TECHNICAL REPORT

ISO/IEC TR 29138-2

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Information technology — Accessibility considerations for people with disabilities —

Part 2:
Standards inventory

Technologies de l'information — Considérations d'accessibilité pour les personnes infirmes —

Partie 2: Inventaire des normes

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

— type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;

— type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;

— type 3, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC TR 29138-2, which is a Technical Report of type 3, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

ISO/IEC TR 29138 consists of the following parts, under the general title *Information technology — Accessibility considerations for people with disabilities*:

— *Part 1: User needs summary*

— *Part 2: Standards inventory*

— *Part 3: Guidance on user needs mapping*

Introduction

ISO/IEC JTC 1 believes that the work in the area of information communication technology (ICT) standardization for accessibility is a major undertaking, encompassing many global, regional and local interests. Additionally, there are significant standards efforts taking place in ISO, IEC, ITU and the national and regional standards bodies as well as various consortia/fora and user groups.

This Technical Report identifies sources of ICT accessibility guidance to support users with the widest range of capabilities. The number of people using ICT products and services, which combine hardware, software, and network technologies, is increasing, as is the variety of ICT products and services. Our everyday lives are filled with such products and services. Currently available ICT equipment and services, however, are not always accessible. Typically, the people most excluded by poor accessibility of products and services are those with disabilities and those with limitations due to age. However, they are not the only ones who experience difficulty in operating ICT products, such as personal computers (PCs). It is essential to improve ICT accessibility so that people with such special needs can have access to ICT products and services. The improvement of accessibility of products and services benefits all users, not only people with such special needs, leading to an inclusive e-society.

By providing appropriate ICT accessibility standards, the market of accessible ICT products and services will develop more efficiently and effectively. Standardization encourages organizations to address the needs of the people with disabilities and people with limitations due to age and triggers development of ICT products and services with built in accessibility.

Standardization bodies are starting to address disability and age-related issues and will, increasingly, develop and implement policies and programs in their standards development to include the needs of both people with disabilities and people with limitations due to age. Individuals have different access needs because of their different levels of capabilities and disabilities. Particularly people with multiple disabilities have distinct needs. The great variety and distinctiveness of individual differences make it difficult for individual standards to address all the needs which address the widest range of capabilities and disabilities.

Information technology — Accessibility considerations for people with disabilities —

Part 2:
Standards inventory

1 Scope

This part of ISO/IEC TR 29138 identifies a collection of documents (which it refers to as standards even though they encompass more than traditional ISO and ISO/IEC standards) that provides guidance on meeting the needs of people with disabilities. While its primary audience is standards developers, it can also be helpful for developers of information technology products and services, policy makers, procurers and for accessibility advocates to consider.

In addition to identifying user needs, this part of ISO/IEC TR 29138 identifies problems that people with disabilities experience with Information Technologies that lead to these user needs and identifies the relationship of these user needs with the accessibility factors for standards developers to consider found in ISO/IEC Guide 71: *Guidelines to address the needs of older persons and people with disabilities* when developing standards.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1
standard
identifiable document that contains some specific guidance

NOTE   In the context of this part of ISO/IEC TR 29138, document standards include: all ISO and ISO/IEC standards, technical reports, publicly available specifications and all documents of other organizations that have a similar function to these ISO and ISO/IEC documents.

2.2
user
person who interacts with the product, service or environment

NOTE   Adapted from ISO/IEC Guide 71 definition 3.4, which is adapted from ISO 9241-11:1998.

2.3
user accessibility need
user need
requirement of a product or its environment of use that improves accessibility to the system for users whose abilities are reduced through environmental factors, injury, disability, or natural degradation from aging

NOTE 1   Where there are many other types of user needs, this Technical Report only deals with user accessibility needs and thus uses the shorter form "user need" to refer to user accessibility needs.

NOTE 2   It might not be possible to meet all user needs.

3   Standards categories

There are many possible means of organizing the set of standards identified in this part of ISO/IEC TR 29138. The approach taken here is to categorize them in terms of their breadth of application. This organization does not provide mutually exclusive categories, but rather categories that can be added together to provide increasingly detailed guidance.

a) **High-level standards** (clause 4.1) are the most generally applicable standards. In addition to collections of guidance from multiple categories, this category also includes standards providing general guidance and those providing guidance on design.

   NOTE   Because of their composition, standards listed in clause 4.1 can also be considered as belonging to all other categories.

b) **Hardware/equipment-oriented standards** (clause 4.2) apply to all types of computer hardware and to most types of related equipment, including consumer electronics, communication equipment, and computers and related equipment designed for use in specialized environments.

   NOTE 1   Additional standards applying to specialized environments are listed in clause 4.5.

   NOTE 2   Additional standards applying to communications services are listed in clause 4.6.

c) **Software/services-oriented standards** (clause 4.3) apply to software used to control computer hardware and equipment with embedded computer controls.

   NOTE   Additional standards applying to communications services are listed in clause 4.6.

d) **User capabilities-oriented standards** (clause 4.4) apply to people regardless of the types of computer systems, equipment, and/or environmental elements that they interact with. These standards provide anthropomorphic guidance related to various populations of humans.

e) **Environment-oriented standards** (clause 4.5) apply to specialized types of computer hardware, related equipment, and environmental design factors for various specific environments, including: public access systems, control centers, and remote / mobile computing.

f) **Communications services-oriented standards** (clause 4.6) apply to the functionality of various types of computer and telecommunications communications. This category includes standards dealing with: communications protocols, telephone regulations and television regulations.

NOTE   Standards on communications equipment (as opposed to communications services) listed in clause 4.2.

g) **Other relevant standards** (clause 4.7) include packaging and other issues.

Good general design is a prerequisite to good accessible design. Thus standards, which may or may not have their own accessibility related guidance are also important in ensuring aspects of usability, which is the goal of accessibility when applied to populations of users with differing capabilities.

Within each category, standards are subdivided into tow subcategories|:

a) standards focused on accessibility

b) standards partly related to accessibility

Within each subcategory, standards are ordered in the following manner:

a) ISO and ISO/IEC standards ordered based on their ISO number

b) Other global standards and sets of guidelines (where such exist, e.g. W3C and IEEE)

c) Regional and national standards, guidelines and regulations

4 The standards

4.1 High-level standards

4.1.1 High-level standards focused on accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO Guide 71	Guidelines for standards developers to address the needs of older persons and persons with disabilities	ISO	Guide published 2001	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=33987
ISO 9241-20	Ergonomics of human-system interaction — Part 20: Accessibility guidelines for information/communication technology (ICT) equipment and services	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40727
ISO TR 22411	Ergonomic data and guidelines for the application of ISO/IEC Guide 71 in standards related to products and services to address the needs of older persons and persons with disabilities	ISO TC159/WG2	TR published 2008 now under redevelopment	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40933
ISO/IEC 24756	Information technology — Framework for specifying a common access profile (CAP) of needs and capabilities of users, systems, and their environments	ISO/IEC JTC1/SC35	under development FDIS published 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41526
	Regional and national standards, guidelines and regulations			
BS 7000-6	Design management systems. Managing inclusive design. Guide	UK BSI	Published 2005	http://www.bsi-global.com/en/Shop/Publication-Detail/?pid=000000000030142267
CWA 14661	Guidelines to Standardisers of ICT products and services in the CEN ICT domain	EU CEN	Published 2003	ftp://cenftp1.cenorm.be/PUBLIC/CWAs/e-Europe/DFA/cwa14661-00-2003-Feb.pdf

