

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

F.790

(01/2007)

SERIES F: NON-TELEPHONE TELECOMMUNICATION
SERVICES

Audiovisual services

Telecommunications accessibility guidelines for older persons and persons with disabilities

ITU-T Recommendation F.790



International
Telecommunication
Union

Document Sharing Hub

ITU-T F-SERIES RECOMMENDATIONS
NON-TELEPHONE TELECOMMUNICATION SERVICES

TELEGRAPH SERVICE	
Operating methods for the international public telegram service	F.1–F.19
The gentex network	F.20–F.29
Message switching	F.30–F.39
The international telemesssage service	F.40–F.58
The international telex service	F.59–F.89
Statistics and publications on international telegraph services	F.90–F.99
Scheduled and leased communication services	F.100–F.104
Phototelegraph service	F.105–F.109
MOBILE SERVICE	
Mobile services and multideestination satellite services	F.110–F.159
TELEMATIC SERVICES	
Public facsimile service	F.160–F.199
Teletex service	F.200–F.299
Videotex service	F.300–F.349
General provisions for telematic services	F.350–F.399
MESSAGE HANDLING SERVICES	F.400–F.499
DIRECTORY SERVICES	F.500–F.549
DOCUMENT COMMUNICATION	
Document communication	F.550–F.579
Programming communication interfaces	F.580–F.599
DATA TRANSMISSION SERVICES	F.600–F.699
AUDIOVISUAL SERVICES	F.700–F.799
ISDN SERVICES	F.800–F.849
UNIVERSAL PERSONAL TELECOMMUNICATION	F.850–F.899
HUMAN FACTORS	F.900–F.999

For further details, please refer to the list of ITU-T Recommendations.

ITU-T Recommendation F.790

Telecommunications accessibility guidelines for older persons and persons with disabilities

Summary

This Recommendation is intended to provide general guidelines for standardizing, planning, developing, designing and distributing all forms of telecommunications equipment and software and associated telecommunications services to ensure their accessibility for people with the widest possible range of abilities. It gives guidance on understanding the topic of accessibility and the ways that accessibility may be incorporated in products and services.

Source

ITU-T Recommendation F.790 was approved on 13 January 2007 by ITU-T Study Group 16 (2005-2008) under the ITU-T Recommendation A.8 procedure.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure e.g. interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <http://www.itu.int/ITU-T/ipr/>.

© ITU 2007

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

CONTENTS

Page

1	Scope	1
2	References.....	1
3	Definitions	2
4	Abbreviations.....	2
5	Conventions	2
6	General principles.....	3
7	Requirements for planning, development and design.....	3
	7.1 Basic policies.....	3
	7.2 Activities concerning development process	4
8	Common requirements for operation and usage of telecommunications equipment and services.....	5
	8.1 Operation	5
	8.2 Installation, connection and configuration	6
	8.3 Physical safety	6
	8.4 Information security	7
	8.5 Rights of content usage	7
9	Requirements for terminal equipment	7
	9.1 Input/Output interface	7
	9.2 Body shapes and structures	9
	9.3 External connection ports	9
	9.4 Terminology, icons and graphic symbols.....	10
	9.5 Alternatives.....	10
	9.6 Standardization and disclosure of interface specifications.....	10
10	Requirements for telecommunications services	10
	10.1 Interactive telecommunications services.....	10
	10.2 Telecommunications platform services	11
	10.3 Emergency calls.....	11
	10.4 Telecommunications services specifications.....	11
11	Requirements for user support.....	11
	11.1 User manuals	11
	11.2 Disclosure of information about telecommunications accessibility	12
	11.3 Instruction.....	12
	11.4 Customer support centres	12
	Appendix I – Further details of informative references.....	13
	Bibliography	15

Introduction

Information and communications technology (ICT), in particular the rapid proliferation of the Internet, has provided substantial benefits to the community; but many older persons and persons with disabilities cannot enjoy these benefits due to barriers in using telecommunications products and services. This issue is becoming more serious with the increasing percentage of aging persons worldwide. In response, some nations have developed their own guidelines for telecommunications accessibility. In today's world, however, telecommunications equipment moves freely across national borders. Thus, in order to enhance telecommunications accessibility, telecommunications accessibility guidelines are indispensable not only domestically but also internationally.

