STAND4ALL

Trainers manual STAND4ALL training committee members in standardization

Index of the Manual

And than information on the separate topics of the training:

In front of you, you have the trainers manual for the STAND4ALL training for committee members in standardization. This manual starts with an 'introduction and background' to the STAND4ALL project and the training. Second the training and its set-up is explained in 'the training course manual'. Third you can find the training material prepared, with, last but not least, the evaluation questionnaires.

INTRODUCTION AND BACKGROUND

I. Introduction to STAND4ALL

Standards for All (STAND4ALL) is a project funded by the European Commission with the main goal of promoting the participation of consumers/end-users in the standardization process. This can be done by using CEN/CENELEC Guide 6 'Guidelines for standards developers to address the needs of older persons and persons with disabilities.' This is the focus of the project and the developed training course. The project started in January 2009 and ended in March 2010. The project consortium is composed of the National Standards Bodies of The Netherlands, Spain and Great Britain, Institute for long-term care 'Vilans' of the Netherlands, User organization BAG Selbsthilfe of Germany, and research institutes from Germany and Belgium.

Participant no. *	**Participant organization name**	**Short name**	**Country**
1 (Coordinator)	Dutch Standardization Institute	NEN	The Netherlands
2	Spanish Association for Standardization and Certification.	AENOR	Spain
3	British Standards Institution	BSI	United Kingdom
4	VILANS	VILANS	The Netherlands
5	German Working Party for the Assistance of Persons with Disabilities and Chronic Diseases	BAG Selbsthilfe	Germany
6	German Research Institute Technology and Disability	FTB	Germany
7	Katholieke Universiteit Leuven Research and Development	K.U.Leuven	Belgium

II. Need for STAND4ALL

There are a number of drivers that have led to the need for a greater involvement of older and disabled people in standardization and recognition of the specific requirements of this user group in order to permit hat involvement.

The UN Convention on the Human Rights of Disabled People, of which the European Union is a signatory, European and Member State legislation and European Union policy all move towards a non-discriminatory society with respect for the individual

and equality of opportunity. The UN Convention in particular, in Article 9, requires the promotion of inclusive design, the development of standards for minimum access and accessibility training.

These legislative and policy drivers reflect developments in demographics and society, whereby people live longer and expect more and better products and services that reflect their potentially changing needs.

The new demographic reality can also provide a business opportunity in terms of inclusive products and services. If *designed for all*, services and products can meet the needs of a broader market.

Standards are a tool of the market that provide for interoperability, safety and market access. If standards can take into account the needs of older and disabled persons then this business opportunity can more easily be realized. However, in order for this to occur, the standardization process itself must reflect those needs. Standardization is a process whereby all interested parties can come together to set common technical specifications for goods, processes and services.

The European Commission has identified the need for training to better enable the views of older and disabled people to be taken into account in standards development. It was for this reason that the STAND4ALL project came about.

III. Goals of the STAND4ALL project

The overall objective of the STAND4ALL training is to increase the effective participation of users with disabilities and their representatives in the standardization process and for committee members to become familiar with disability and accessibility issues. The starting point of the project is CEN/CENELEC Guide 6 -'*Guidelines for standards developers to address the needs of older persons and persons with disabilities*'. This guideline was developed in 2002 and contains guidance on the creation and the revision of standards to ensure greater accessibility of products and services. Guide 6:

- Describes a **Process** by which the needs of older persons and persons with disabilities may be considered during the development of standards
- Provides **Tables** to enable standards developers to relate the relevant clauses of a standard to the factors which should be considered to ensure all abilities are addressed
- Offers descriptions of body functions or human abilities and the practical implications of impairment
- Offers a List of sources that Standards Developers can use

If Guide 6 is properly used, disability issues for older persons and persons with disabilities will be addressed accordingly.

Research shows that this guide is not used as expected and that more information on the arguments to use it and on how it can be used is necessary.

Therefore, the main activity of the STAND4ALL project was the development of two training courses for two main target groups:

1. consumers/end-users;
2. committee members in standardization;

In these courses, information is provided on why consumers/end-users should be included in standardization processes and how this can be organized.

Objectives of training for consumers/end-users:

- Understanding why standards are important and why consumers/end-users should be involved and what the preconditions are under which this could be done (USEM principles)
- Understanding Guide 6 and how this guide can be used in standards development
- Users acquiring knowledge on how to ensure consumer issues are considered in the standardization process and what skills are necessary to achieve this

The training for committee members in standardization focuses on why and how the needs of consumers/end-users can be integrated into standardization processes.

Objectives of training for committee members in standardization are:

- Understanding consumer/end-user needs in standardization
- Understanding the use of Guide 6
- Understanding the requirements for consumer/end-user participation

This training will result in a pool of trained consumers/end-users who are able to take an active part in the work of technical committees in the standardization process. Additionally, the trained committee members can make use of their knowledge and promote the inclusion of the group of consumers/end-users in their standardization work.

Another positive outcome will be the opportunity for users' organizations to discuss the questions of standardization more intensively in their own structures and make it to a prioritised item on their agenda. This can have a multiplier effect so that in future consumers/end-users can discuss the relevant items in the technical committees on the same level as the committee members.

The STAND4ALL consortium has produced materials with a view to facilitating the continuation of the training courses and further dissemination of information, thus ensuring the sustainability of the project. These materials are a website, www.stand4all.eu, and a set of training manuals, of which this document forms part. Also, an e-Learning module is developed that can easily be used by future organisations in preparing any STAND4ALL training.

IV. STAND4ALL Manuals

These training manuals are a tool to enable organizations to reproduce the courses that were run during the STAND4ALL project.

STAND4ALL approach to training manuals

The consortium has developed training manuals for the two training courses that form the core of STAND4ALL: training for standardization Committee members on the needs of older and disabled users and training for older and disabled users on standardization Committees. These courses naturally have a number of similarities, for example similar justifications in terms of need, drivers and design. For

example, it was decided to deliver parts of the training to both sets of trainees together. As the contact between the two target groups was considered very valuable, the two training courses were combined partly. This combined session is then similar presented in both courses and manuals.

Nevertheless, it was considered important to have separate manuals for the courses as the focus of the courses and therefore the modules in the two courses are different. In particular, the topic 'Information on standardization' is to be delivered only to users, as it provides information on the European standardization process, from why standards are important, to who develops them. This kind of information is not useful for people already active in standardization, namely the committee members.

The training courses reflected in the manuals have been used three times by the developers and also by a National Standards Body which was not involved in the early development of the training. With the feedback received from these training courses and ANEC, the training was finalized.

For each training course, the consortium has produced a manual for the trainers and a manual for the trainees. The trainers' manuals provide the training materials, in particular slides, as well as detailed explanations of those slides and background documents. The manual as a whole serves to enable a proficient trainer to set up and deliver a training course that builds on the experiences of STAND4ALL.

The trainees' manuals provide the course material and sufficient background information to take part in the course.

The STAND4ALL training manuals

There are therefore 4 training manuals:

- Trainers' manual for committee members;
- Trainees' manual for committee members;
- Trainers' manual for users;
- Trainees' manual for users.

Each manual follows the same basic structure, comprising an introduction and the training course manual itself. The manuals differ primarily in the course modules and the level of detail with variations based on the subject matter and audience (Committee members/users/trainers/trainees).

The training course manuals provide information on the different topics of the training, the material that can be used and how to present this material. Each module of the training courses consists of:

- short introduction to the topic
- information on the topic
- presentation of the topic
- possible extra material.