Identifier	Title	Country / Org	Status	Reference
DIN TR 124	Barrierefreie Gebrauchsgüte	Germany DIN	Published 2005	http://www.beuth.de/beuth/owa/bwr_eins tieg.artikelinfo?z_kontaktnummer=20060 41477573539720060727020140&z_art_ id=83849626
JIS X 8341-1	Guidelines for older persons and persons with disabilities — Information and communications equipment, software and services — Part 1: Common Guidelines	Japan JIS	Published 2004	http://www.webstore.jsa.or.jp/webstore/ Com/FlowControl.jsp?lang=en&bunsyol d=JIS+X+8341-1%3A2004&dantaiCd=JIS&status=1&pa geNo=0
JIS Z 8071	Guidelines for standards developers to address the needs of older persons and persons with disabilities	Japan JIS	Published 2003	http://www.webstore.jsa.or.jp/webstore/ Com/FlowControl.jsp?lang=en&bunsyol d=JIS+Z+8071%3A2003&dantaiCd=JIS &status=1&pageNo=0
Stanca Act	Provisions to support the access to information technologies for the disabled	Italy Federal Law	Published 2004	http://www.pubbliaccesso.gov.it/english/i ndex.htm
Korea Guidelines	Recommendation Guidelines to Improve Accessibility for the Disabled and the Elderly to the IT services/IT products	Korea MIC	Published 2002	http://www.iabf.or.kr/lib/common/downlo ad.asp?path=pds&file=Recommendation Guidelines to Improve Accessibility.pdf
Nordic Guidelines	Nordic Guidelines for Computer Accessibility	Nordic Council of Ministers	Published 1998	http://trace.wisc.edu/docs/nordic_guideli nes/nordic_guidelines.htm
US 508	Section 508 of the US Rehabilitation Act	USA Federal Law	Published 1998 under revision	http://www.section508.gov/index.cfm?Fu seAction=Content&ID=12

4.1.2 High-level standards partly related to accessibility

Standard Identifier	Title	Organization	Status	Source
ISO and ISO/IEC standards				
ISO 1503	Ergonomic requirements for design on spatial orientation and directions of movements		IS published 2008	http://www.iso.org/iso/iso_catalogue/catalogue_ics/catalogue_detail_ics.htm?csnumber=40302
ISO 6385	Ergonomic principles in the design of work systems	ISO TC159/SC1	IS published 2004 under revision as 6385-2	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=35885
ISO 6385-1	Ergonomics — Part 1: Basic concepts, terms and definitions	ISO TC159/SC1	under development CD published 2008 (will replace ISO 6385)	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42885
ISO 9241-1	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 1: General introduction	ISO TC159/SC4	IS published 1997 Amendment 1 published 2001	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=21922
ISO 9241-2	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 2: Guidance on task requirements	ISO TC159/SC4	IS published 1992	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=16874
ISO 9241-11	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 11: Guidance on usability	ISO TC159/SC4	IS published 1998	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=16883
ISO 9241-210	Ergonomics of human system interaction — Part 210: Human-centred design for interactive systems	ISO TC159/SC4	under development DIS published 2008 (will replace ISO13407)	—

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ISO/IEC 12207	Information technology — Software life cycle processes	ISO/IEC JTC1/SC7	IS published 2008	http://www.iso.org/iso/iso_catalogue/cat alogue_ics/catalogue_detail_ics.htm?cs number=43447
ISO 13407	Human-centred design processes for interactive systems	ISO TC159/SC4	IS published 1999 (under revision as 9241-210)	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=21 197
ISO/IEC 15288	Systems engineering — System life cycle processes	ISO/IEC JTC1/SC7	IS published 2008	http://www.iso.org/iso/iso_catalogue/cat alogue_tc/catalogue_detail.htm?csnumb er=43564
ISO/IEC 15289	Systems and software engineering —Content of systems and software life cycle process information products (Documentation)	ISO/IEC JTC1/SC7	Published 2006	http://www.iso.org/iso/iso_catalogue/cat alogue_tc/catalogue_detail.htm?csnumb er=43790
ISO TR 16982	Ergonomics of human-system interaction — Usability methods supporting human-centred design	ISO TC159/SC4	TR published 2002	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=31 176
ISO PAS 18152	Ergonomics of human-system interaction — Specification for the process assessment of human-system issues	ISO TC159/SC4	PAS published 2003	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=38 596
ISO TR 18529	Ergonomics — Ergonomics of human-system interaction — Human-centred lifecycle process descriptions	ISO TC159/SC4	TR published 2000	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=33 499
ISO/IEC 25060	Software product Quality Requirements and Evaluation (SQuaRE) — Common Industry Format (CIF) for Usability — General Framework for Usability-related Information	ISO/IEC JTC1/SC7	under development DTR published 2008	http://www.iso.org/iso/iso_catalogue/cat alogue_tc/catalogue_detail.htm?csnumb er=35786
ISO/IEC 25062	Software engineering — Software product Quality Requirements and Evaluation (SQuaRE) — Common Industry Format (CIF) for usability test reports	ISO/IEC JTC1/SC7	IS published 2006	http://www.iso.org/iso/en/CatalogueDetai lPage.CatalogueDetail?CSNUMBER=43 046

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4.2 Hardware-oriented / equipment-oriented standards

4.2.1 Hardware-oriented / equipment-oriented standards focused on accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO/IEC 10779	Information Technology — Office equipment accessibility guidelines for elderly persons and persons with disabilities	ISO/IEC JTC1 SC 28	IS published 2008	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=46086
ISO/IEC 29136	Information Technology — User Interfaces — Accessibility functions for personal computers	ISO/IEC JTC1 SC 35	under development new work item 2007	—
ISO/IEC 13066	Information Technology — Interoperability with Assistive Technology (AT)	ISO/IEC JTG1 SC 35	under development new work item 2008	—
	Regional and national standards, guidelines and regulations			
ANSI C.63.19	American National Standard for Methods of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids	USA ANSI/IEEE	Published 2007	http://webstore.ansi.org/ansidocstore/product.asp?sku=IEEE+Std+C63%2E19%2D2007
JBMS-71	Auditory signal	Japan JBMIA	Published 2006	http://www.jbmia.or.jp/hyojun2/upload-v3/archive/JBMS-71.pdf
JIS S0011	Guidelines for all people including elderly and people with disabilities — Marking of tactile dots on consumer products	Japan JIS	Published 2000	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyold=JIS+S+0011%3A2000&dantaiCd=JIS&status=1&pageNo=0
JIS S 0012	Guidelines for all people including elderly and people with disabilities — Usability of consumer products	Japan JIS	Published 2000	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyold=JIS+S+0012%3A2000&dantaiCd=JIS&status=1&pageNo=0

