up, for example, via SMS or following up after a call to a support service to confirm what actions are being taken. accessible support to be provided at no extra cost. For example, if ticket machines are not accessible and I need to buy the ticket at a service centre, the tickets are often more expensive. my emails replied to in a maximum of 24 hours.	Many individuals may face challenges with one, two, or all three communication methods (verbal, written, or numeric choices). Provide alternate modes of communication. When no adequate, accessible alternate format exists, the user should not be charged extra using a more accessible service that works for them.

			<p>Support service should respond to requests promptly, within 24 hours of the service request.</p> <p>Develop cooperation between different organisations in a value chain could help to integrate accessible solution,</p>
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### C.3 User accessibility needs related to information in non-digital form

Table C.9 — Usage without vision

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
I cannot	because	I need	Suggestion(s) for addressing user needs
access alternative assistive formats of information (digital formats/websites) comparison	the information provided is not the same as the printed version; some of the printed content is missing.	to be able to access information in braille. to be given the possibility to contact a person on the phone to get more information.	<p>Provide alternate (assistive) formats, for example spoken information;</p> <p>Provide examples of alternative text formats like:</p> <ul style="list-style-type: none"> <li>i. Large-print text for people with low visio</li> <li>ii. Printed document or Braille for people who are blind</li> <li>iii. Printed or PDF text Accessible digital text (screen reader-friendly) for blind and low-</li> </ul>

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
			vision screen reader users iv. Printed material Audio recording (MP3, DAISY) for blind users and users with reading disabilities v. Complex PDF Accessible HTML page for people using assistive tech or mobile devices Chart or image Text description (alt text).
access information	alternative spoken information is not supported or provided.	to be able to have access to an audio version of the information.	Provide spoken information in alternative assistive formats.
access information provided to the user	user guides for devices are provided only in one mode of communication, for example a paper version.	need to be able to have access to alternate formats.	Provide information in alternate formats.
access the manual or work out how the new device works and operates	alternate text descriptions for images, which provide information on how the device works. are missing,	need to be able to have access to alternate text format.	Provide information in alternate text formats, for example audio.

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
use instruction videos	they do not provide alternate assistive formats in form of audio descriptions.	need to be able to have access to alternate audio descriptions.	Provide alternate audio descriptions.
access information	It is not provided in form of braille as an alternate assistive format.	need to be able to have access to the alternate accessible format of braille.	Provide alternate accessible format in form of braille.

**Table C.10 — Usage with limited vision**

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
I cannot	because	I need	Suggestion(s) for addressing user needs
access information provided for users	text is too small for me to read.	to be able to access large print.	Provide large print as an alternate accessible format.
read information provided for he user	the font-type used is difficult to read.	information presented in easy-to-read fonts, such as Times New Roman or Arial.	Provide text in easy-to-read fonts (e.g. Times New Roman or Arial) Avoid italics and capitalisation.
see the information provided to the user properly	of a lack of contrast.	to be able to change the contrast according to my accessibility needs or be supplied with a range of contrasts to choose from.	Provide the user with user-adjustable settings Provide the user with a high contrast ratio, for example, black and white, while avoiding the use of colour Refer to WCAG 2.2. 1.4.3. and 1.4.4. and 1.4.12.
access information	document design guidelines are not followed; text is not optimised for readability and accessibility needs.	information presented according to content design guidelines. I need information broken up into smaller units to make it easier to comprehend.	Follow readability guidelines for text presentation and design of information content, such as using white space.

<b>Barriers</b>	<b>Design - shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
			Use short sentences. Provide visual units to differentiate text, which refers to different content.
read information	of poor line spacing (lines may stack depending on the type of visual impairment).	to be provided with a text format, which provides sufficient line spacing.	Follow document design guidelines. Use at least 1.5 line spacing. Refer to WCAG 1.4.12.
read print	of poor print quality, a glossy finish creates reflections that make reading difficult.	to be provided with alternate formats familiar with colour codes used in public places to find my way.	Provide documentation in alternate formats. Use standardised colour coding rather than design-driven choice of colours.