Trainers' manual for standardization Committee members

This manual is the trainers' manual for standardization Committee members. As such the training course manual contains the background information and slide notes necessary for a trainer to deliver the course to Committee members. The manual is set-up for experienced trainers with basic knowledge of the topic of accessibility and inclusion and standardization. The training course manual is arranged into the following sections:

1. Preparations for the training
2. Programme for the course
3. Training course modules:

i. Welcome and introduction
ii. Motivation and background
iii. Information on Standardization
iv. User Aspects
v. User Participation
vi. Exercises
vii. Role-play
viii. Further Implementation

4. Evaluation
5. Annexes

V. Learning methods in STAND4ALL

Learning methods

The training course has included different learning methodologies. This is based on the topics of the training. For each topic and its goals, the necessary activities and material needed to achieve these goals were investigated and included in the training course structure.

Not only presentations are being used, but also interactive parts form an indispensable part of the course. There are assignments, group discussions, questions to answer, small questionnaires and also a role-play. This is all part of the training structure to make sure the different learning styles of the trainees and their learning preferences are being met. This is also due to the fact that we want the two target groups (committee members in standardization and consumers/end-users) to mingle. This is the start of a business relation.

The part of taught sessions (presentations) reflects the expectation of the trainees who come to a course to receive information from the lessons. The taught presentations are supported by transparencies which to hand out to the trainees. People with visual impairment can receive an electronic version of the handout.

From a didactical point of view the use of visual and auditory input, but also the option to read and write (in the handouts) during the session in combination with the interaction with the trainer supports many learning styles. By commenting the handouts the trainees enhance the already existing information of the handout by their own thoughts or additional inputs of the trainers. In particular this is very suitable for later reflection of the material at home. Large amounts of information can be passed in rather short time in this way. However without consolidating the knowledge and enhance and deepen it, this can lead to low reception of the information. Therefore we have used complementary approaches to connect the information of the taught parts with experiences and emotional actions of the trainees.

In part we used the methodology to collectively construct the knowledge in group assignments and group discussions. This brings the trainees in a very active position. They can involve their own knowledge and experience, combine it with that of the discussion partners and thus open a new horizon. Knowledge constructed in this way keeps very present in the trainees' memory as it is connected with the emotional group experience of the construction process. Another advantage is the need to actively discuss, to identify conclusions and also to present the findings to the other groups. The assignments and group sizes vary in the sequence of the course creating a lively and flexible group dynamics.

As a further emotional learning experience we decided to use a role play close to the end of the course. The role play and its reflection offer great potential for illustrating real life situations and for exercising the use of knowledge in an efficient way. In particular the experience of getting into a perspective, to argue and defend it helps to deepen the understanding of the processes. In the role play the lead for the discussion and the organisation are given to persons experienced with the standardization process, in order to create a realistic framework. Group processes like putting an argument forward, supporting or challenging a position, finding alleys and making compromises can be exercised and reflected.

In this manual the material developed for each topic can be found with a short introduction to the topic and an explanation on how to use the material in the training. This is complemented by notes to go with the presentations. For the topic 'participation in standardization' there are no notes included with the presentation but there is an even more extensive word-document added with a lot of information that can be used in the presentation. This is done because the notes field are not suited for giving the amount of information and for this crucial topic it is important to include a wide scope of information.

There is also a manual for trainees which for each topic, includes some short information, the hand-outs of the presentation and other relevant material. This provides audience and instruction to exercises and descriptions of roles for the role-play.

Additionally, two manuals prepared for the trainees; one for the consumers/end-users and one for the committee members in standardization. The manuals for trainees are meant to be distributed at the beginning of the training course.

TRAINING COURSE MANUAL: trainers' manual for Committee members

I. Preparations for the training

Set-up of the Training courses

The training is developed to meet the goals that are set. There are two training courses for two different target groups. To have the best outcome, these two target groups need to meet each other and work together. That is why a parallel session for the two target groups is planned. The manual continues with the presupposition that the two courses are planned at the same moment and therefore a parallel session is possible. The parallel topics 'roleplay' and 'further implementation' can also be used if just one target group is present.

Here we describe the content of the course, the topics of the course in short to know what the course consist of.

Note

It is important to schedule 30 minutes for registration at the beginning of the day. During this time, there's a possibility to informally meet the trainees. This is particularly important for the consumer/end-user-trainees as they in general don't have a lot of experience with these kinds of meetings and sometimes need extra attention because of their requirements.

Training course consumers/end-users

Welcome and introduction

This part is to start the day. It is important to start with introducing yourself; who are you, what is your background and why are you providing this course. Secondly, the trainees should introduce themselves: who are they and what is their background? And most important: what are their expectations and learning objectives? The expectations and learning objectives of trainees can be written down on a Flip Chart. The moderator can assist here. You can come back to that in the summary of day one and/or at the end of the course.

Background and Motivation

-> What is going on in Europe (and beyond) which drives the focus on user-perspective? And what are the reasons to do that? One of the fields where user-perspective can be integrated is standardization.

In a 60 minutes presentation with group discussions the most important developments are highlighted and the reasons for a 'user-focused approach' are discussed.

Information on Standardization

-> What is standardization, what is the consequence of standards and what is the process?

In a 60 minutes presentation the highlights of the standardization process are given.

In addition to this you need to be aware of the level of knowledge of the trainees. For example; explain what a mandate is. The focus should be the content of these 'guides'. You should also avoid as much as possible the use of acronyms.

User Aspects

-> What are the preconditions for users to take part in standardization?

In 60 minutes the trainees will think of the preconditions via several questions. In the end of the topic this leads to the USEM principles, the basis for an ideal model of end-user involvement in standardization processes.

User Participation

-> In standardization you can use Guide 6 for the input of a user perspective. What is this guide, how can it help for a user perspective and how can it be used?

Guide 6 will be explained; the concrete use of it will be taught and exercised so that trainees can use it themselves in practice.

Exercises

-> If you want to be part of the standardization world you need to know how you can act in a standardization committee and what skills, experience and focus you need.

In two and a half hours, time is allocated to exercise different aspects of promoting user participation in standardization. This goes from having a good short story about the importance of user participation to setting your strategy for in a committee.

Interactive session: Role Play or Simulation of a TC Meeting

Both of these interactive sessions are proven to be effective and have their advantages.

- *Role-play*

-> In a role play we give a real example of how standardization works and how a committee works.

In 105 minutes a role play with a real example will be prepared, played and evaluated. The importance of the role play is to show how standardization in a committee works and how end-users/consumers can be part of it.

- *Simulation of a TC Meeting*

-> In a Simulation of a TC Meeting, we give a real example of how standardization works and how a committee works.

A product used by lots of consumers - for example a remote-controller- will be discussed. Trainees take a look at an existing standard and are asked to comment on it, with the help/use of Guide 6.

Further Implementation

-> With all the information given in the training it is good to have a look on what the next steps will be. What will the trainees do with the knowledge and experience they have gained?

In 60 minutes the trainees will discuss about their role in standardization and how a user perspective can be improved.

Training course committee members in standardization

The committee members already have experience in standardization, so they do not need information on standardization and do not need to exercise on the skills and focus you need in a committee.

Motivation and Background

-> What is going on in the world which motivates the focus on user-perspective? And what are the reasons to do that? One of the fields where user-perspective can be integrated is standardization.

In a 45 minutes presentation with group discussions the most important developments are highlighted and the reasons for a 'user focused approach' are discussed.

User Participation

-> Having heard why it is important to have a user-perspective it is the question how you can do that in standardization. What are the preconditions for users to participate in standardization? To make sure the content of the standard is user-friendly, you can use Guide 6. During the training, Guide 6 will be explained and different exercises will be carried out to consolidate its use.