JIS S 0013	Guidelines for the elderly and people with disabilities — Auditory signals on consumer products	Japan JIS	Published 2002	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+S+0013%3A2002&dantaiCd=JIS&status=1&pageNo=0
JIS S 0014	Guidelines for the elderly and people with disabilities — Auditory signals on consumer products — Sound pressure levels of signals for the elderly and in noisy conditions	Japan JIS	Published 2003	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+S+0014%3A2003&dantaiCd=JIS&status=1&pageNo=0
JIS X 8341-2	Guidelines for older persons and persons with disabilities — Information and communications equipment, software and services — Part 2: Information processing equipment	Japan JIS	Published 2004	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+X+8341-2%3A2004&dantaiCd=JIS&status=1&pageNo=0
JIS X 8341-4	Guidelines for older persons and persons with disabilities — Information and communications equipment, software and services — Part 4: Telecommunications equipment	Japan JIS	Published 2005	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+X+8341-4%3A2005&dantaiCd=JIS&status=1&pageNo=0
JIS X 8341-5	Guidelines for older persons and persons with disabilities — Information and communications equipment, software and services — Part 5: Office equipment	Japan JIS	Published 2006	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+X+8341-5%3A2006&dantaiCd=JIS&status=1&pageNo=0
TIA 504-A	Telecommunications-Telephone Terminal Equipment-Magnetic Field and Acoustic Gain Requirements for Headset Telephones Intended for Use by the Hard of Hearing	USA TIA	Published 1998	http://www.tiaonline.org/standards/catalog/details.cfm?document_id=1213
UNE 139801	Computer applications for people with disabilities. Computer accessibility requirements. Hardware.	Spain AENOR	Published 2003	http://www.aenor.es/desarrollo/inicio/home.asp#

4.2.2   Hardware-oriented / equipment-oriented standards partly related to accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO 7000	Graphical symbols for use on equipment — Index and synopsis	ISO TC145/SC 3	IS published 2004	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=35627
ISO 9241-3	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 3: Visual display requirements	ISO TC159/SC4	IS published 1992 under revision as 9241-300 to 308	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=16875
ISO 9241-4	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 4: Keyboard requirements	ISO TC159/SC4	IS published 1998	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=16876
ISO 9241-7	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 7: Requirements for display with reflections	ISO TC159/SC4	IS published 1998	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=16879
ISO 9241-8	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 8: Requirements for displayed colours	ISO TC159/SC4	IS published 1997	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=16880
ISO 9241-9	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 9: Requirements for non-keyboard input devices	ISO TC159/SC4	IS published 2000	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=30030
ISO 9241-300	Ergonomics of human-system interaction — Part 300: Introduction to electronic visual display requirements	ISO TC159/SC4	IS published 2007	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40096
ISO 9241-302	Ergonomics of human-system interaction — Part 302: Terminology for electronic visual displays	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40097

ISO 9241-303	Ergonomics of human–system interaction — Part 303: Requirements for electronic visual displays	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=40 098
ISO 9241-304	Ergonomics of human–system interaction — Part 304: User performance test methods	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=40 099
ISO 9241-305	Ergonomics of human–system interaction — Part 305: Optical laboratory test methods for electronic visual displays	ISO TC159/SC4	under development FDIS published 2007	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=40 100
ISO 9241-306	Ergonomics of human–system interaction — Part 306: Field assessment methods for electronic visual displays	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=40 101
ISO 9241-307	Ergonomics of human–system interaction — Part 307: Analysis and compliance test methods for electronic visual displays	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=40 102
ISO TR 9241-307	Ergonomics of human–system interaction — Part 308: Surface-conduction electron-emitter displays (SED)	ISO TC159/SC4	TR published 2007	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=44 843
ISO 9241-400	Ergonomics of human–system interaction — Part 400: Principles and requirements for physical input devices	ISO TC159/SC4	IS published 2007	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=38 896
ISO 9241-410	Ergonomics of human–system interaction — Part 410: Design criteria for physical input devices	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=38 899
ISO 9241-910	Ergonomics of human–system interaction — Part 920: Framework for tactile and haptic interactions	ISO TC159/SC4	under development working draft 2008	—
ISO 9241-920	Ergonomics of human–system interaction — Part 920: Guidance on tactile and haptic interactions	ISO TC159/SC4	under development FDIS published 2008	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=42 904

ISO 9355-1	Ergonomic requirements for the design of displays and control actuators — Part 1: Human interactions with displays and control actuators	ISO TC159/SC4	IS published 1999	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=21919
ISO 9355-2	Ergonomic requirements for the design of displays and control actuators — Part 2: Displays	ISO TC159/SC4	IS published 1999	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=21920
ISO 9355-3	Ergonomic requirements for the design of displays and control actuators — Part 3: Control actuators	ISO TC159/SC4	IS published 2006	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40188
ISO 9355-4	Ergonomic requirements for the design of displays and control actuators — Part 4: Location and arrangement of displays and control actuators	ISO TC159/SC4	Under development DIS published 2008	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40199
ISO/IEC 9995-1	Information technology — Keyboard layouts for text and office systems — Part 1: General principles governing keyboard layouts	ISO/IEC JTC1/SC35	IS published 2006	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42981
ISO/IEC 9995-2	Information technology — Keyboard layouts for text and office systems — Part 2: Alphanumeric section	ISO/IEC JTC1/SC35	IS published 2002	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=36042
ISO/IEC 9995-3	Information technology — Keyboard layouts for text and office systems — Part 3: Complementary layouts of the alphanumeric zone of the alphanumeric section	ISO/IEC JTC1/SC35	IS published 2002	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=36043
ISO/IEC 9995-4	Information technology — Keyboard layouts for text and office systems — Part 4: Numeric section	ISO/IEC JTC1/SC35	IS published 2002	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=36044
ISO/IEC 9995-5	Information technology — Keyboard layouts for text and office systems — Part 5: Editing section	ISO/IEC JTC1/SC35	IS published 2006	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42982
ISO/IEC 9995-6	Information technology — Keyboard layouts for text and office systems — Part 6: Function section	ISO/IEC JTC1/SC35	IS published 2006	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42983

Standard	Title	Committee	Status	URL
ISO/IEC 9995-7	Information technology — Keyboard layouts for text and office systems — Part 7: Symbols used to represent functions	ISO/IEC JTC1/SC35	IS published 2002	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=36045
ISO/IEC 9995-8	Information technology — Keyboard layouts for text and office systems — Part 8: Allocation of letters to the keys of a numeric keypad	ISO/IEC JTC1/SC35	IS published 2006	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42984
ISO/IEC 10741-1	Information technology — User system interfaces — Dialogue interaction — Part 1: Cursor control for text editing	ISO/IEC JTC1/SC35	IS published 1995	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=18832
			Amendment 1 published 1996	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=26768
ISO/IEC 13818-1	Information technology — Generic coding of moving pictures and associated audio information: Systems.	ISO/IEC JTC1/SC29	IS published 2007	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=44169
			Amendment 1 published 2007	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=44170
			Corrigenda 1 Published 2008	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=46284
ISO/IEC 13251	Collection of graphical symbols for office equipment	ISO/IEC JTC1/SC35	IS published 2004	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=21486
ISO 13406-1	Ergonomic requirements for work with visual displays based on flat panels — Part 1: Introduction	ISO TC159/SC4	IS published 1999 under revision as 9241-300 to 308	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=25671

Standard	Title	Committee	Status	URL
ISO 13406-2	Ergonomic requirements for work with visual displays based on flat panels — Part 2: Ergonomic requirements for flat panel displays	ISO TC159/SC4	IS published 2001, under revision as 9241-300 to 308	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=25670
ISO/IEC 14755	Information technology — Input methods to enter characters from the repertoire of ISO/IEC 10646 with a keyboard or other input device	ISO/IEC JTC1/SC35	IS published 1997	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=25491
ISO/IEC 15411	Information technology — Segmented keyboard layouts	ISO/IEC JTC1/SC35	IS published 1999	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=27654
ISO/IEC 15412	Information technology — Portable computer keyboard layouts	ISO/IEC JTC1/SC35	IS published 1999	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=27655
ISO/IEC TR 15440	Information technology — Future keyboards and other associated input devices and related entry methods	ISO/IEC JTC1/SC35	TR published 2005	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40059
ISO/IEC 15938-5	Information technology — Multimedia content description interface — Part 5: Multimedia description schemes	ISO/IEC JTC1/SC29	IS published 2003	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=34232
			Amendment 1 published 2004	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=37570
			Amendment 2 published 2005	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=40393
			Corrigenda 1 Published 2004	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=41343
			Amendment 3 published 2008	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=46385