Table C.11 — Usage without hearing

<b>Barriers</b>	<b>Design - shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
access information	information is provided only in verbal form (and not in visual or readable form).	to be provided with videos with sign language or captions to have access to alternate formats, such as electronic documents.	Provide an alternate accessible format, such as sign language or captions. Provide alternate digital formats.
access information	because content is not available in sign language interpretation for example, information videos.	to have access to alternate accessible format in the form of sign language.	Provide sign language interpretation to the user for example in videos.

**Table C.12 — Usage limited hearing**

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
understand spoken information properly, it is barely audible to me. I have problems understanding information coming from speakers. Announcement transmitted via speakers or audio systems are barely audible for me.	I have reduced ability to detect the full range of sound frequencies, in particular, I struggle with higher frequencies; I have reduced ability to localize sound.	to be able to adjust sound and frequencies to match my personal abilities. to be able to have access to alternate formats to provide the information to me.	Provide alternate formats, where the user can adjust sound and frequencies to their abilities. Provide text messages on mobile/ smart phones. Provide hearing loops (preferably working with regular earphones using mobile or smart phones.
understand spoken information	I have reduced ability to detect low-volume sound.	to be given the option to increase sound volume to levels I can understand.	Provide alternate formats. Provide technology that enables the user to increase sound volume to their individual needs and abilities.

**Table C.13 — Usage with limited mobility, flexibility or reach**

<b>Barriers</b>	<b>Design -shortcoming</b>	<b>User accessibility needs</b>	<b>Possible applicable design guidance</b>
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
access information	it is positioned inadequately. It may be too high, or it might be at an angle that may make it difficult to read from a lower/ seated position.	to be able to view signs, maps, information, etc. from different positions, for example while standing and being seated.	Display information at different heights, so that people can view it from either a standing or seated positions.

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
		I need to have access to the information in a crowded or empty space	Where possible, provide height adjustability. Make sure information provided at different heights is not blocked or obscured by other people, vehicles, or other means, for example, information at a lower height may be obscured by passengers of an airline placing their carry-on luggage in front of it or a transportation card parking right in front of it.
access information	of inappropriate font size (too small) or viewing distance and viewing angle, taking into account that viewing may be from a seated rather than standing position.	to be able to view the information from different angles in different positions for example, standing and seated, which I have access to the space needed to do so, and not be obstructed, for example by crowds	Provide adequate space and access to space where information can be viewed unobstructed from different viewing angles and heights.
access a paper-based manual	pages in a manual or booklet are challenging to operate with limited fine manual control. When printed information has to be accessed publicly or at the workplace because of limited reach, strength, or dexterity.	adequate space for accessing the information, while it does not rely on fine manual control.	Provide adequate space and access, limit reach by providing close access. Avoid body postures of the user where excessive strength is needed, for example, in reach, where static muscle work of the arms is required,

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
			holding the extended arm. This pose may be impossible for users with limited muscular strength.

**Table C.14 — Usage with limited cognition**

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
I cannot	because	I need	Suggestion(s) for addressing user needs
access or understand information	because it is not provided in an easy-to-read and understand format. Information is not provided in an alternative accessible format, for example, using a visual format such as a pictogram.	to have access to instructional videos presented in a language that is easy to understand. have access to information in an easy-to-read format.	Provide spoken information in video in an easy-to-understand format Let the user control presentation speed, provide stop and scroll functions to go back. Spoken information needs to be presented slowly so that it can be clearly understood. Provide text in an easy-to-read format
access information	because information is too complex to comprehend and take in.	to have access to easy-to-read and easy-to-understand alternate text formats.	Break text up into smaller visual units rather than using just one paragraph for the same information.
understand content in printed media	of its complex text, structure.	to have access to clear/simple printed information.	Provide alternate accessible format, i.e., text in an easy-to-read format.

