# The work of the eAccessibility experts group: Status of "Design for All" Standardisation work



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Accessibility for All

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# Introduction

On 8 December 1999 the European Commission launched an initiative entitled "eEurope - An Information Society for All", which proposed ambitious targets to bring the benefits of the Information Society within reach of all Europeans. The preliminary text focused on ten priority areas, from education to transport and from healthcare to the needs of people with disabilities.

Action line NR 7 dealt explicitly with the fact that ICT can improve the quality of life and job chances of people with disabilities.

This eEurope initiative then underwent critical reviews and many discussions were started to provide more detailed information (and content !) to the planned action lines.

At the European Council in Feira (June 2000) a more detailed workplan was accepted which included the specific action:

> **"Publication of Design for All standards for accessibility of information technology products, in particular to improve the employability and social inclusion of people with special needs".**

This mandate concerns the European Commission and the private sector and its deadline was fixed at the end of 2002.

The private sector would be represented by the standardisation organisations and they provided a response to the eEurope action plan. This response was discussed with the Commission services DG Enterprise and DG Information Society and a first understanding of the activities to be carried out under this mandate was prepared. These activities included the following:

- To include the principle of "mainstreaming accessibility" in other areas of the standardisation activities through the development of Design for all guidelines to be used by the European standardisation organisations to consider the needs of older persons and people with disabilities when performing standardisation work.

- To ensure that consumer interest is represented in the standards work by developing a mechanism that would permit formal consultation with official representatives of users with disabilities e.g. the European Disability Forum.
- To ensure that existing standards and existing electronic information will be available in accessible format. In particular the use of the W3C/WAI content guidelines.
- To finance a common work programme that will permit the development of the main priorities and activities identified in phase I of mandate 273.
- To ensure co-ordination among the work done by the European standardisation organisations in this field.

Today, a clear progress has been achieved in all these objectives and infrastructures have been set up to ensure the continuation and co-ordination of the work in this field.

The eAccessibility expert group was set up by ESDIS to help with their expertise the development and monitoring of this target and get support from the Member States.

# Objectives

The eAccessibility Expert group has discussed the way the eEurope mandate was being implemented. As publication of standards has been delegated since long to the standardisation bodies (directive 98/34/EC), the eAccessibility Expert group agreed that, within the eEurope mandate, an overview of ongoing actions was going to be made and that new standardisation actions would be identified, initiated and co-ordinated.

The result of this work were brought together in a report to the eAccessibility group by the end of December 2002.

The main conclusions can also be found in this presentation.

# Main actors

The main groups active in standardisation work at this moment can be categorised into four groups:

a) the European standardisation bodies **CEN**, **CENELEC** and **ETSI**

European Committee for Standardisation

European Committee for Electrotechnical Standardisation

European Telecommunication Standards Institute

b) the co-ordination groups **ICTSB** and **DATSCG** (details below)

c) the working groups set up by the European Commission (**ESDIS** - High level group for the Employment and Social Dimension of the Information Society , and its subgroup on **eAccessibility**)

d) the **European Commission** itself (DG Enterprise, DG Information Society, DG Employment and Social Affairs)

# The CEN/CENELEC/ETSI mandates

## Introduction

In the course of 1998-1999, two mandates were issued by the European Commission towards the European Standardisation Bodies:

- **M/273** "Mandate to the European Standards Bodies for Standardisation in the field of information and communication technologies (ICT) for disabled and elderly people"
- **M/283** "Mandate to the European Standards Bodies for a guidance document in the field of safety and usability of products by people with special needs"

## The work of M/273

The title of mandate M/273 is: "Standards for disabled and elderly peoples' access to information and communication technologies (ICT) products and services including "Design for All".