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Further Implementation

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In 60 minutes the trainees will discuss about their role in standardization and how a user perspective approach can be improved.

This leads to a schedule with a two-day course for the consumers/end-users and a one day course for the committee members in standardization. A draft schedule is available.

At the evening between the two-day training for the consumer/end-users and prior to the training of the committee members a dinner can be arranged where the trainees can meet each other and get in contact on an informal way. This supports the learning environment and promotes the chances of establishing a sustained business relation and network.

Setting and Important issues

The different training topics can be delivered by one person or by several persons. However the very specific focus of each topic is such that it is very possible that a single person may not be comfortable in covering the whole training.

Where there is more than one trainer, it is beneficial to use a moderator. This moderator welcomes people, introduces the trainers, manages time and is responsible for any arrangements that are required by the trainees/trainers.

The training is prepared for around 12 consumer/end-user trainees and 12 committee member trainees. It is developed for small groups and the set-up of the training is based on this. The developed material is particularly suited for small groups.

For preparing the training and for networking issues there is an e-learning module available. In the e-learning module the parts of the training can be found with some small assignments to check the level of knowledge on a specific topic. This can be used by the trainees to prepare on the training course. This programme can also be used for the trainees and trainers to keep in touch after the training through for example a forum. The e-learning can be found at: http://www.moodle.reha-technologie.de/login/index.php.

The lay out of the training room is preferable in u-form. The trainees can see and hear each other and there is an open feel. There should also be the possibility for small groups of 3/4 persons to discuss during the training on assignments.

With this training course which is partly for consumers/end-users, probably with disabilities, the accessibility of the training is very important. This means you need an accessible venue, accessible training material and an accessible way of presenting the material.

Accessible venue: The meeting room needs to be accessible and large enough for people in wheelchairs to move around. There should be good lighting and acoustics to assist those with a hearing impairment or who are making use of an interpreter. Of course there is a need for an accessible toilet and accessible lunch arrangements. With a two-day training programme for consumers/end-users and with emphasis on the interaction between the two training groups, the set-up of the training also includes an evening programme with a dinner. The location of this has to be accessible as well as any overnight accommodation.

Accessible training material: people with different disabilities can come to the training. For visually impaired people, you have to make sure that the material is also suitable for them. This typically means that they want to have the material in a digital form to put on their computer so it can be enlarged or read with a read speaker. Thus the material has to be sent to trainees beforehand.

Accessible presenting: there are some issues to keep in mind when presenting to an audience with possible vision or hearing impairment. Some rules:

- Talk slowly to assist lip readers and sign interpreters
- Make sure you do not refer to pictures on the slides, but explain the messages contained.
- Make sure documents are given in an accessible form for everyone (word file for blind people, for example)
- Make sure documents are sent beforehand to give the chance for the trainees to have the material organized on their computer system the way they can manage and read it.
- When having all these different people around, be aware that it takes more time for presenting, going to the toilet, etc...
- If there are visually impaired people it is preferable to start each new topic with telling the names who are around the table. This is to know where everyone is seated. In the beginning it is even better to let everyone first tell their name before making comments.

List of materials to use for the training:

- Manuals for trainees
- Laptop and projector
- Flip over with markers
- Tape
- Name tags
- Pens and paper to write on

Evaluation of the training course

There are several ways of evaluating the training course; different methods are used in this case. There are:

- Self evaluation forms: These forms are for the trainers themselves to fill in and give information on how the trainers experienced the task.
- Observer forms: To use this there should be one or two observers appointed for the whole training to make comments on the training, the trainers and how they think the information of the training is passed on.
- Questionnaires for trainees: The questionnaire developed asks questions about the whole training and separate topics. These questionnaires should be handed out at the end of the training (not forgetting that some trainees will prefer to have the questionnaire in digital form so they can complete it on their computers). It is preferable to ask trainees to complete questionnaires right away and had them over before leaving.

To test the knowledge of the trainees there is also a case study prepared. This case study can be sent out to the trainees after the training. A model for the answers is included in this trainer manual.

Using the material

The material for the STAND4ALL training presented in this manual can be used by other organizations. For example standardization organizations can organise the training themselves in the national setting. The training courses are developed with European Commission funding; this should be mentioned on the material if it is used.

The training course is not accredited; there is no official diploma to gain following the training. There is a certificate developed which can be used to give the trainees as a proof they have attended the course.

More information on the project and the material can be found on http://STAND4ALL.eu.

II. Programme for the course

The training for committee members takes one full day. The programme of this course is set up as following:

Day 1	Program
8.30 – 9.00	Registration and coffee
9:00 – 9:30	Welcome and introduction
9:30 – 10:15	Topic 1 Background & Motivation

10.15 – 10.45	Topic 2 Implement Guide 6 in standardization processes (part one)
10:45 – 11:00	**Coffee Break**
11:00 – 11:30	Topic 2 Implement Guide 6 in standardization processes (part two)
11:30 – 12:00	Preparation of Interactive session: 'Role play' or 'Simulation of a TC Meeting'
12.00 – 12.45	Interactive session: 'Role play' or 'Simulation of a TC Meeting'
12:45 – 14:00	**Lunch Break**
14:00 – 14:30	Interactive session: 'Role play' or 'Simulation of a TC Meeting' (discussion)
14:30 – 15:30	Topic 3 Further Implementation
15:30 – 16:00	Closure
	Departure

With the information above the training can be organized. For the training materials for the different topics are also prepared. These materials can be used by the trainers, and of course modified where it is needed. The materials in this manual are proved to be useful for the goals the training achieves.

STAND4ALL Training course [place], [date] for committee members in standardization

08.30 – 9.00 h	Registration and coffee
09:00 – 9:30 h	Introduction
09:30 – 10:15 h	Topic 1: Background & Motivation
10.15 – 10.45 h	Topic 2: User participation in standardization; how to use Guide 6? (part one)
10:45 – 11:00 h	**Coffee Break**
11:00 – 11:30 h	Topic 2: User participation in standardization; how to use Guide 6? (part two)

After this morning session committee members in standardization and Consumers/end-users will join together

11:30 – 12:00 h	Preparation of role play
12:00 – 12:45 h	Interactive role play
12:45 14:00 h	**Lunch Break**
14:00 – 14:30 h	Discussion of interactive role play
14:30 – 15:30 h	Further implementation
15:30 – 16:00 h	Closure

STAND4ALL

Topic 'Welcome and Introduction'

Introduction to 'Welcome and introduction'

The goal of this topic is to make trainees feel at ease and to provide background information regarding the STAND4ALL training, its initiation, set up, and the expected results from trainees.

It is very important to have a positive learning environment in which people feel inspired and comfortable to learn in. The first session of the course, this 'Welcome and introduction' session is extremely important to reach that.

Further, this will be achieved via:

- Good contact prior to the training, including follow-up telephone calls. These phone calls are part of the recruitment and not always held in English.
- The trainees will receive an envelope with information on the training, location and contacts in their hotel.
- The training day begins with half an hour registration and informal session with coffee and tea.

These prior steps can be used by the trainer as an ice-breaker as well, by simply referring to it or concretely ask what trainees have received from STAND4ALL so far.
It is also important to emphasize that during the training there is a host, who is available for all questions during the day.

The aim of the topic “Welcome and Introduction" is further to provide understanding of the concept of 'Accessibility in Standardization" so that trainees understand the need for the STAND4ALL training.