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
comprehend the text content	for text comprehension, an advanced reading level is required to read and understand the content.	access to alternate text provided in an easy-to-read and comprehend alternate format.	Follow guidelines for understandable written text, multimedia, and spoken language.
understand written information	text uses acronyms and jargon without explain what they mean.	access to alternate text format, where plain English is used.	Avoid jargon, abbreviations and foreign words.
understand written text	of complex formatting, including numeric tables and graphs.	to have access to alternate accessible formats, for example plain English graphs and table descriptions.	Provide information presented in tables and graphs in alternate accessible format. Use plain English table and graph annotations.
understand text	the sentences and vocabulary used are too complex for me to comprehend. Texts are too long and formulated in a too complicated manner.	access to an alternate accessible format, for example, text provided in plain English.	Maximise understandability – referring to easy-to-understand language
comprehend text	the writing style is technical or legal language, or jargon. Information is presented in a complicated way.	to have access to alternate accessible text formats.	Provide a reference Framework for Language. Using bullet points and similar: Three short sentences, each expressing one idea, are easier to understand than one long sentence that includes three ideas. Easy-to-read guidelines to be mainstreamed given the added value for most users, starting with people with

Barriers	Design -shortcoming	User accessibility needs	Possible applicable design guidance
			learning/cognitive disabilities. Use of widely used symbols, infographics. Use examples to convey complex concepts.

**Table C.15 — General All functional limitations**

Barriers	Design shortcoming	User accessibility needs	Possible applicable design guidance
<b>I cannot</b>	<b>because</b>	<b>I need</b>	<b>Suggestion(s) for addressing user needs</b>
access and understand information	information is provided in one format only. Alternate accessible formats are not provided (audio, video, easy to read, braille).	to be provided with alternate accessible digital content.	Provide alternate accessible formats, for example, digital content using a QR code.
I cannot access information in an accessible format without extra costs	I have to pay for a print version of the information in cases where the information is available online.	To be provided with alternate accessible formats, where I can choose how to access information, for example via video, text, illustrations, etc.	Provide alternate formats, the user can choose from at no extra costs.
I cannot access information	information is not provided on how to access and where to find information in alternate accessible formats.	Be able to access information in different formats using alternate sensory channels, for example, being provided with written text, alternate spoken language, or easy-to-read and understand text, alternate visual, audio, or audiovisual sensory channels.	Make information available through multiple sensory channels to meet different individual needs. Examples are written text, spoken language, easy-to-understand visual, audio, or audiovisual sensory channels. Provide information on

Barriers	Design shortcoming	- User needs accessibility	Possible applicable design guidance
			<p>how to get further support (on accessing and understanding the information).</p> <p>Getting help to access and understand the information. A person 'in the loop' to answer questions.</p> <p>Provide compatibility with existing accessibility features on mobile/ smart phones.</p>

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## Annex D (informative)

### Knowledge content

#### D.1 Introduction

This Annex provides guidance with respect to clause 7.3 on competence and knowledge. The content in this Annex can be used to inform knowledge on disability awareness, user accessibility needs and disability etiquette.

The learning topics outlined below are not an exhaustive list and are meant as a starting point.

The content created under the topics below should be co-designed with persons with disabilities and, in particular, through their representative organisations to ensure that the content meaningfully represents the lived experience of persons with disabilities. In D.9, a number of “Use Cases for Accessibility Requirements” are provided as additional material to support the delivery of content. The “use cases” presented are examples and are not an exhaustive list.

Annex C provides further information on the lived experience of persons with disabilities engaging with a support service.

Delivery of the content should include persons with lived experience. Delivery of content should be delivered in accessible modes in accordance with EN 301549 and the h(EN) on the accessibility of information in non-digital form (prEN 18340).