The mandate was initiated to explore the role of standardisation in solving some of the problems signalled by some research projects under the TIDE initiative to put assistive technology compatible products in the market and to interface them with mainstream ICT technologies for the benefit of people with disabilities and older persons. Also the results of the line in standards of the Heart study and the recommendations and conclusions of the conference organised in 1996 in Amsterdam "European policy workshop ICT standardisation and disability in Europe" contributed to the definition and launching of this mandate. It requested work to be carried out in two phases:
1) determine requirements for standardisation to ensure accessibility for disabled and elderly people within the information society and develop a (preliminary) common work programme in line with the results;
2) develop European standards on the area of assistive technology and access to products and services by people with disability and older persons based on the results of the programme of work defined in the first phase.

A project team carried out the first part of phase 1, producing an extensive report [15-5-2000] with the requirements identified and the corresponding proposed actions. The proposed actions were very varied: new standards, guidelines, policy measures, research activities, co-ordination work, etc. Recommendations were done not only for work under CEN but also to ETSI, CENELEC and other ESO's

An example of the report is given below.

| Requirements | Standardisation |
|---|---|
| **General** | |
| - It should be possible to adjust the timing to the needs of the user. | Existing:<br>- EN 1332-4 Coding of User Requirements<br>- Revise EN 1332-4 to include this requirement. |

**Physical**     **Visual**     **Cognitive**

- None identified

**Auditory**

| - Voice control and voice recognition should be provided. | - Revise EN 1332-4 to include this requirement. |
|---|---|

**Dexterity**

| - Hands free alternative should be provided. | - Revise EN 1332-4 to include this requirement. |
|---|---|

The project team concluded that no pan-ICT standards did exist with regard to the Design for all approach and that a considerable amount of work would be needed to rectify the situation. The work was presented to the ICTSB and it was concluded that as it was impossible to carry out all the actions proposed. It was necessary to set priorities and a plan for co-ordination. The final report containing about 250 concrete recommendations is available at the CEN web site.

Also in February 2000 a CEN ISSS Open meeting on Design for All and Assistive Technology in ICT took place in order to prepare phase two of the mandate based on the above mentioned final report.
The major conclusions were, the need to have a holistic approach when developing standards in this area, the need to improve the relation between research and standardisation work, increase participation of users with disabilities in this work, better co-ordination among the work done in this area in the various standardisation organisations and finally the need to go on with this work in a continuous way. This lead to the creation of the CEN ISSS Design for all and Assistive technology workshop that was launched in September 2001.

## The work of M/283

The title of mandate M/283 is: "Standards that promote barrier-free design, enabling the use of products by disabled and elderly people by applying the principles of design for all, adaptable design and assistive technology"

The mandate requires that the European standardisation organisations:

1) draft a guidance document which explains how to address the needs of elderly and disabled people in product standards,
2) set up a mechanism to make sure that the guidance document is actually used, distribute, promote and evaluate the use of the document, and
3) possibly review specific existing standards in view of possible amendment in the context of the guidance document.

In co-operation with the international standardisation organisations ISO and IEC, the European organisations have developed a general guidance document, published as "CEN/CENELEC Guide 6" and as "ISO/IEC Guide 71" (with the same content).

An example is given below:

| Define standards project | Ensure committee well equipped | Develop content of Standard | Review process | Publish Standard |
|---|---|---|---|---|
| Identify: | Ensure: | Use Guide 6 and other guidance material to help determine: | Ensure: | Ensure: |
| • purpose of standard<br>• end-users of product or service being standardized<br>• current accessibility of product or service to broad range of users | • committee members aware of ageing and disability issues, e.g. experts and users represented and/or training provided<br>• meeting rooms accessible to | • particular needs and safety concerns of older persons and persons with disabilities<br>• ways of minimizing hazards through new or enhanced requirements | • usability requirements in standard have been assessed, e.g. by consumer test panels<br>• language and terminology of standard is acceptable to older persons and persons | • that standard can be reproduced in alternative formats |

(excerpt from Guide 6/Guide 71)

Generally it is accepted that the Guide 6/ Guide 71 is valuable and informative but too general to be really useful in practical standardisation work. The working groups developing the guides have therefore recommended that sector-specific guidelines need to be elaborated.