Reference	Title	Committee	Status	URL
ISO 20282-1	Ease of operation of everyday products — Part 1: Context of use and user characteristics	ISO TC159/SC1 (now in SC4)	IS published 2006	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=34122
ISO TS 20282-2	Ease of operation of everyday products — Part 2: Test method	ISO TC159/SC1 (now in SC4)	TS published 2006	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=36452
ISO/IEC 21000-7	Information technology — Multimedia framework (MPEG-21) — Part 7: Digital Item Adaptation	ISO/IEC JTC1/SC29	IS published 2007	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=46501
ISO/IEC 24738	Information technology — Icon symbols and functions for multimedia link attributes	ISO/IEC JTC1/SC35	IS published 2006	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38848
ISO/IEC 24755	Information technology — Screen icons and symbols for personal mobile communication devices	ISO/IEC JTC1/SC35	IS published 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41525
ISO/IEC 24757	Information technology — Keyboard interaction model — Machine-readable keyboard description	ISO/IEC JTC1/SC35	under development FDIS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41527
ISO/IEC TR 24785	Information Technology — Taxonomy of cultural and linguistic adaptability user requirements	ISO/IEC JTC1/SC35	under development DTR published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41555
Other global standards and guidelines				
IEEE 1621	IEEE Standard for User Interface Elements in Power Control of Electronic Devices Employed in Office/Consumer Environments	IEEE	Published 2004	http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&isnumber=31207&arnumber=1453037&punumber=9863
Regional and national standards, guidelines and regulations				
BS 4822	Specification for keyboard allocation of graphic characters for data processing	UK BSI	Published 1994	http://www.bsi-global.com/en/Shop/Publication-Detail/?pid=000000000000116386

Standard Identifier	Title	Organization	Status	Source
CSA Z243.200	Canadian Keyboard Standard for English and French Languages	Canada CSA	Published 1992	http://www.csa-intl.org/onlinestore/GetCatalogItemDetails.asp?mat=2003196&Parent=1277
DIN 2137	Text and office systems — Keyboards — German keyboard for data and text processing, as well as for typewriters, information on graphic characters or symbols	Germany DIN	Published 2003	http://www.din.de/cmd?workflowname=dinSearch&languageid=de
INCITS 154	Office Machines and Supplies — Alphanumeric Machines — Keyboard Arrangement (formerly ANSI X3.154-1988 (R1999))	USA INCITS	Published 1999	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+154%2D1988+%28R1999%29

4.3 Software-oriented standards

4.3.1 Software-oriented standards focused on accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO 9241-129	Ergonomics of human-system interaction — Guidance on individualization	ISO TC159/SC4	under development CD published 2008	—
ISO 9241-171	Ergonomics of human-system interaction — Guidance on software accessibility	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=39080
ISO TS 16071	Ergonomics of human-system interaction — Guidance on accessibility for human-computer interfaces	ISO TC159/SC4	TS published 2003 Revised as 9231-171	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=30858
ISO/IEC TR 19765	Information technology — Survey of icons and symbols that provide access to functions and facilities to improve the use of information technology products by the elderly and persons with disabilities	ISO/IEC JTC1/SC35	TR published 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=33903

Identifier	Title / Description	Organization	Status	URL
ISO/IEC TR 19766	Information technology — Guidelines for the design of icons and symbols accessible to all users, including the elderly and persons with disabilities	ISO/IEC JTC1/SC35	TR published 2007 / under revision as 11581-10	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42128
ISO/IEC 24786-1	Information Technology — User Interfaces — Accessible User Interface for Accessibility Setting on Information Devices — Part 1: General and methods to start	ISO/IEC JTC1/SC35	under development / FCD published 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41556
Other global standards and guidelines				
ATAG 1.0	Authoring Tool Accessibility Guidelines 1.0	W3C / WAI	Published 2000 / under revision as ATAG 2.0	http://www.w3.org/TR/ATAG10/
ATAG 2.0	Authoring Tool Accessibility Guidelines 2.0	W3C / WAI	under development	http://www.w3.org/TR/ATAG20/
UAAG 1.0	User Agent Accessibility Guidelines	W3C / WAI	Published 2002	http://www.w3.org/TR/UAAG10/
WCAG 1.0	Web Content Accessibility Guidelines 1.0	W3C / WAI	Published 1999	http://www.w3.org/TR/WCAG10/
WCAG 2.0	Web Content Accessibility Guidelines 2.0	W3C / WAI	under development	http://www.w3.org/TR/WCAG20/
Regional and national standards, guidelines and regulations				
CWA 14835	Guidelines for making information accessible through sign language on the web	EU / CEN	2003	http://cenftp1.cenorm.be/PUBLIC/CWAs/e-Europe/DFA/cwa14835-00-2003-Sep.pdf

	Title	Country / Org	Status	URL
HFES 200.2	HFES 200: Human Factors Engineering of Software User Interfaces — Part 2: Accessibility	USA HFES 200	Published 2005 under ballot as ANSI/HFES 200	http://www.hfes.org//Publications/ProductDetail.aspx?ProductId=63
JIS X 8341-2	Guidelines for older persons and persons with disabilities — Information and communications equipment, software and services — Part 2: Information processing equipment	Japan JIS	Published 2004	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyold=JIS+X+8341-2%3A2004&dantaiCd=JIS&status=1&pageNo=0
JIS X 8341-3	Guidelines for older persons and persons with disabilities — information and communications equipment, software and services — Part 3: Web Content	Japan JIS	Published 2004	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyold=JIS+X+8341-3%3A2004&dantaiCd=JIS&status=1&pageNo=0
KICS.OT-10.0003	Internet Web Contents Accessibility Guideline	Korea MIC	Published 2005	http://www.iabf.or.kr/Lab/Kwcag/kwcag10.pdf
TTAS.KO-10.0213	Software Accessibility Guidelines 1.0	Korea TTA	Published 2006	http://www.iabf.or.kr/lib/common/download.asp?path=pds&file=TTAS.OT-10.0213.pdf
TTAS.OT-10.0073	Korean User Agent Accessibility Guidelines 1.0	Korea TTA	Published 2006	http://www.iabf.or.kr/lib/common/download.asp?path=pds&file=TTAS.OT-10.0073.pdf
TTAS.OT-10.0074	Korean Authoring Tools Accessibility Guidelines 1.0	Korea TTA	Published 2006	http://www.iabf.or.kr/lib/common/download.asp?path=pds&file=TTAS.OT-10.0074.pdf
UNE 139802	Computer applications for people with disabilities. Computer accessibility requirements. Software	Spain AENOR	Published 2003	http://www.aenor.es/desarrollo/inicio/home/home.asp#
24 hour agency web guidelines	Guidelines for an accessible public administration	Swedish Government	Published 2006	English: http://www.eutveckling.se/static/doc/swedish-guidelines-public-sector-websites.pdf Swedish: http://www.eutveckling.se/static/doc/vagledningen-24-timmarswebben-2006-05.pdf