#### D.2 Awareness

**Table D.1 Awareness**

Learning topic	Learning Outcomes
What is Disability	<ul style="list-style-type: none"> <li>— Learners will be able to recognise the different types of impairments and conditions including, but not limited to, persons with a range of disabilities across the following functionalities: vision, hearing, speech, mobility, cognition, psychological and social and combinations thereof.</li> <li>— Learners will be able to articulate what ableism is, and how it impacts persons with disabilities.</li> <li>— Learners will be able to identify the different models of disability and how they have influenced societal attitudes, policies, and practices.</li> <li>— Learners will be familiar with the Human rights-based approach promoted by the UNCRPD.</li> </ul>
What is Accessibility	<ul style="list-style-type: none"> <li>— Learners will be able to articulate what accessibility means and its role in providing access on equal basis with others.</li> <li>— Learners will be able to identify different aspects of accessibility and how they contribute to accessible outcomes (including, but not limited to, access to buildings, access to information and communication, access to interpreters and forms of live assistance).</li> </ul>

Learning topic	Learning Outcomes
	<ul style="list-style-type: none"> <li>— Learners will be able to identify common barriers to accessibility experienced by persons with disabilities.</li> <li>— Learners will be able to identify solutions to eliminate obstacles and barriers to accessibility experienced by persons with disabilities.</li> <li>— Learners will be aware of legal obligations.</li> </ul>
Inclusion and putting it into practice.	<ul style="list-style-type: none"> <li>— Learners will be able to understand what inclusion entails and identify inclusive practices and approaches.</li> </ul>

## D.3 Etiquette

### D.3.1 Language and Terminology

NOTE Preferred terminology changes over time and is always subject to individual preferences.

**Table D.2 Language and terminology**

Learning topic	Learning Outcomes
Inclusive Language and Terminology.	<ul style="list-style-type: none"> <li>— Learner will be able to identify the relationship between language and terminology and respect and dignity.</li> <li>— Learner will be aware of, and be able to identify, the contextual preferences in disability terminology (identity-first or person-first terminology) according to the area served by support service.</li> <li>— The learner will recognize the importance of using friendly and age-appropriate language.</li> <li>— Learner will be able to identify alternatives to communication used by people with a variety of user accessibility requirements, including, but not limited to, the national sign language and alternative and augmentative communication forms (AAC).</li> </ul>

### D.3.2 Behaviour

**Table D.3 Behaviour**

Learning topic	Learning Outcomes
Creating a supportive environment.	<ul style="list-style-type: none"> <li>- Learners will be aware of the importance of assuming competence of the user and the importance of avoiding assumptions about a user's preferred form of communication.</li> <li>- Learners will be aware of the importance of being patient and open minded throughout an interaction with a user.</li> <li>- Learners will be aware of the importance of using every mode of communication available to enable a user to understand and to be understood.</li> <li>- Learners will be able to recognise that the user does not have to disclose an impairment or condition to access other modes of communication.</li> </ul>

Learning topic	Learning Outcomes
	<ul style="list-style-type: none"> <li>- Learners will be able to recognize that all forms of communication are equal, one is not superior to another even if it is used more frequently.</li> <li>- Learners will be able to recognize the importance of not interrupting or finishing user’s sentences.</li> <li>- Learners will be aware of the importance of respecting personal space and equipment. Wheelchairs, canes, and other assistive devices are part of an individual’s personal space. Learners will be aware not to touch or move them without permission.</li> </ul>
Creating a flexible environment.	<ul style="list-style-type: none"> <li>- Learner will understand the importance of providing flexible options to the user. Learners will be aware of the options available when communicating with users. (Flexible options include, but are not limited to, providing questions that will be asked at an in-person appointment ahead of time or providing multiple forms of information).</li> </ul>
Personal Assistants or Support Persons.	<ul style="list-style-type: none"> <li>- Learners will be aware of what the role of a personal assistant or support person is.</li> <li>- Learners will be aware of the importance of addressing the user first, rather than speaking to the personal assistant or support person, when a personal assistant or support person is present.</li> <li>- Learners will be aware of the proper procedure when interacting with a personal assistant or support person, including, but not limited to, asking the user’s permission before speaking directly with their support person.</li> </ul>

#### D.4 User accessibility requirements

It is important to understand the diversity of users and contexts of use. Persons may share an impairment but use different strategies to access, understand and use support services. Each user can have diverse combinations of needs and any user might require different modes of communication depending on different contexts.