In September 2002, M/283 organised a conference in Copenhagen. The main objective was to inform about ongoing activities in the M/283 framework, including Guide 6.
Information was also given on M/273 "ICT area", M/292 "Product information" and M/293 "Child safety", which all have an approach similar to M/283.

# The CEN-ISSS-DfA Workshop

A CEN Workshop is a quasi-permanent forum for discussing an developing new standards in the form of "CEN Workshop Agreements". Within CEN-ISSS (CEN Information Society Standardisation group) such a workshop on Design for All and Assistive technologies in ICT was set up in September 2001. The initial work programme focused on the development of an initial set of ICT sector-specific Design for All guidelines to the CEN standardisation community, based on Guide 6/Guide 71

and other relevant documentation and some other of the recommendation of the final report of mandate 273

Several overview documents have been produced such as the document "**Current Standardisation Actions**" (ed. Loic A. Martinez Normand) which also contains several non-European initiatives and "**Guidelines for Standardisers**" (ed. J. Sandhu). Much more information is collected and made available through the **Tiresias** website (see below).

CEN ISSS-DfA recently agreed on the creation of a project to **review existing or completed RTD projects** (within IST and other frameworks) in terms of their opportunities for standardisation in the CEN ICT domain.

The conclusions of this project are expected by the end of 2002. A draft version was circulated at the beginning of Dec. 2002.

Besides some other specific standards in this area are being carried out.

# CENELEC actions

CENELEC's technical Board Working group (BTWG) 101-5 is preparing currently a guidance document for use by all CENELEC Technical Committees dealing with IT on the safety and usability of IT-based electrical products for people with special needs (including children, the elderly and persons with disabilities). This should ensure that the Design for All and Assistive Technology requirements are taken into account in all of CENELEC's standardisation work.

Furthermore CENELEC has started work on "Digital TV and interactive services" and on "Access for All to broadcast and video applications".

Following the June 2002 Seville workshop on "TV broadcasting for All", actions have been planned on several issues, including subtitling and audio description. A report identifying standardisation requirements regarding accessibility will be submitted to the Joint Technical Committee Broadcasting (CENELEC/ETSI/EBU) in October 2003.

# ETSI Technical Committee Human Factors (TC HF)

Within ETSI standardisation actions are delegated to technical committees. The actions in relation to the eEurope initiative are mainly organised by the Technical Committee Human Factors (TC-HF).

The actual work has been delegated to teams of experts, called Specialist Task Forces (STFs). In the spring of **2001** the following STFs started their work:

- STF 181: Requirements of Assistive Technology Devices in ICT
- STF 182: Speech-Recognition- Voice User Interfaces: Generic User Command, Control and Editing Vocabulary for ICT products and Services: Main European Languages
- STF 183: Study on Multimodality of Icons, Symbols and Pictograms
- STF 184: Design for All: Guidelines for ICT Products and Services

By the end of 2002 several deliverables from these STFs were available.

During **2002** several new STF's have started the work on the following Guides (under the Order Voucher ETSI/ENTR/eEurope/2001-002):
- Task 3.4.1: European alphanumeric characters; assignment for the 12-key telephone pads
- Task 3.4.2: Multi-modal interaction, communication and navigation
- Task 3.4.3: Access to ICT by young people

# Co-ordination groups

## ICTSB

The ICT Standards Board (ICTSB) is an initiative from the three European standards organisations with the participation of specification providers as partners to co-ordinate specification activities in the field of Information and Communication Technologies (ICT).

The ICTSB listens to requirements for standards and specifications that are based on concrete market needs and expressed by any competent source. The Board then considers what standards or specifications need to be created, and how the task will be carried out.
The European Commission participates as an observer in these meetings and it is in this group that, during the discussions for the follow up of the work of mandate 273, the Commission (DG ENTR and DG INFSO) insisted that there was not only industrial interest for the follow up of this work but also public interest in the follow up of these activities.
The need for a better co-ordination among the work of the ESO's in this area was made clear and this lead to the creation of the DATSCG.