4.3.2 Software-oriented standards partly related to accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO 9241-10	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 10: Dialogue Principles	ISO TC159/SC4	Replaced by ISO 9241-110	—
ISO 9241-12	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 12: Presentation of information	ISO TC159/SC4	IS published 1998	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=16 884
ISO 9241-13	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 13: User guidance	ISO TC159/SC4	IS published 1998	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=16 885
ISO 9241-14	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 14: Menu dialogues	ISO TC159/SC4	IS published 1997	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=16 886
ISO 9241-15	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 15: Command dialogues	ISO TC159/SC4	IS published 1997	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=16 887
ISO 9241-16	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 16: Direct manipulation dialogues	ISO TC159/SC4	IS published 1999	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=16 888
ISO 9241-17	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 17: Form filling dialogues	ISO TC159/SC4	IS published 1998	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=16 889
ISO 9241-110	Ergonomics of human-system interaction — Part 110: Dialogue principles	ISO TC159/SC4	IS published 2006	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=38 009
ISO 9241-151	Ergonomics of human-system interaction — Part 151: Guidance on World Wide Web user interfaces	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetail Page.CatalogueDetail?CSNUMBER=37 031

Standard	Title	Committee	Status	URL
ISO/IEC TR 11580	Information technology — Framework for describing user interface objects, actions and attributes	ISO/IEC JTC1/SC35	TR published 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42779
ISO/IEC 11581-1	Information technology — User system interfaces and symbols — Icon symbols and functions — Part 1: Icons — General	ISO/IEC JTC1/SC35	IS published 2000 under revision as 11581-10	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=24267
ISO/IEC TR 11581-1	Information technology — User system interfaces and symbols — Icon symbols and functions — Part 1: Introduction to and overview of icon standards	ISO/IEC JTC1/SC35	under development CD 2008	http://www.iso.org/iso/iso_catalogue/catalogue_ics/catalogue_detail_ics.htm?csnumber=46444
ISO/IEC 11581-2	Information technology — User system interfaces and symbols — Icon symbols and functions — Part 2: Object icons	ISO/IEC JTC1/SC35	IS published 2000	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=24268
ISO/IEC 11581-3	Information technology — User system interfaces and symbols — Icon symbols and functions — Part 3: Pointer icons	ISO/IEC JTC1/SC35	IS published 2000	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=27721
ISO/IEC 11581-5	Information technology — User system interfaces and symbols — Icon symbols and functions — Part 5: Tool icons	ISO/IEC JTC1/SC35	IS published 2004	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40060
ISO/IEC 11581-6	Information technology — User system interfaces and symbols — Icon symbols and functions — Part 6: Action icons	ISO/IEC JTC1/SC35	IS published 1999	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=24263
ISO/IEC 11581-10	ISO/IEC 11581 Information Technology — User Interface Icons — Part 10: Framework and general guidance	ISO/IEC JTC1/SC35	under development CD published 2008 (combines 11581-1,19766)	http://www.iso.org/iso/iso_catalogue_tc/catalogue_detail.htm?csnumber=46445
ISO 14915-1	Software ergonomics for multimedia user interfaces — Part 1: Design principles and framework	ISO TC159/SC4	IS published 2002	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=25578

ISO 14915-2	Software ergonomics for multimedia user interfaces — Part 2: Multimedia navigation and control	ISO TC159/SC4	IS published 2003	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=28583
ISO 14915-3	Software ergonomics for multimedia user interfaces — Part 3: Media selection and combination	ISO TC159/SC4	IS published 2002	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=28584
ISO/IEC 18035	Information technology — Icon symbols and functions for controlling multimedia software applications	ISO/IEC JTC1/SC35	IS published 2003	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=30820
ISO/IEC 18036	Information technology — Icon symbols and functions for World Wide Web browser toolbars	ISO/IEC JTC1/SC35	IS published 2003	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=30821
ISO/IEC TR 19764	Information technology — Guidelines, methodology and reference criteria for cultural and linguistic adaptability in information technology products	ISO/IEC JTC1/SC35	TR published 2005	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=35399
ISO/IEC TR 24784	Information Technology — Description of ISO/IEC 9995 issues regarding users needs and necessary innovations	ISO/IEC JTC1/SC35	under development DTR published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41554
	Regional and national standards, guidelines and regulations			
HFES 200.1	HFES 200: Human Factors Engineering of Software User Interfaces — Part 1: Introduction	USA HFES 200	Published 2005 under ballot as ANSI/HFES 200	http://www.hfes.org//Publications/ProductDetail.aspx?ProductId=63
HFES 200.3	HFES 200: Human Factors Engineering of Software User Interfaces — Part 3: Interaction Techniques	USA HFES 200	Published 2005 under ballot as ANSI/HFES 200	http://www.hfes.org//Publications/ProductDetail.aspx?ProductId=63

4.4 User capabilities-oriented standards

4.4.1 User capabilities-oriented standards focused on accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO/IEC 24751-1	Information technology — Individualized adaptability and accessibility in e-learning, education and training — Part 1: Framework and reference model	ISO/IEC JTC1/SC36	under development FDIS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41521
ISO/IEC 24751-2	Information technology — Individualized adaptability and accessibility in e-learning, education and training — Part 2: "Access for all" personal needs and preferences for digital delivery	ISO/IEC JTC1/SC36	under development FDIS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=43603
ISO/IEC 24751-3	Information technology — Individualized adaptability and accessibility in e-learning, education and training — Part 3: "Access for all" digital resource description	ISO/IEC JTC1/SC36	under development FDIS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=43604
ISO/IEC 24751-4	Information technology — Individualized adaptability and accessibility in e-learning, education and training — Part 4: Access for all non-digital resource description	ISO/IEC JTC1/SC36	under development new work item 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=46165
ISO/IEC 24751-5	Information technology — Individualized adaptability and accessibility in e-learning, education and training — Part 5: Personal needs and preferences for non-digital resources	ISO/IEC JTC1/SC36	under development new work item 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=46166
ISO/IEC 24751-6	Information technology — Individualized adaptability and accessibility in e-learning, education and training — Part 6: Personal needs and preferences for description of events and places	ISO/IEC JTC1/SC36	under development new work item 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=46167
ISO/IEC 24751-7	Information technology — Individualized adaptability and accessibility in e-learning, education and training — Part 7: Description of events and places	ISO/IEC JTC1/SC36	under development new work item 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=46168

Reference	Title	Organization	Status	URL
ISO/IEC 24751-8	Information technology — Individualized adaptability and accessibility in e-learning, education and training — Part 8: Language accessibility and human interface equivalencies (HIEs) in e-learning applications	ISO/IEC JTC1/SC36	under development CD published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=46169
Other global standards and guidelines				
IMS	IMS AccessForAll Meta-data Overview	IMS	Published 2004	http://www.imsglobal.org/accessibility/accmdv1p0/imsaccmd_oviewv1p0.html
Regional and national standards guidelines and regulations				
CSA B659-01	Design for Aging	Canada CSA	Published 2001	http://www.csa-intl.org/onlinestore/GetCatalogDrillDown.asp?Parent=2929
JIS S 0011	Guidelines for all people including elderly and people with disabilities — Marking of tactile dots on consumer products	Japan JIS	Published 2000	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+S+0011%3A2000&dantaiCd=JIS&status=1&pageNo=0
JIS S 0012	Guidelines for all people including elderly and people with disabilities — Usability of consumer products	Japan JIS	Published 2000	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+S+0012%3A2000&dantaiCd=JIS&status=1&pageNo=0
JIS S 0013	Guidelines for the elderly and people with disabilities — Auditory signals on consumer products	Japan JIS	Published 2002	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+S+0013%3A2002&dantaiCd=JIS&status=1&pageNo=0
JIS S 0031	Guidelines for the elderly and people with disabilities — Visual signs and displays — Specification of age — related relative luminance and its use in assessment of light	Japan JIS	Published 2004	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyoId=JIS+S+0031%3A2004&dantaiCd=JIS&status=1&pageNo=0