**Table D.4 — User accessibility needs**

Learning topic	Learning Outcomes
User Accessibilityneeds.	<ul style="list-style-type: none"> <li>- Learner will be able to identify several diverse examples of user accessibility needs, including, but not limited to, those of persons with a range of disabilities across the following functionalities: vision, hearing, speech, mobility, cognition, psychological and social and combinations thereof.</li> <li>— Learner will be able to identify the importance of meeting user accessibility needs to reduce communication barriers and the subsequent prejudice and exclusion that comes from those barriers.</li> <li>— Learner will be able to identify the multiple solutions available to staff to meet user accessibility needs.</li> </ul>

Learning topic	Learning Outcomes
User Accessibility needs of the products and services being offered that the support service is supporting.	<ul style="list-style-type: none"> <li>— Learner will be able to identify diverse user accessibility needs of the product or service they will be supporting</li> <li>— Learner will be able to communicate, in multiple modes, the accessibility features, functions, or characteristics designed to address identified user accessibility needs in the product or service they are supporting.</li> <li>— Learner will be familiar with the company policy on how to respond and document emerging user accessibility needs of the supported products or services.</li> </ul>
User Accessibility needs of the support service.	<ul style="list-style-type: none"> <li>— Learner will be able to identify diverse user accessibility needs of the support service.</li> <li>— Learner will be able to communicate, in multiple modes, the accessibility features, functions, or characteristics designed to address identified user accessibility needs of the support service.</li> <li>— Learner will be familiar with the company policy on how to respond and document to emerging user accessibility needs of the support service.</li> </ul>

## D.5 Knowledge on accessibility legislation and supporting standards

Table D.5 — Legislation and supporting standards

Learning topic	Learning Outcomes
Standards supporting the European Accessibility Act as relevant, such as: <ul style="list-style-type: none"> <li>— Requirements on the presentation of information in H(EN) on Nondigital Information.</li> <li>— Requirements for ICT products and services and digital information in H(EN)301549.</li> <li>— Requirements on Managing of Accessibility in H(EN)17161.</li> <li>— Requirements on Support Services in H(EN) Support Services.</li> </ul>	<ul style="list-style-type: none"> <li>— Learner will be aware of the European Accessibility Act, the applicable products and services and their requirements.</li> <li>— Learner will be aware of the content of the standards and their applicability.</li> </ul>

## D.6 Use cases for accessibility requirements

### D.6.1 General

This section includes real use cases examples to support content with practical scenarios. The aim is to help support service personnel understand how accessibility awareness, etiquette, and user accessibility needs apply in day-to-day service delivery. Each use case is linked to specific functional performance criteria and reflects how inclusive design and proper staff training can remove barriers and improve accessibility outcomes in a support service for persons with disabilities.

### D.6.2 Usage without hearing

Use case for deaf sign language user as it is currently in of phone manufacturing company.

**Objective:** to ensure real-time, equitable access to customer support services without hearing.

**EXAMPLE** A support service provider enables sign language customers to connect with a sign language interpreter through remote video interpreting or video relay service. This interpreting service is available both in physical service locations (e.g. retail stores) and or through online platforms (e.g., web-based customer support). Customers can initiate the connection without needing to book an appointment in advance.

**Actors:**

- Deaf or hard of hearing customer who is a sign language user
- Support service staff
- Professional sign language interpreter available remotely

**Preconditions:**

- The customer requires sign language interpretation to communicate effectively.
- The service location is equipped with video connectivity.
- An internet-enabled device is available to facilitate video interpreting.

**Basic Flow:**

- a) The customer requests assistance at a service location or through an online support platform.
- b) The support system provides an option to initiate a video call with a remote sign language interpreter.
- c) The interpreter joins the session in real time.
- d) Communication between the customer and staff is facilitated through the interpreter.
- e) The session ends once the support request has been addressed.