## DATSCG

Under the ICTSB, a co-ordination group for standardisation activities on Design for All and assistive technology has been set up. This "Design for All and Assistive Technology Standardisation Co-ordination group, DATSCG"  was created as a direct response to the eEurope2002 plan and was triggered by the discussions on the follow up of the recommendations of Mandate 273.

It has the following objectives :
- To ensure co-ordination of the ICT related standardisation work;
- To act as an overall focal point on design-for-all and assistive technology standardisation;
- To assist in organising promotional activities on design for all and assistive technologies standardisation requirements in ICT;
- To promote the knowledge and awareness of existing guidelines and tools by the market-players.

Although membership is by invitation, DATSCG tries to have as many organisations as possible involved in their work, including organisations of or for persons with a disability.

Especially the contribution of the European Disability Forum (EDF), as representative of the final users is very important. Also the Association for the Advancement of Assistive Technology in Europe (AAATE) has the status of observer to DATSCG.

# Stimulation of new actions

Besides collecting information on existing work, eAccessibility delegates have been participating to the work of:

- CEN ISSS DfA
- ICTSB
- DATSCG

eAccessibility's standardisation work was brought to the attention of the audience of several international conferences including the 2001 AAATE Conference in Ljubljana and the ICCHP conference in Linz (July 2002) where a **special thematic session** on eEurope was organised.

# Pointers for further information

The three European standardisation bodies have collaborated for the production of several overview documents on their standardisation work.

Highly relevant to standardisation work in the field of DfA are the following brochures:

- "STANDARDS THAT MAKE E-EUROPE TICK" (Oct. 2001)
  (http://www.etsi.org/literature/eEurope/E-Standards%20031001.pdf)

and

- "E-ACCESSIBILITY" (2nd ed., Sept. 2002)
  (http://www.etsi.org/literature/eEurope/E-Accessibility.pdf)

More information on the different organisations mentioned in this report is available from their websites:

- ESDIS
  `http://europa.eu.int/comm/employment_social/soc-dial/info_soc/esdis/index.htm`
- eAccessibility
  `http://europa.eu.int/information_society/eeurope/action_plan/eaccess/eu/targets_2001_2002/text_en.htm`
- TIRESIAS
  `http://www.tiresias.org`
- CEN-ISSS-DfA
  `http://forum.afnor.fr/afnor/WORK/AFNOR/GPN2/Z62B/index.htm`
- DATSCG
  `http://www.ict.etsi.fr/DATSCG/TOR.htm`
- Year 2003
  `http://europa.eu.int/comm/employment_social/soc-prot/disable/com271/comfinal_en.pdf`

# Conclusions and recommendations

From the overview given in this document, it is clear that over the last few years, and this primarily because of the push given by the eEurope2002 action, many standardisation activities in the field Assistive Technology and Design have taken place.

Only the most important ones have been referred to in this document. The large number of activities marked a clear big change in relation to the past, even to the extent that any overview might get lost.

Therefore it is especially noteworthy to signal that the special co-ordination group DATSCG, who is reporting directly to the ICTSB (ICT Standardisation Board) has taken on board to reflect and to report on the ongoing activities. For the first time ever in standardisation work, also the involvement and the input from technically trained handicapped users has been stimulated and several observers were welcomed.

But quite a lot of these standardisation actions were the direct result of the fact that the eEurope 2002 plan explicitly mentioned five areas where new and larger efforts would be needed to make sure that also people with an impairment get access to modern ICT equipment and to the information sources available through broadband networks.

In the eEurope 2005 plan, eInclusion is not mentioned as a vertical pillar anymore, but is seen as an overall action theme to be taken into account for every new development.
Lessons learnt from FP4 TAP show that there is a big danger for projects or actions not paying enough attention to this (horizontal) requirement - or only through lip service - unless groups and organisations explicitly get the mandate to participate, to evaluate and to check the new eEurope2005 activities.

The eEurope2002 action, which now has ended, and especially the eAccessibility expert group has put many activities and services for persons with a disability or elderly citizens on the track.
New efforts and new funding will be required within the eEurope2005 framework and other funding schemes to ensure that this valuable work can go on.

# Acknowledgements

# Glossary

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