Standard Identifier	Title		Status	Source
JIS S 0032	Guidelines for the elderly and people with disabilities — Visual signs and displays — Estimation of minimum legible size for a Japanese single character	Japan JIS	Published 2003	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyol d=JIS+S+0032%3A2003&dantaiCd=JIS &status=1&pageNo=0
JIS S 0033	Guidelines for the elderly and people with disabilities — Visual signs and displays — A method for colour combinations based on categories of fundamental colours as a function of age	Japan JIS	Published 2006	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyol d=JIS+S+0033%3A2006&dantaiCd=JIS &status=1&pageNo=0

4.4.2 User capabilities-oriented standards partly related to accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO 7250-1	Basic human body measurements for technological design — Part 1: Body measurement definitions and landmarks	ISO TC159/SC3	IS published 2008	http://www.iso.org/iso/en/CatalogueDetai lPage.CatalogueDetail?CSNUMBER=44 152
ISO TR 7250-2	Basic human body measurements for technological design — Part 2: Statistical summaries of body measurements from individual ISO populations	ISO TC159/SC3	under development new work item 2005	http://www.iso.org/iso/en/CatalogueDetai lPage.CatalogueDetail?CSNUMBER=41 249
ISO 10075	Ergonomic principles related to mental work-load — General terms and definitions	ISO TC159/SC1	IS published 1991	http://www.iso.org/iso/en/CatalogueDetai lPage.CatalogueDetail?CSNUMBER=18 045
ISO 10075-2	Ergonomic principles related to mental workload — Part 2: Design principles	ISO TC159/SC1	IS published 1996	http://www.iso.org/iso/en/CatalogueDetai lPage.CatalogueDetail?CSNUMBER=20 264
ISO 10075-3	Ergonomic principles related to mental workload — Part 3: Principles and requirements concerning methods for measuring and assessing mental	ISO TC159/SC1	IS published 2004	http://www.iso.org/iso/en/CatalogueDetai lPage.CatalogueDetail?CSNUMBER=27 571

Standard	Title	Committee	Status	URL
ISO 11226	Ergonomics — Evaluation of static working postures	ISO TC159/SC3	IS published 2000	http://www.iso.org/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=25573
			technical corrigendum published 2006	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=44143
ISO 11228-1	Ergonomics — Manual handling — Part 1: Lifting and carrying	ISO TC159/SC3	IS published 2003	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=26520
ISO 11228-2	Ergonomics — Manual handling — Part 2: Pushing and pulling	ISO TC159/SC3	IS published 2007	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=26521
ISO 11228-3	Ergonomics — Manual handling — Part 3: Handling of low loads at high frequency	ISO TC159/SC3	IS published 2007	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=26522
ISO 14738	Safety of machinery — Anthropometric requirements for the design of workstations at machinery	ISO TC159/SC3	IS published 2002	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=27556
			2nd technical corrigendum published 2005	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=41725
ISO 15534-1	Ergonomic design for the safety of machinery — Part 1: Principles for determining the dimensions required for openings for whole-body access into machinery	ISO TC159/SC3	IS published 2000	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=27559
ISO 15534-2	Ergonomic design for the safety of machinery — Part 2: Principles for determining the dimensions required for access openings	ISO TC159/SC3	IS published 2000	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=30263
ISO 15534-3	Ergonomic design for the safety of machinery — Part 3: Anthropometric data	ISO TC159/SC3	IS published 2000	http://www.iso.ch/iso/en/CataloguePage.CatalogueDetail?CSNUMBER=30264

Standard Identifier	Title	Organization	Status	Source
ISO 15536-1	Ergonomics — Computer manikins and body templates — Part 1: General requirements	ISO TC159/SC3	IS published 2005	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=27580
ISO 15536-2	Ergonomics — Computer manikins and body templates — Part 2: Verification of functions and validation of dimensions for computer manikin systems	ISO TC159/SC3	IS published 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=34220

4.5 Environment-oriented standards

4.5.1 Environment-oriented standards focused on accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO TS 14415	Ergonomics of the thermal environment — Application of International Standards to people with special requirements	ISO TC159/SC5	IS published 2005	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=39870
ISO 24500	Guidelines for all people, including elderly persons and persons with disabilities — Auditory signals on consumer products	ISO TC159/SC5	under development CD published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=46170
ISO 24501	Guidelines for all people including elderly persons and persons with disabilities — Auditory signals on consumer products — Sound pressure levels of signals for the elderly and in noisy conditions	ISO TC159/SC5	under development CD published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=46171
ISO 24502	Guidelines for all people including elderly persons and persons with disabilities -- Visual signs and displays -- Specification of age -related relative luminance and its use in assessment of light	ISO TC159/SC5	under development new work item 2007	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=46172

	Regional and national standards, guidelines and regulations			
AS 3769	Automatic teller machines: User access	Australia SA	Published 1990 Amended 1990	http://www.saiglobal.com/shop/script/Details.asp?DocN=stds000000835 http://www.saiglobal.com/shop/script/Details.asp?DocN=amdm000405650
CSA B651	Accessible Design for the Built Environment	Canada CSA	Published 2004	http://www.csa-intl.org/onlinestore/GetCatalogDrillDown.asp?Parent=1070
CSA B651.1	Barrier-Free Design for Automated Banking Machines	Canada CSA	Published 2001	http://www.csa-intl.org/onlinestore/GetCatalogDrillDown.asp?Parent=2562
CSA B651.2	Accessible design for self-service interactive devices	Canada CSA	Published 2007	http://www.csa-intl.org/onlinestore/GetCatalogDrillDown.asp?Parent=4493
JIS S0014	Guidelines for the elderly and people with disabilities — Auditory signals on consumer products — Sound pressure levels of signals for the elderly and in noisy conditions	Japan JIS	Published 2003	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyold=JIS+S+0014%3A2003&dantaiCd=JIS&status=1&pageNo=0
JIS T 0901	Guidelines of electronic guide system using audible signage for visually impaired persons	Japan JIS	Published 2005	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyold=JIS+T+0901%3A2005&dantaiCd=JIS&status=1&pageNo=0
TTAS.KO-09.0040	Automatic Teller Machine's Accessibility Guidelines 1.0	Korea TTA	Published 2006	http://www.iabf.or.kr/lib/common/download.asp?path=pds&file=TTAS_KO-09_0040.pdf
TTAS.OT-09.0001	Digital Talking Book Guidelines 1.0	Korea TTA	Published 2006	http://www.iabf.or.kr/lib/common/download.asp?path=pds&file=TTAS_OT-09_0001.pdf

4.5.2 Environment-oriented standards partly related to accessibility

Standard Identifier	Title	Organization	Status	Source
	ISO and ISO/IEC standards			
ISO 9241-5	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 5: Workstation layout and postural requirements	ISO TC159/SC4	IS published 1998	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=16877
ISO 9241-6	Ergonomic requirements for office work with visual display terminals (VDTs) — Part 6: Guidance on the work environment	ISO TC159/SC4	IS published 1999	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=16878
ISO 11064-1	Ergonomic design of control centres — Part 1: Principles for the design of control centres	ISO TC159/SC4	IS published 2000	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=19042
ISO 11064-2	Ergonomic design of control centres — Part 2: Principles for the arrangement of control suites	ISO TC159/SC4	IS published 2000	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=19043
ISO 11064-3	Ergonomic design of control centres — Part 3: Control room layout	ISO TC159/SC4	IS published 1999; technical corrigendum published 2002	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=19044 http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=36577
ISO 11064-4	Ergonomic design of control centres — Part 4: Layout and dimensions of workstations	ISO TC159/SC4	IS published 2004	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=19045
ISO 11064-5	Ergonomic design of control centres — Part 5: Displays and controls	ISO TC159/SC4	IS published 2008	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=44691
ISO 11064-6	Ergonomic design of control centres — Part 6: Environmental requirements for control centres	ISO TC159/SC4	IS published 2005	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=39713