Within this topic we will discuss the following issues:

- What are the background and objectives of the STAND4ALL training?
- Introduction of both trainers and trainees
- The set-up of the training

Make sure in the Welcome and Introduction session that:

- The aim of the training is that the standardization experts need to learn about accessibility and that accessibility experts (thus: users) need to know about standardization.
- The goals of the training are clear for everyone. Check this with the goals and expectations the trainees have themselves. It is important for trainees to know what the objectives of the topics of the training are.
- The training is as interactive as possible. Do not use just presentations and have lectures. Add stories, pictures and examples. The role play is a good example of an interactive learning method.

For this topic a presentation is prepared in which the project STAND4ALL and the objectives of the training is presented. There is also a document prepared with extra information for the trainer which can be used for this session. For the presentation 30 minutes is scheduled.

Annexes:
- STAND4ALL document 'Welcome and introduction'
- Presentation

For further reading and more information the following website can be used:
- www.STAND4ALL.eu

Information on Welcome and Introduction

Preliminary note: This topic should be treated as an interactive discussion, so please encourage trainees to ask questions throughout.

Trainers and other key persons (contact persons for the venue etc) need to be aware of the requirements of disabled people in the audience throughout the course, but in this first presentation of the training it is extremely important to make the trainees feel at ease.

Therefore, it is recommended to carefully check the list of trainees, including their organizations and country beforehand.

The trainer should start introducing him/herself. Inform the trainees with your name, company, country, some personal details and what your link is with the training. Also include some information about your experience with disability and standardization, your aims of today and that you're happy to provide the training.

The roll-call of delegates is very important as it gives an opportunity for trainees to become part of the group. This part should be interactive and give us an idea of trainees' learning objectives.

Please invite trainees and ask them:

Who are you and What do you expect today? Write down some of the statements made by trainees, for example on a Flip Chart

It is wise to introduce the concept of the STAND4ALL training slowly, by giving information on the background of the STAND4ALL project. You can then proceed with some information regarding the STAND4ALL trainings and today's' session.

<u>Background STAND4ALL</u>
The STAND4ALL consortium was established in October 2008, after a Call for Tender by the European Commission on 'Training of stakeholders on consultation on standardization'. Seven organizations from six different countries in Europe decided to collaborate in order to reply successfully to the European Commission.
After the award of the contract, the actual work began 1st of January 2009. The STAND4ALL consortium was developed to include inputs from key stakeholder groups such as national standards bodies, research institutes and user organizations.

As the STAND4ALL acronym implies, the consortium has included the idea of STANDARDIZATION and STANDARDS considering ALL needs, which also includes the universal principle of Design for All. STAND4ALL is about including people with disabilities, not only in the content of the standards, but also in the standardization process.

The consortium has worked hard to establish an enlarged European network of 'CEN/CENELEC Guide 6'-experts and accessibility specialists in the field of standardization. STAND4ALL aimed to ensure that it was recognised that the essential requirements from older people and people with disabilities need to be taken into account in the field of standardization.

STAND4ALL confirmed that CEN/CENELEC/ETSI/TCs, wherein standards are developed, have the responsibility to take on board a wide range of representatives in their particular field. In practice, consumers are not well represented. This applies to consumers in general, but even more so to consumers with disabilities. In CEN/CENELEC/ETSI/TCs representatives are not well informed about the needs of older people and those with disabilities and that qualified users (who represent user organizations) with disabilities rarely participate in the standardization process.

It is therefore needed both to inform representatives in CEN/CENELEC/ETSI/TCs about the needs of people with disabilities and to encourage them to take these needs into consideration while developing a standard as to involve users with disabilities in the field of standardization. CEN/CENELEC Guide 6–'*Guidelines for standards developers to address the needs of older persons and persons with disabilities*' is an appropriate tool to give representatives in standardization a better understanding about these needs and how to implement these needs.

STAND4ALL has developed (and also implemented in the period October 2009-Febryuary 2010) training courses for persons with disabilities (and their representatives) and for experts ('committee members') in standardization.

The training course focuses on the implementation of the requirements of CEN/CENELEC Guide 6 in the work of technical committees and on the guidance to people with disabilities and their organizations and to disability and accessibility experts on how they can participate in the standardization process.

According to STAND4ALL, a long-lasting impact of the trainings will be an enlarged European network of 'CEN/CENELEC Guide 6'-experts and accessibility specialists in the field of standardization so that the essential requirements from elderly people and people with disabilities are taken into account in the field of standardization.

This STAND4ALL training will:
- Facilitate participation of user organizations in the standardization process
- Ensure that the use of CEN/CENELEC Guide 6 in the field of standardization is improved
- Qualify more users (which represent user organizations) with disabilities to participate in European standardization

NOTE
- In the context of this report consumer / end-user refers to people with disabilities and the elderly, representatives of their organizations, and disability and accessibility experts.
- The training has been delivered in four different European cities (Madrid, Brussels, London and Dublin) to almost 90 stakeholders.

Training set-up
There are two trainings; one for (representatives of) users and one for committee members.

The objectives of the user training are:

- Understanding why standards are important and why consumers/end-users should be involved and what the preconditions are under which this could be done (USEM principles)
- Understanding Guide 6 and how this guide can be used producing standards
- Users have knowledge on how to bring forward consumer issues and what skills are necessary in doing so

The training course for committee members in standardization will place more focus on: Why and how the needs of consumers/end-users can be integrated into standardization processes.

Although these training courses have a slightly different focus, the end goal for both will be a good use of Guide 6 in standardization and knowledge from both groups on each other's world.

Overall goal of STAND4ALL: standards which are developed, and do have consequences for consumers/end-users, must consider all stakeholders, also people with disabilities.

Definition of trainees

- Users: people with knowledge on accessibility issues, but no – or little - knowledge on standardization.

In the context of this training consumers/end-user refers to people with disabilities and the elderly, representatives of their organizations, and disability and accessibility experts.

- Committee members in standardization: people involved in standardization (at both national or European level) with no – or little- knowledge on accessibility issues.

In short set-up of the STAND4ALL training:

- 2 days for users
- 1 day for committee members in standardization
- Different topics, several exercises, short intermezzos and time to get to know your European colleagues/ other trainees
- Combined session of the two groups
- Today is the first day, tomorrow is the second day.

Tomorrow will be the first day for the training for committee members in standardization ("TC experts"). The contact between the two target groups is very valuable. They will get in touch with each other, which is the first step in getting to work together. Therefore the two training courses are partly combined. The combined session is the 'Role play'. In a role play we give a real example of how standardization works and how a committee works.
In 105 minutes a role play with a real example will be prepared, played and evaluated. The importance of the role play is to show how standardization in a committee works and how end-users/consumers be part of it. Besides the role-play, there is also another option for an interactive session described in the manuals which is a little bit more focused on working together on a change in a standard using Guide 6.

Please make sure in the Welcome and Introduction session that:

- The aim of the training is that the standardization experts need to learn about accessibility and that accessibility experts (thus: users) need to know about standardization.
- The goals of the training are clear for everyone. Check this with the goals and expectations the trainees have themselves. It is important for trainees to know what the objectives of the topics of the training are.
- The training is as interactive as possible. Do not use just presentations and have lectures. Add stories, pictures and examples. The role play is a good example of an interactive learning method.

Welcome and Introduction

Good morning,

Welcome everybody. My name is (….).

I am happy you all showed interest to take part in this STAND4ALL Training session, here in Madrid.

In total, we have around 17 trainees today, coming from

-UK

-Ireland

-France

-Finland

-Sweden

-The Netherlands

-Poland

Let me first give you the agenda for today (next slide)

Content presentation

- Background and objectives STAND4ALL Training
- Introducing ourselves
- Content of the training

2

Good morning,

Welcome everybody. My name is (….).

I work for …

I am happy you all showed interest to take part in this STAND4ALL Training session, here in ... At …premises.