**Postconditions:**

- The customer receives full and equal access to support service in their preferred communication mode.
- The service provider ensures an inclusive and accessible experience.

### D.6.3 Usage without vision or with limited vision

#### Use case for support service waiting systems

**Objective:** To ensure blind or visually impaired users can independently access support service waiting systems (e.g., waiting list displays and ticket dispensers) in public service environments.

**Description:** Public service points (e.g., post offices, social services, healthcare centres) provide accessible queue management systems where ticket numbers display comply with EN 301 549 and offer clear, readable visual information and clear audio output.

**Actors:**

- Blind or visually impaired customer
- Ticket number display

- Queue management display system
- On-site support staff

**Preconditions:**

- The customer is blind or has a visual impairment that limits access to visual interfaces.
- The ticketing machine complies with EN 301 549 (audio output, accessible and readable information).
- The waiting display system is equipped with high-contrast visuals and synchronised audio announcements.
- Staff are trained to assist and provide accessible information upon request.

**Basic Flow:**

- a) The customer enters the service area.
- b) They approach the ticketing machine, which offers tactile controls and audio prompts.
- c) The customer uses headphones or a built-in speaker to interact with the machine and receive a ticket.
- d) The customer waits for their turn, guided by a combination of a large, high-contrast display and clear audio announcements indicating ticket numbers.
- e) If needed, the customer refers to a tactile map or maquette available at the entrance to understand the space layout.
- f) When their number is called, they proceed to the assigned counter or room.

**Postconditions:**

- The customer is served in turn without relying on visual cues alone.
- The support service environment ensures autonomous navigation and interaction for all users, in compliance with accessibility standards.

#### **D.6.4 Usage without vision**

**Use case: accessing online banking support via chatbot**

**Objective:** To enable a user who is blind to independently sign a banking contract online and receive accessible support through a chatbot and human support agent.

**Description:** A blind customer wishes to open a new savings account through their bank's online platform. The user accesses the online banking portal using a screen reader. During the process of reviewing and signing the account agreement, the user encounters unclear content. They initiate contact with the bank's support service, starting with an AI chatbot and later transitioning to a live support agent.

**Actors:**

- Blind customer
- Bank's online banking system
- AI chatbot

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- Human support service agent

### Preconditions:

- The user is blind and uses assistive technology (screen reader).
- The bank's digital interface and chatbot are compliant with EN 301 549 for accessibility.
- A human support agent is available for escalation and trained in accessible communication.
- The contract is available in accessible formats (text, audio, accessible PDF).

### Basic Flow:

- a) The blind user logs in to the online banking platform using their screen reader.
- b) They begin the process of opening a new savings account and reviewing the contract.
- c) The user encounters unclear legal terminology or layout that the screen reader cannot interpret effectively.
- d) The user activates the chatbot, which supports keyboard navigation and voice commands.
- e) The chatbot explains the contract in plain language and offers downloadable audio summaries.
- f) When a specific question about a contract clause cannot be answered, the chatbot offers to transfer the user to a live human agent.
- g) The live agent connects via real-time text (RTT) or voice-assisted relay and continues support.
- h) The agent confirms the user's understanding and guides them through the signing process.
- i) The user signs the document using a secure, screen-reader-friendly digital signature platform.
- j) A confirmation of the signed contract is emailed in an accessible format (e.g., accessible PDF or structured HTML).

### Postconditions:

- The user successfully signs the banking contract independently, using accessible tools.
- All interactions with the chatbot and human agent are completed via accessible communication methods (screen reader, RTT, or voice relay).
- The user receives a confirmation of the signed contract in an accessible format (e.g., screen-reader-friendly PDF or structured HTML).
- The user's understanding and autonomy are respected throughout the process.

## D.6.5 Usage with limited cognition

### Use case: chatbot service and human alternatives

**Objective:** To enable users with cognitive and/or speech disabilities to independently open, understand, and sign banking contracts online using plain language tools, AI chatbot support and human agents through alternative communication methods.