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Reference	Title	Organization	Status	URL
ISO 11064-7	Ergonomic design of control centres — Part 7: Principles for the evaluation of control centres	ISO TC159/SC4	IS published 2006	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=22470
ISO/IEC 24752-1	Information technology — User interfaces — Universal remote console — Part 1: Framework	ISO/IEC JTC1/SC35	IS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42309
ISO/IEC 24752-2	Information technology — User interfaces — Universal remote console — Part 2: User Interface Socket Description	ISO/IEC JTC1/SC35	IS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42310
ISO/IEC 24752-3	Information technology — User interfaces — Universal remote console — Part 3: Presentation Template	ISO/IEC JTC1/SC35	IS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42311
ISO/IEC 24752-4	Information technology — User interfaces — Universal remote console — Part 4: Target Description	ISO/IEC JTC1/SC35	IS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42312
ISO/IEC 24752-5	Information technology — User interfaces — Universal remote console — Part 5: Resource Description	ISO/IEC JTC1/SC35	IS published 2008	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=42313
	Regional and national standards, guidelines and regulations			
TTAS.KO-07.0050	The Standard for DTV Closed Caption System	Korea TTA	Published 2007	http://www.iabf.or.kr/lib/common/download.asp?path=pds&file=TTAS.KO-07.0050.zip
EIA 608	Recommended Practice for Line 21 Data Service (Analog Television Closed Captioning)	USA EIA	Published 1999	http://www.tiaonline.org/standards/catalog/details.cfm?document_id=913
EIA 708 B	Digital Television (DTV) Closed Captioning	USA EIA	Published 1999	http://www.tiaonline.org/standards/catalog/details.cfm?document_id=1001
HFES 200.4	HFES 200: Human Factors Engineering of Software User Interfaces — Part 4: Voice Input / Output and Telephony	USA HFES 200	Published 2005 under ballot as ANSI/HFES 200	http://www.hfes.org//Publications/ProductDetail.aspx?ProductId=63

4.6 Communications services-oriented standards

4.6.1 Communications services-oriented standards focused on accessibility

Standard Identifier	Title	Organization	Status	Source
	Other global standards and guidelines			
IETF RFC 3351	User Requirements for the Session Initiation Protocol (SIP) in Support of Deaf, Hard of Hearing and Speech-impaired Individuals	IETF	Published 2002	http://www.ietf.org/rfc/rfc3351.txt?number=3351
ITU-T TACL	Telecommunications Accessibility Checklist	ITU-T	Published 2006	http://www.itu.int/publ/T-TUT-FSTP-2006-TACL/en
ITU-T Rec. E.135	Human Factors Aspects of Public Telecommunication Terminals for People with Disabilities	ITU-T	Published 1995	http://www.itu.int/rec/T-REC-E.135/en
ITU-T Rec. F.790	Telecommunications Accessibility Guidelines for Older Persons and Persons with Disabilities	ITU-T	Published 2007	http://www.itu.int/rec/T-REC-F.790/en
ITU-T Rec. V.18	Operational and Interworking Requirements for DCE:s Operating in the Text Telephone Mode	ITU-T	Published 2000 Amendment 2002	http://www.itu.int/rec/T-REC-V.18-200011-I/en http://www.itu.int/rec/T-REC-V.18-200211-I!Amd1/en
ITU-T Rec. V.151	Procedures for end-to-end connection of analogue PSTN text telephones over an IP network utilizing text relay	ITU-T	Published 2006	http://www.itu.int/rec/T-REC-V.151-200605-I/en
ITU-T Rec. F.703	Multimedia conversational services		Published 2000	http://www.itu.int/rec/T-REC-F.703/en
ITU-T H. Sup. 1	Video Quality for sign language and lip reading	ITU-T	Published 1999	http://www.itu.int/rec/T-REC-H.Sup1/en

Regional and national standards, guidelines and regulations

AS/ACIF S040	Requirements for Customer Equipment for use with the Standard Telephone Service — Features for special needs	Australia Australian Communications Authority	Published 2001	http://www.acif.org.au/__data/page/3312/S040_2001.pdf
AS/NZS 4277	Text telecommunications: User interface requirements — For Deaf people and people with hearing and speech disabilities	Australia SA	Published 1995 Amendment 1996	http://www.onlinepublications.austroads.com.au/script/Details.asp?DocN=stds000012813 http://www.onlinepublications.austroads.com.au/script/Details.asp?DocN=amdm0000650332
CSA T510-95	Performance and Compatibility Requirements for Telephone Sets With Loop Signaling	Canada CSA	Published 2003	http://www.csa-intl.org/onlinestore/GetCatalogDrillDown.asp?Parent=203
CSA T516	Telecommunications — Telephone Terminal Equipment — Requirements for Pay Telephone Keypads and Function Keys with Particular Regard to Use by Persons with Disabilities	Canada CSA	Published 2002	http://www.csa-intl.org/onlinestore/GetCatalogDrillDown.asp?Parent=3226
ETSI ETR 333	Text Telephony; Basic user requirements and recommendations	EU ETSI	Published 1998	http://webapp.etsi.org/workprogram/Report_WorkItem.asp?WKI_ID=6739
ETSI SR 001 996	An annotated bibliography of documents dealing with Human Factors and disability	EU ETSI	Published 2005	http://webapp.etsi.org/workprogram/Report_WorkItem.asp?WKI_ID=19759
ETSI TR 101 806	Guidelines for Telecommunication Relay Services for text and video	EU ETSI	Published 2000	http://webapp.etsi.org/workprogram/Report_WorkItem.asp?WKI_ID=7796
JIS X 8341-4	Guidelines for older persons and persons with disabilities — Information and communications equipment, software and services — Part 4: Telecommunications equipment	Japan JIS	Published 2005	http://www.webstore.jsa.or.jp/webstore/Com/FlowControl.jsp?lang=en&bunsyold=JIS+X+8341-4%3A2005&dantaiCd=JIS&status=1&pageNo=009

Standard Identifier	Title	Organization	Status	Source
UNE 153010	Subtitling for deaf and hard-of-hearing people. Subtitling by teletext	Spain AENOR	Published 2003	http://www.aenor.es/desarrollo/inicio/home.asp#
UNE 153020	Audio description for visually impaired people. Guidelines for audio description procedures and for the preparation of audio guides	Spain AENOR	Published 2005	http://www.aenor.es/desarrollo/inicio/home.asp#
US 255	Section 255 Telecommunications Access For People with Disabilities of the US Communications Act	USA Federal Law	Published 1996 under revision	http://www.fcc.gov/cgb/dro/section255.html
US Part 79.1	47 C.F.R. § 79.1 Closed Captioning Of Video Programming (relating to: Telecommunications Act, Section 713)	USA Federal Regulation	2004	http://www.fcc.gov/cgb/dro/caption.html
US Part 79.1	47 C.F.R. § 79.2 Accessibility of programming providing emergency information(relating to: Telecommunications Act, Section 713)	USA Federal Regulation	2004	http://www.fcc.gov/cgb/dro/emergency_info_regs.html