In total, we have …. trainees today, coming from (different countries from Europe):

-Namely : (sum up countries of trainees)

Let me first give you the agenda for this first presentation (this introduction) and for todays' program (next slide)

Background STAND4ALL

Responsibility European standardization institutions:
all stakeholders involved in the process

Practice European standardization institutions:
NOT all stakeholders involved in the process

3

What is a standard?

Put at its simplest, a standard is an agreed, repeatable way of doing something. In Europe, we do this by publishing documents that contain a technical specification or other precise criteria designed to be used consistently as a rule, guideline, or definition.

Standards help to make life simpler and to increase the reliability and the effectiveness of many goods and services we use. Standards are created by bringing together the experience and expertise of all interested parties such as the producers, sellers, buyers and users of a particular material, product, process or service.

This is done in the world of European standardization, namely within CEN/CENELEC and ETSI TCs. ***We'll explain more on standardization later today > topic 2.***

These European standardization institutions CEN, CENELEC and ETSI have the responsibility to take on board a wide range of representatives in their particular field while developing a standard.

In best case, all interested parties are represented.

In practice, however, this is not the case. In practice, consumers/end users are not well represented.

This applies to users consumers/end users in general, but to elderly and disabled consumers and end/users in particular.

Objectives STAND4ALL

- An EU-funded project, in which both
  - consumers (or end users) with a functional impairment and
  - committee members in standardization
- are trained to take into account the needs of older people and people with disabilities in standardization.

4

So, because of this situation – the 'ignorance' of the requirements of the elderly and disabled in standardization - and because of the aim to change this situation, STAND4ALL was set up.

STAND4ALL stands for:

-Promotes the idea of standardization + STANDARDS considering ALL needs, including the universal principle of Design for All.

Not only in the content of the standard, but also in the standards development.

To improve the impact of elderly and disabled people, STAND4ALL simulates the use of CEN/CLC Guide 6. To reach this, we'll train both consumers/end users and TC experts in the use of this guide and user participation in standardization. Standards which are developed , and do have consequences for consumers/end users, must consider all stakeholders, including elderly and/or disabled people.

STAND4ALL project

- European project training professional users
- Training committee members in standardization

5

Therefore, the STAND4ALL project does not train only consumers/end users but also professionals already working in standardization : The committee members.

The training of these two target groups have a different focus.

The training course for professional users will focus a bit more on:

-Facilitate participation of users in standardization

-Qualify more users for participation in standardization

The objectives for the users are therefore :

Understanding why standards are important and why consumers/end-users should be involved and what the preconditions are under which this could be done (USEM principles)

Understanding Guide 6 and how this guide can be used producing standards

Users have knowledge on how to bring forward consumer issues and what skills are necessary in doing so

The training course for committee members in standardization will focus a bit more on:

-On why and how the needs of consumers/end-users can be integrated into standardization processes.

Objectives of training for committee members:

Understanding consumer/end-user (older persons and those with disabilities) needs in standardization

Understanding on use of Guide 6

Understanding the requirements for consumer/end-user participation

STAND4ALL trainees

- Users:
  people with knowledge on accessibility issues, but no – or little - knowledge on standardization.
- Committee members in standardization:
  people involved in standardization (at both national or European level) with no – or little- knowledge on accessibility issues.

6

In the context of this training consumers/end-user refers to people with disabilities and the elderly, representatives of their organisations, and disability and accessibility experts.

STAND4ALL

Several partners involved:

introduction of the consortium partners

7

This training is set up by the STAND4ALL consortium, this STAND4ALL consortium consists of 7 different parties, coming from

-Spain: Aenor

-UK: BSI

-The Netherlands: NEN and Vilans

-Belgium: KUL

-Germany: FTB and BAGH

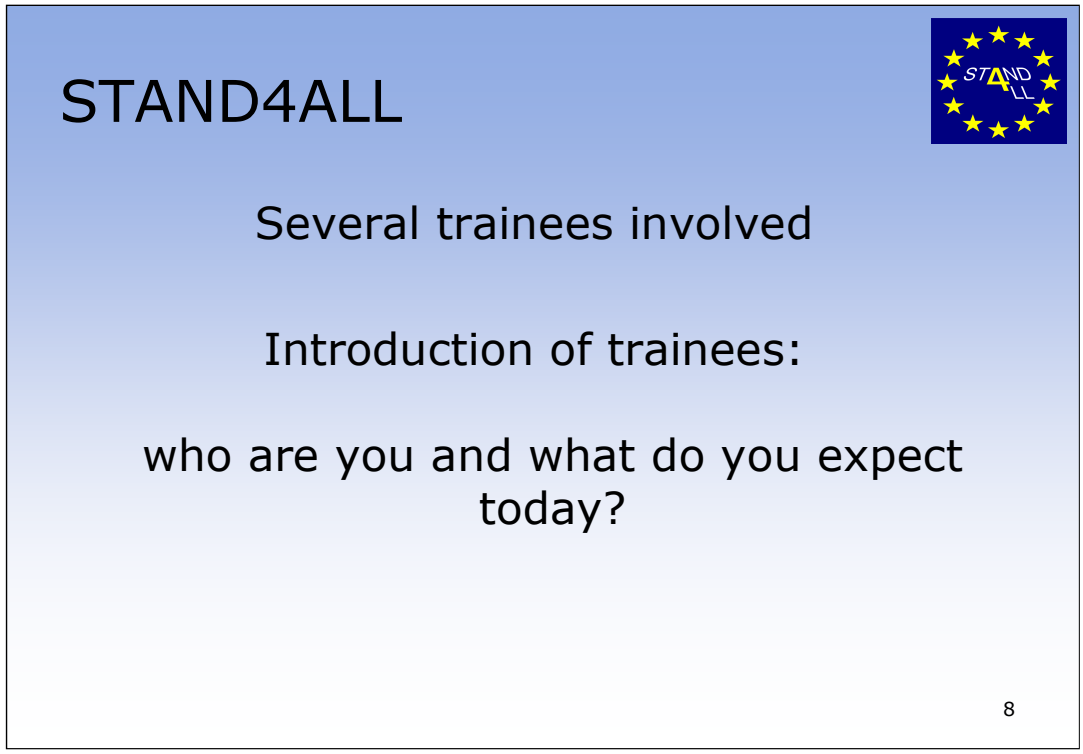
Representatives from these organisations will now introduce themselves.

Together we/they have developed the training and together delivered the training from October 2009 until February 2010.

(They now introduce themselves, some of them are trainers today):

-In February 2010 one extra session was held in Dublin, at NSAI premises. This course was delivered in close collaboration with NSAI.

NSAI delivered a part of training, as a test case to see how/ if a NSB itself was able to provide the STAND4ALL course.



After introduction from ourselves (the trainers for this session), we now move to the trainees.

This part should be interactive and give us an idea of trainees' learning objectives.

Perhaps write down some of the statements made by trainees, for example on a Flip Chart

Content of the training

- 2 days for users
- 1 day for committee members in standardization
- Different topics, several exercises, short intermezzos and time to get to know your European colleagues/ other trainees
- Combined session of the two groups

9

Today is the only training day for committee members in standardization ("TC experts"), for the user session it is the second day.

There will be a combined session with these users, so that we can get to know each other and learn from each other.