**Description:** A customer with speech impairment and/or intellectual impairment wants to open a savings account online. They experience challenges understanding complex legal content or navigating a non-intuitive interface. They access an AI chatbot designed for cognitive accessibility and speech alternatives. If needed, the user can smoothly escalate to a trained human support agent via Real-Time Text (RTT), chat, or voice relay service.

#### Actors

- Customer with cognitive or speech limitations
- Online banking system
- Accessible AI chatbot
- Trained human support agent

#### Preconditions

- The user may have difficulty processing complex information or communicating verbally.
- The interface is designed for cognitive accessibility (e.g., simplified layouts, clear instructions, plain language).
- AI chatbot is optimised for plain-language communication and can read text aloud.
- Alternative communication channels (RTT, voice relay, chat) are available.
- Human agents are trained in supporting people with cognitive and speech disabilities.

#### Basic Flow

- The user logs into their online banking account.
- The interface offers step-by-step navigation
- While reviewing the account contract, the user has difficulty understanding legal or procedural language.

The user initiates the accessible AI chatbot, which provides:

- Plain language explanations (no jargon, no acronyms, simple language)
- Visual summaries or icons to help explain steps.
- Audio versions of the content for auditory learners.
- Slow-paced responses and options to repeat or rephrase information.

If the chatbot cannot help sufficiently, it offers to connect the user to a trained human agent via:

- Real-Time Text (RTT) chat for non-verbal communication.
- Text relay service for users with limited speech ability.

The agent confirms the user's needs and provides:

- Plain language support tailored to the user's cognitive processing level.

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- Documents that are delivered in the user's preferred accessible format.
- Extra time for responses and guided support.
- Help with using a screen-reader-friendly or step-by-step digital signature tool.

### Postconditions:

- The user successfully opens and signs the banking contract using accessible tools.
- The contract and confirmation documents are delivered in the user's preferred accessible format (e.g., plain text, audio, or easy-read PDF).
- The interaction (whether via AI chatbot or human support) builds user confidence and encourages continued independent use of digital banking services.

## D.7 References

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Let's get started! - LIVE TEXT ACCESS

AccessCat | Catalogue

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KOPIA FRÅN SIS FÖR REMISSBEHANDLING  
ENDAST FÖR INTERNT BRUK  
FÅR EJ KOPIERAS ELLER SPRIDAS

## Annex ZA (informative)

### Relationship between this European Standard and the accessibility requirements of Directive 2019/882 aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/587 Commission implementing decision of 14.9.2022 to provide one voluntary means of conforming to requirements of DIRECTIVE (EU) 2019/882 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 April 2019 on the accessibility requirements for products and services.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding accessibility requirements of that Directive and associated EFTA regulations

**Table ZA.1 — Correspondence between this European Standard and DIRECTIVE (EU) 2019/882**

Requirements of DIRECTIVE (EU) 2019/882	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Section I Clause 3 Section III Clause (d)	5.2.1, 5.3,5.4, 5.5, 5.6.1.1, 5.6.1.2, 5.6.2.1, 5.6.2.2, 5.6.2.3,5.6.3, 5.6.4, 5.7, 5.8.1.1, 5.8.1.2, 5.8.1.3, 5.8.1.4, 5.8.1.5, 5.8.2.1, 5.8.2.2, 5.8.2.3, 5.8.2.4, 5.8.2.5, 6.1, 6.2, 6.3, 7.1.1, 7.1.2.1, 7.1.2.2, 7.1.2.3, 7.1.2.3, 7.1.2.4, 7.1.2.5, 7.1.3.1, 7.1.3.2, 7.1.3.3, 7.1.3.4, 7.1.3.5, 7.1.3.6, 7.2.1. (a) to (d) ,7.2.2 ,7.2.3 (a) to (d) , 7.3.1. (a) to (k) 7.3.2 (a) to (e), 7.4 7.5.1, 7.5.2, 7.6, 7.7.1 (a) to (c), 7.7.2, 8.1.1, 8.1.2 (a) to (f)	

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) / [service(s)] / [...] falling within the scope of this standard.

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