4.6.2   Communications services-oriented standards partly related to accessibility

Standard Identifier	Title	Organization	Status	Source
	Other global standards and guidelines			
IETF sipping-transc-conf-03	The Session Initiation Protocol (SIP) Conference Bridge Transcoding Model	IETF	under development draft published 2006	http://www.ietf.org/rfc/rfc5370.txt
IETF RFC 2198	Redundancy for RTP payloads	IETF	Published 1997	http://www.ietf.org/rfc/rfc2198.txt?number=2198
IETF RFC 2327	SDP; Session Description Protocol	IETF	Published 1998	http://www.ietf.org/rfc/rfc2327.txt?number=2327

ID	Title	Org	Status	URL
IETF RFC 2793	RTP Payload for Text Conversation	IETF	Published 2000	http://www.ietf.org/rfc/rfc2793.txt?number=2793
IETF RFC 2833	RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals	IETF	Published 2000	http://www.ietf.org/rfc/rfc2833.txt?number=2833
IETF RFC 3261	SIP: Session Initiation Protocol	IETF	Published 2002	http://www.ietf.org/rfc/rfc3261.txt?number=3261
IETF RFC 3550	RTP: A Transport Protocol for Real-Time Applications	IETF	Published 2003	http://www.ietf.org/rfc/rfc3550.txt?number=3550
IETF RFC 3711	SRTP; Secure Real Time Protocol	IETF	Published 2004	http://www.ietf.org/rfc/rfc3711.txt?number=3711
IETF RFC 3840	Indicating User Agent Capabilities in the Session Initiation Protocol (SIP)	IETF	Published 2004	http://www.ietf.org/rfc/rfc3840.txt?number=3840
IETF RFC 3841	Caller Preferences for the Session Initiation Protocol	IETF	Published 2004	http://www.ietf.org/rfc/rfc3841.txt?number=3841
IETF RFC 4102	Registration of the text/red MIME Sub-Type	IETF	Published 2005	http://www.ietf.org/rfc/rfc4102.txt?number=4102
IETF RFC 4103	RTP Payload for Text Conversation	IETF	Published 2005	http://www.ietf.org/rfc/rfc4103.txt?number=4103
IETF RFC 4351	RTP Payload for Text Conversation interleaved in an audio stream	IETF	Published 2006	http://www.ietf.org/rfc/rfc4351.txt?number=4351
IETF RFC 4504	SIP Telephony Device Requirements, Configuration and Data	IETF	Published 2006	http://www.ietf.org/rfc/rfc4504.txt?number=4504
IETF RFC 4566	Session Description Protocol	IETF	Published 2006	http://www.ietf.org/rfc/rfc4566.txt?number=4566
IETF RFC 4733	Definition of Events For Modem, FAX, and Text Telephony Signals	IETF	Published 2006	http://www.ietf.org/rfc/rfc4734.txt?number=4734
IETF RFC 5012	Requirements for Emergency Context Resolution with Internet Technologies	IETF	Published 2008	http://www.ietf.org/rfc/rfc5012.txt

IETF RFC 5194	Framework of requirements for real-time text conversation using SIP	IETF	http://www.ietf.org/rfc/rfc5194.txt
ITUT NGN	NGN Release 1	ITUT	http://www.itu.int/ITU-T/ngn/release1.html
ITU-T Rec. F.700	Framework Recommendation for multimedia services	ITU-T	http://www.itu.int/rec/T-REC-F.700/en
ITU-T Rec. F.724	Service description and requirements for videotelephony services over IP networks	ITU-T	http://www.itu.int/rec/T-REC-F.724/en
ITU-T Rec. F.733	Service description and requirements for multimedia conference services over IP networks	ITU-T	http://www.itu.int/rec/T-REC-F.733/en
ITU-T Rec. F.742	Service description and requirements for distance learning services	ITU-T	http://www.itu.int/rec/T-REC-F.742/en
ITU-T Rec. H.224	A real time control protocol for simplex applications using the H.221 LSD/HSD/MLP channels	ITU-T	http://www.itu.int/rec/T-REC-H.224/en
ITU-T Rec. H.245	Control protocol for multimedia communication	ITU-T	http://www.itu.int/rec/T-REC-H.245/en
ITU-T Rec. H.248	Gateway control protocol	ITU-T	http://www.itu.int/rec/T-REC-H.248/en
ITU-T Rec. H.248.2	Gateway control protocol: Facsimile, text conversation and call discrimination packages	ITU-T	http://www.itu.int/rec/T-REC-H.248.2/en
ITU-T Rec. H.248.21	Gateway control protocol: Semi-permanent connection handling package	ITU-T	http://www.itu.int/rec/T-REC-H.248.21/en
ITU-T Rec. H.320	Narrow-band visual telephone systems and terminal equipment	ITU-T	http://www.itu.int/rec/T-REC-H.320/en
ITU-T Rec. H.323	Packet-based multimedia communications systems	ITU-T	http://www.itu.int/rec/T-REC-H.323/en
ITU-T Rec. H.324	Terminal for low bit-rate multimedia communication	ITU-T	http://www.itu.int/rec/T-REC-H.324/en

ITU-T Rec. T.134	Text chat application entity	ITU-T	Published 1998	http://www.itu.int/rec/T-REC-T.134/en
ITU-T Rec. T.140	Protocol for multimedia application text conversation	ITU-T	Published 1998	http://www.itu.int/rec/T-REC-T.140/en
ITU-T Rec. V.8	Procedures for starting sessions of data transmission over the public switched telephone network	ITU-T	Published 2000	http://www.itu.int/rec/T-REC-V.8/en
ITU-T Rec. V.8bis	Procedures for the identification and selection of common modes of operation between data circuit-terminating equipments (DCEs) and between data terminal equipments (DTEs) over the public switched telephone network and on leased point-to-point telephone-type circuits	ITU-T	Published 2000	http://www.itu.int/rec/T-REC-V.8bis/en
ITU-T Rec. V.16	A simultaneous voice plus data modem, operating at a voice plus data signalling rate of 4800 bit/s, with optional automatic switching to data-only signalling rates of up to 14 400 bit/s, for use on the General Switched Telephone Network and on leased point-to-point 2-wire telephone type circuits	ITU-T	Published 1996	http://www.itu.int/rec/T-REC-V.61/en
ITU-T Rec. V.150.1	Modem-over-IP networks: Procedures for the end-to-end connection of V-series DCEs	ITU-T	Published 2003	http://www.itu.int/rec/T-REC-V.150.1/en
ITU-T Rec. V.152	Procedures for supporting voice-band data over IP networks	ITU-T	Published 2005	http://www.itu.int/rec/T-REC-V.152/en
ITU-T Rec. V.250	Serial asynchronous automatic dialling and control	ITU-T	Published 2003	http://www.itu.int/rec/T-REC-V.250/en
ITU-T Rec. Y.1541	Network performance objectives for IP-based services	ITU-T	Published 2006	http://www.itu.int/rec/T-REC-Y.1541/en
ITUT Rec. Y.2000SerSup1	NGN Release 1 Scope	ITUT	Published 2006	http://www.itu.int/rec/T-REC-Y.2000SerSup1-200607-P/fr
ITUT Rec. Y.2012	NGN Release 1 Requirements	ITUT	Published 2006	http://www.itu.int/rec/T-REC-Y.2012/en