After all, the standardization experts need to learn about accessibility

Accessibility experts or: users need to know about standardization

Today's programme

- Background & Motivation
- Implementing Guide 6 in the standardization process
- Preparation of interactive session
- Interactive session
- Further Implementation

10

Program

After the welcome, we'll continue with

9:30 – 10:15Topic 1Background & Motivation

10.15 – 10.45Topic 2 Implement Guide 6 in standardization processes (part one)

10:45 – 11:00Coffee Break

11:00 – 11:30Topic 2 Implement Guide 6 in standardization processes (part two)

11:30 – 12:00Preparation of interactive session

12.00 – 12.45Interactive session

12:45 – 14:00Lunch Break

14:00 – 14:30Interactive session (discussion)

14:30 – 15:30Topic 3 Further Implementation

15:30 – 16:00Closure

Departure

Have a good day!

STAND4ALL

Topic 'Background and motivation'

Background and Motivation

This topic has the following goal:
Understanding the need for consumers/end-users' input in different international and national developments and how to organise to make consequent changes.

Why do we want to promote the user perspective in standardization? Is it to be a good guy? Maybe it is a legal obligation or very interesting for marketing purposes?

There are several developments at national level, European level and on global level which give a push to consumer/end-user participation. The developments, regulations, etcetera that are important will be mentioned in this topic. Of course the link with standardization is being made. What is the value of standardization with keeping in mind the user perspective? And what can the role of consumers/end-users or committee members in standardization be to have a more user-focus in the standardization process?

The topic consists of the following parts:

1. Non-discrimination, equal rights (Developments in the US, UN convention). It is our duty to make sure all people have the same rights and possibilities. The UN convention on the human rights of disabled people is there to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms.
2. Because of growth of the elderly population more people need help and a larger economic impact can be observed -> more political interest. In the growing of this group there has also been a shift in how the society thinks of inclusion for all. There has been a shift from the medical model of disability to the social model of disability in which the problems of a disability are located in the society instead of in the individual. This is an important change in how we look at people with disabilities and one with consequences for how we arrange our society.
3. Solutions; there are several organizations and movements focused on including consumers and people with disabilities in particular. Examples are given in the presentation.

For this topic only one form of teaching is prepared: the presentation. It is a presentation of approximately 45 minutes. It is important to give an idea of the background.

Annex:

- STAND4ALL document background and motivation
- presentation

Examples where to find information related to this topic:

- website UN (www.un.org/disabilities)
- Wikipedia for info on the social model (http://en.wikipedia.org/wiki/Social_model_of_disability)
- Website on design for all (www.designforalleurope.org)

Information on topic ‘Background and Motivation’

The topic ‘Background and motivation’ is built up of 5 sub-topics.

Sub-topic 1: policy and legislation
Sub-topic 1 is about relevant policy and legislation within European and International contexts and how these cover ‘equality’ and ‘accessibility for people with disabilities’.

The EU promotes the active inclusion and full participation of disabled people in society, in line with the EU human rights approach to disability issues. Disability is a rights issue and not a matter of discretion. This approach is also at the core of the UN Convention on the Rights of People with Disabilities, to which the European Community is a signatory.

UN convention
In 1994 the standard rules on the equalization of opportunities for persons with disabilities were accepted by the United Nations. Although not a legally binding instrument, the standard rules represent a strong moral and political commitment of Governments to take action to attain equalization of opportunities for persons with disabilities. The rules serve as an instrument for policy-making and as a basis for technical and economic cooperation.

The 22 rules are:
Rule 1. Awareness-raising
Rule 2. Medical care
Rule 3. Rehabilitation
Rule 4. Support services
Rule 5. Accessibility
Rule 6. Education
Rule 7. Employment
Rule 8. Income maintenance and social security
Rule 9. Family life and personal integrity
Rule 10. Culture
Rule 11. Recreation and sports
Rule 12. Religion
Rule 13. Information and research
Rule 14. Policy-making and planning
Rule 15. Legislation
Rule 16. Economic policies
Rule 17. Coordination of work
Rule 18. Organizations of persons with disabilities
Rule 19. Personnel training
Rule 20. National monitoring and evaluation of disability programmes in the implementation of the Rules
Rule 21. Technical and economic cooperation
Rule 22. International cooperation

In 2006 the Convention on the Rights of Persons with Disabilities and its Optional Protocol was adopted at the United Nations Headquarters in New York, and was opened for signature on 30 March 2007. There were 82 signatories to the Convention, 44

signatories to the Optional Protocol, and 1 ratification of the Convention. The Convention entered into force on 3 May 2008.

The purpose of the convention is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity. These rules are moral and political guides which the member states follow.

There are eight guiding principles that underlie the Convention and its specific articles:
- Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons
- Non-discrimination
- Full and effective participation and inclusion in society
- Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity
- Equality of opportunity
- Accessibility
- Equality between men and women
- Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities

These rules and general principles on accessibility are set as a response to a shift in the world's population (more people with disabilities) and that although pre-existing human rights conventions offer considerable potential to promote and protect the rights of persons with disabilities, this potential was not being tapped.

In 2006 the international community accepted a new human rights agreement. This agreement has judicial consequences.
(http://www.un.org/disabilities)

A Toolkit was designed to focus more specifically on the Conventions provisions regarding accessibility to information and communication technologies (ICTs). The UN Convention on the Rights of Persons with Disabilities (CRPD) establishes a range of rights and responsibilities. It establishes rights for persons with disabilities and responsibilities for governmental and private sector players from signatory and ratifying countries. The Toolkit was designed to address policy makers and regulators in all of the ICT areas. This toolkit is not complete yet, but there is already a lot of information on how to work with the 'rules' of the convention to bring it into practice.

Also the European Community and its Member States have confirmed their view that disability is a broad Human Rights issue. That is why they set up the EU Disability Strategy that is build upon three pillars:
- EU anti-discrimination legislation and measures, which provide access to individual rights
- Eliminating barriers in the environment that prevent people with disabilities from exercising their abilities
- Mainstreaming disability issues

This STAND4ALL training is part of this framework.

In America there is significant regulation to eliminate discrimination on disabilities. This is not included in the presentation because it is not the European legislation, but it shows how regulation is also possible.

Americans with Disabilities Act

On July 26, 1990, President George H.W. Bush signed into law the Americans with Disabilities Act of 1990 (ADA) -- the world's first comprehensive civil rights law for people with disabilities. The Act prohibits discrimination against people with disabilities in employment (Title I), in public services (Title II), in public accommodations (Title III) and in telecommunications (Title IV). The ADA has been described as the Emancipation Proclamation for the disability community.

PURPOSE- It is the purpose of this Act is:

(1) to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities;

(2) to provide clear, strong, consistent, enforceable standards addressing discrimination against individuals with disabilities;

(3) to ensure that the Federal Government plays a central role in enforcing the standards established in this Act on behalf of individuals with disabilities; and

(4) to invoke the sweep of congressional authority, including the power to enforce the fourteenth amendment and to regulate commerce, in order to address the major areas of discrimination faced day-to-day by people with disabilities.

On September 25, 2008, President George W. Bush signed into law The ADA Amendments Act of 2008 (ADAAA). It is intended to give broader protections for disabled workers and "turn back the clock" on court rulings which Congress deemed too restrictive.[4] There were some major changes made in ADA. The ADAAA includes a list of major life activities.

Signing of the Americans with Disabilities Act. President George H.W. Bush (center) is flanked by Evan Kemp, Chairman, Equal Employment Opportunity Commission (left) and Justin Dart, Chairman, President's Committee on Employment of People with Disabilities (right). Standing are the Rev. Harold Wilke (left) and Sandra Swift Parrino, Chairperson, National Council on Disability (right).