ITU-T Recommendation F.790

Telecommunications accessibility guidelines for older persons and persons with disabilities

1 Scope

This Recommendation is intended to provide general guidelines for standardizing, planning, developing, designing and distributing all forms of telecommunications equipment and software and associated telecommunications services (hereinafter referred to collectively as "telecommunications equipment and services") to ensure their accessibility for people with the widest possible range of abilities including older persons and persons with permanent or temporary disabilities (hereinafter referred to as "older persons and persons with disabilities").

For many years, ITU-T has addressed the needs of persons with disabilities in the development of specific Recommendations. Making telecommunications equipment and services accessible makes sense not only in terms of humanitarian aspects but also in terms of economic aspects. The most obvious reason is the increase in potential customers. Features that make products and services usable for older persons and persons with disabilities can often make them convenient and easy to use for everyone else.

This Recommendation is intended to be part of the overall framework that ITU-T can use in its efforts to support the need for older persons and persons with disabilities to provide more accessible equipment and services. This Recommendation provides information by identifying problem areas which need to be considered when drafting such Recommendations addressing the needs of older persons and persons with disabilities. In the process of developing those Recommendations, it is necessary to actively involve a broad range of users such as older persons and persons with disabilities and clearly understand user and task requirements. Especially, addressing needs earlier rather than later in the development process is preferable in order to reduce or eliminate extra cost for developing those Recommendations.

Also it is to be noted that an accessible design approach may not resolve everything. Where accessible design cannot fully respond to the needs of older persons and persons with disabilities, in particular in the field of services, the need for personal assistance may still be required. However, the provision of personal assistance should never be relied upon to replace the accessible design approach.

Of necessity, guidance provided in this Recommendation is general. It is recognized that additional specific guides need to be developed for specific equipment or service. Though the scope of this Recommendation is given for a development of Recommendations specific to meet the needs of older persons and persons with disabilities, the guidelines described in this Recommendation are expected to be a good reference for producing any other Recommendations in ITU-T to improve telecommunication accessibility.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- [ISO/IEC Guide 71] ISO/IEC Guide 71:2001, *Guidelines for standards developers to address the needs of older persons and persons with disabilities*.
- [ISO 13407] ISO 13407:1999, *Human-centred design processes for interactive systems*.

3 Definitions

This Recommendation defines the following terms:

3.1 user: End-users of telecommunications products and services are people, groups of people and organizations that use or consume telecommunications products and services. They are a diverse group, including people, whatever the age or gender, level of income, geographic environment or work activities. End-users, whether they be organizations or people, have varied requirements.

See Resolution GSC 11-22 (UWG) on *User needs, considerations and involvement*.

3.2 disability: In this Recommendation, "disability" is defined as a state when use of telecommunications equipment and services is restricted.

Mainly, "disability" is viewed as a result of temporary or permanent functional limitation due to disease, accident, ageing and so on. More generally, "disability" includes a state when full use of telecommunications equipment and services is not possible due to the physical and/or social environment (e.g., voice telephony under noisy environment).

NOTE – For more detailed information about the definition of "disability", please refer to appropriate documents such as WHO ICF (World Health Organization – International Classification of Functioning, Disability and Health).

3.3 telecommunications equipment: Any machine, device, line or other form of equipment used to perform telecommunications operations.

3.4 telecommunications services: Services provided to users via the use of telecommunications equipment.

3.5 interactive telecommunications services: Services designed to enable the two-way exchange of information between multiple users in multiple locations via telecommunications equipment such as exchanges and network servers. (Examples: voice telephony, facsimile, video phone, e-mail and instant messaging services.)

3.6 telecommunications platform services: Services designed to support telecommunications equipment and user management, user authentication, content management, charging and payment procedures by operators engaged in the provision of information services via telecommunications equipment.

3.7 telecommunications accessibility: For the telecommunications area, the usability of a product, service, environment or facility by the widest possible range of users and especially users with disabilities.

3.8 assistive technology: Piece of equipment, product system, hardware, software or service that is used to enable, maintain or improve functional capabilities of individuals with disabilities.

4 Abbreviations

None.

5 Conventions

None.