Rehabilitation act

The U.S. Rehabilitation Act of 1973 prohibits discrimination on the basis of disability in programs conducted by Federal agencies, in programs receiving Federal financial assistance, in Federal employment, and in the employment practices of Federal contractors. The standards for determining employment discrimination under the Rehabilitation Act are the same as those used in title I of the Americans with Disabilities Act.[1] In 1998 an Amendment to Section 508 of the Rehabilitation Act was developed. One of the key sections is Section 508.

Section 508 establishes requirements for electronic and information technology developed, maintained, procured, or used by the Federal government. Section 508 requires Federal electronic and information technology to be accessible to people with disabilities, including employees and members of the public.[1] (Wikipedia)

Section 508 was enacted to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Under Section 508 (29 U.S.C. ‘ 794d), agencies must give disabled employees and members of the public access to information that is comparable to the access available to others.
(http://www.section508.gov/index.cfm?FuseAction=Content&ID=3)

An accessible information technology system is one that can be operated in a variety of ways and does not rely on a single sense or ability of the user. For example, a system that provides output only in visual format may not be accessible to people with visual impairments and a system that provides output only in audio format may not be accessible to people who are deaf or hard of hearing. Some individuals with disabilities may need accessibility-related software or peripheral devices in order to use systems that comply with Section 508.[1] (Wikipedia)

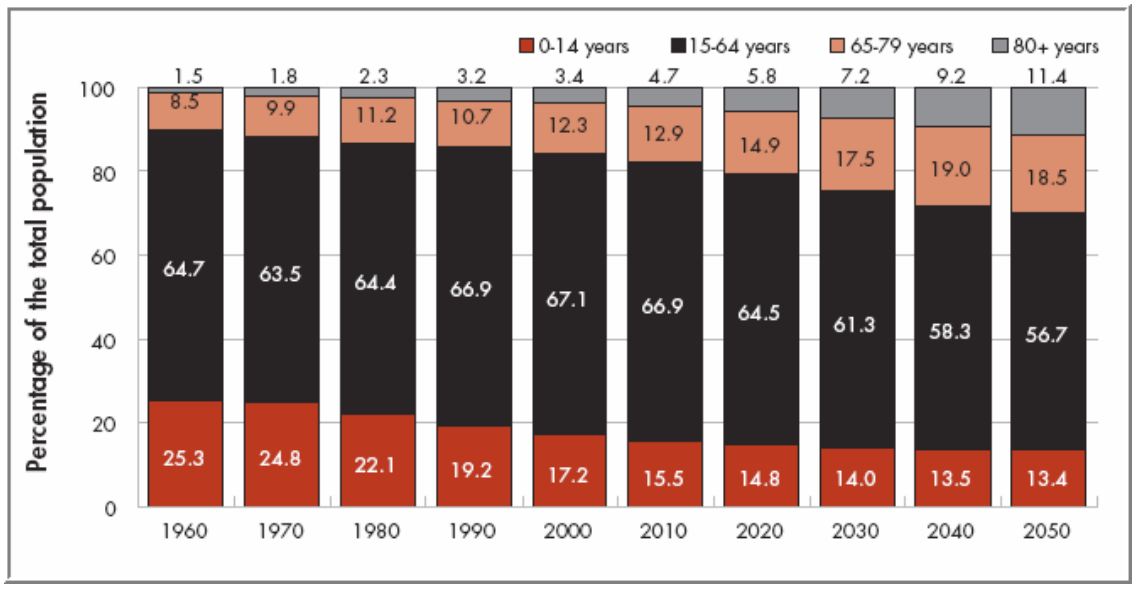
Sub-topic 2: demographic changes
Sub-topic 2 is on demographic issues and changes in society which underline the need for a consumer focus, especially for consumers with more needs than others.

People getting older
As people are living longer, there is an increasing number of older people which has an impact on the number of disabled people due to age related impairments. The United Nations estimates that by 2050 one out of every five people will be over 60 years, and by 2150, one third of the worlds' population is expected to be 60 years of age or older.
In Europe we see the same trend. In 1995 there were 101 (15%) million of 65+, in 2050 Europe will have 173 (20%) million of 65+.

Other research show even more progressive rises.

By 2020, 25% of the EU's population will be over 65. To respond to this growing demographic challenge, the Council of Ministers approved a Commission's plan to make Europe a hub for developing digital technologies designed to help older people to continue living independently at home.
(http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/994&format=HTML&aged=0&language=EN).

In the EU-25 countries, this means a change from 2000 when 15.7% of the population was over 64, to an estimated 17.6% in 2010 and 20.7% in 2020 (Figure A.1.1; Table A.1.1).
Figure A.1.1: Population structure by major age group for EU-25 countries (1960 to 2050 estimates)



see also Table A.1.1 below (EC 2007a)

Table A.1.1: Population structure by major age groups: EU-25 for 1960 through 2050 by decade (EC 2007a)

Age	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
80+ years	1.5%	1.8%	2.3%	3.2%	3.4%	4.7%	5.8%	7.2%	9.2%	11.4%
65-79 years	8.5%	9.9%	11.2%	10.7%	12.3%	12.9%	14.9%	17.5%	19.0%	18.5%
15-64 years	64.7%	63.5%	64.4%	66.9%	67.1%	66.9%	64.5%	61.3%	58.3%	56.7%
0-14 years	25.3%	24.8%	22.1%	19.2%	17.2%	15.5%	14.8%	14.0%	13.5%	13.4%

The trends by country are also interesting, and vary considerably (Figure A.1.2). The EU-25 countries had a dependency ratio of approximately 18 percent in 1970, but expected to rise to approximately 27% by 2010 and 54 percent by 2050; across the EU the 2010 prediction ranges from approx 17 percent in Slovakia to 32 percent in Italy (Figure A.1.2).

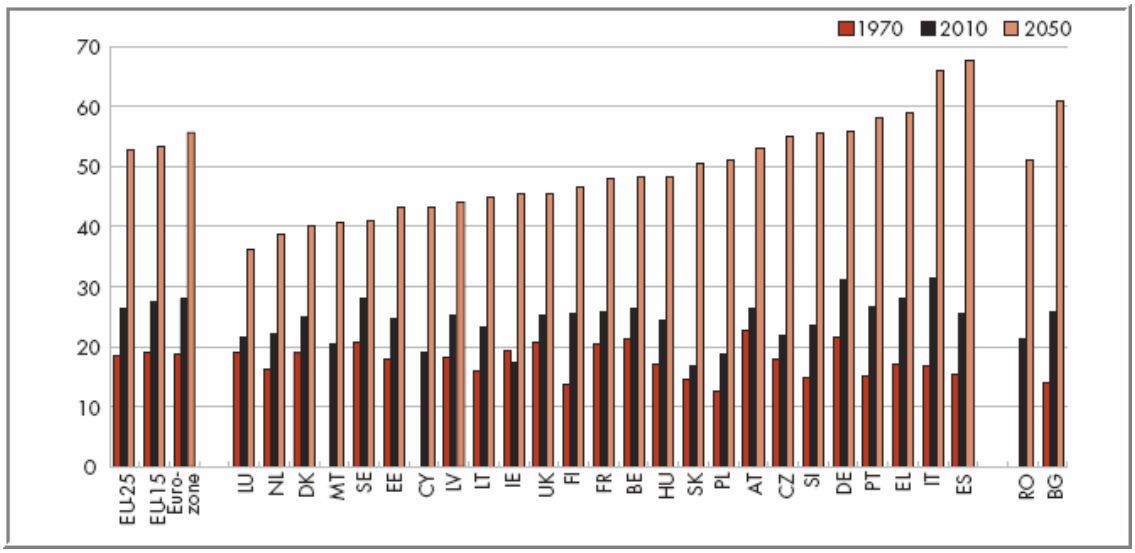


Figure A.1.2: Old age dependency ratio for EU-25 countries (1970 and 2010, 2050 estimates)
(population aged 65 and over as a percentage of the working age population [15-64 years]) (EC 2007a)

Besides people getting older there are less young people. People do not get that many children as 50 years ago. This means that there will be put tremendous pressure on society in terms of supporting the elderly population, and any means to assist them to continue contributing to and participating in society, and to “age in place”, needs to be adopted.

This trend shows that we the costs of the ageing society will rise to take care of them properly. To make sure that the healthcare system stays feasible we need to have a good look at the system at the moment and opportunities to change and reduce costs. The urge arises to do something to make sure we can cope with the 'problems' that will arise when the group of elderly continues to grow.

People living independent for longer period of time
Another trend is that elderly people are living at home more and more instead of living in nursing homes.

People living at home. Need for practical houses and products to use themselves.

In Europe, most elderly people appear to live alone and home care receives priority. This may be the result of specific promotion of independence for the elderly or it may be the consequence of a lack of care facilities, resulting in the responsibility for care being left to the family.

In all countries an increase in the number of the elderly people living independently is apparent. Living independently is often the choice of the elderly themselves, but in some countries elderly people are also compelled to live independently because there are too few care facilities or insufficient places.
(Bouwcollege: healthcare and welfare for the elderly in other European countries; report number 546, January 2003)

This trend means that there are more houses needed to be used by elderly, which mostly have some kind of a disability. And to live as independent as possible, products and services should be useable by this target groups as well.

More opportunities
Disabled people have more opportunities; they are able to improve their life chances through education, employment and social participation so they demand access to services.
This is partly because of changed regulations; anti-discrimination rules that this is possible. The whole community is more focused on how to include people then how to put people with possibilities far away in nursing homes. There are also more technical possibilities; technical aids are developed which can assist people to accomplish several activities. For example a hearing aid can help people hard of hearing to follow a meeting. Home automation, also called domotics, can make sure the lights turn on and of automatically and nurses will be alarmed when someone has fallen in the house.

And older people's aspirations for inclusion are growing – 'grey power'. This is about mobilizing retired people as well as all people that are over-fifty or have already taken early retirement.

Sub-topic 3: models of disability and inclusion
Sub-topic 3 is about two models which are focused on people with disabilities and how the society, including products and buildings, can be designed to include people with disabilities.

The Social Model of Disability
Inclusive design and the adaptation of technology to people with special needs are approaches to technology that are closely related with the social model of disability. Michael Oliver coined the phrase "social model of disability" in 1983 (see Oliver & Sapey, 2006, 29) as a way to describe an approach that had been emerging for some time. This social model was a response to the deficiencies of the "individual model of disability".
According to the **individual model of disability**, the "problem" of disability is located within the individual, and the problems that people with disabilities experience are direct consequences of their impairment. Consequently, the main task of professionals is to help the individual adjust to his or her disabling condition. According to Michael Oliver, there are two aspects to this:

> first, there is physical adjustment through rehabilitation programmes designed to return the individual to as near normal a state as possible; and second, psychological adjustment that helps the individual to come to terms with his or her physical limitations. (Oliver & Sapey, 2006, 22)

According to Oliver, one of the aspects of the individual model is the medicalisation of disability. He argues that this medicalisation is inappropriate because disability is a social state and not a medical condition, so medical intervention in and control over disability is inappropriate. Illness and disability are not the same thing, even though some illnesses may have disabling consequences and disabled people may have illnesses at various points in their lives (Oliver, 1990). Because of the medicalisation of the individual model of disability it is known to many as the **medical model of disability**.

The **social model of disability** locates the problem of disability within society. In other words, the cause of the problems is not individual limitations "but society's failure to provide appropriate services and adequately ensure the needs of disabled people are fully taken into account in its social organization" (Oliver, 1990). Furthermore, the consequences of this failure do not simply fall on individuals but systematically on people with disabilities as a group, "who experience this failure as discrimination institutionalised by society" (Oliver, 1990).
Instead of "treating or rehabilitating the patient", the social model focuses on full functional participation in society. The individual and social models of disability are conflicting models and difficult to integrate (van Roosmalen & Ohnabe, 2007, 53). Anti-discrimination legislation, inclusive design, rehabilitation engineering[1], and more inclusive standards all play a role within the social model of disability and can enable persons with disabilities to participate in society.

[1] "Rehabilitation engineering is the systematic application of engineering sciences to design, develop, adapt, test, evaluate, apply, and distribute technological solutions to problems confronted by individuals with disabilities. Functional areas addressed through rehabilitation engineering may include mobility, communications, hearing, vision, and cognition, and activities associated with employment, independent living, education, and integration into the community." http://en.wikipedia.org/wiki/Rehabilitation_engineering.

Design for All/Inclusive Design

Design for All is design for human diversity, social inclusion and equality. This holistic approach constitutes a creative and ethical challenge for all planners, designers, entrepreneurs, administrators and political leaders.

People also speak about Inclusive Design: The design of mainstream products and/or services that are accessible to, and usable by, as many people as reasonably possible without the need for special adaptation or specialized design. (The British Standards Institution (2005) British Standard 7000-6:2005).

Design for All/Inclusive Design aims to enable all people to have equal opportunities to participate in every aspect of society. To achieve this, the built environment, everyday objects, services, culture and information – in short, everything that is designed and made by people to be used by people – must be accessible, convenient for everyone in society to use and responsive to evolving human diversity.
The practice of Design for All makes conscious use of the analysis of human needs and aspirations and requires the involvement of end users at every stage in the design process. In should be embedded within the design and development process, resulting in better designed mainstream products that are desirable to own and satisfying to use.

(From The EIDD Stockholm Declaration©, 2004 (www.designforalleurope.org))
(The British Standards Institution (2005)British Standard 7000-6:2005)

Read more:
http://www.inclusivedesigntoolkit.com
http://www.designforalleuropa.org

Sub-topic 4: EU initiatives and organizations
What does the Council of Europe (COE) offer to member states on Universal Design?

The Council of Europe offers members several solutions with regard to universal design, like:
- Recommendations to governments, Plans and Examples
- Coordinated Resolutions

Here an example of a coordinated Resolution:

Council of Europe Resolution ResAP(2007)3, "Achieving full participation through Universal Design".

"Recommends that the governments of the member states of the Partial Agreement in the Social and Public Health Field (note 1), having due regard to their specific national, regional or local structures and respective responsibilities:

i. promote full participation in community life, and in particular, prevent the creation of new barriers by designing, from the outset, solutions that are accessible and usable for all; and in doing so, take into account and integrate as appropriate in their policy, legislation and practice the principles of Universal Design;

ii. be guided, in their processes of integrating Universal Design principles in policy, legislation and practice, by the measures advocated in the appendix to this resolution;

iii. promote the application of Universal Design in the implementation of Recommendation Rec(2006)5 of the Committee of Ministers to member states on the Council of Europe Action Plan to promote the rights and full participation of people with disabilities in society: improving the quality of life of people with disabilities in Europe 2006-2015;

iv. assure to this end the widest possible dissemination of this resolution amongst all parties concerned, for example through awareness-raising campaigns and co-operation with the private sector and civil society, involving, in particular, non-governmental organisations of people with disabilities."

Note (1)
These countries are: Austria, Belgium, Bulgaria, Cyprus, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

What does the European Commission offer to member states (e.g. National Standards Bodies) on Universal Design?

The Commission promotes and supports the process of technical standardization in various sectors through mandates to the European Committees for Standardization (CEN, CENELEC and ETSI).

Verwijderd: standardisation

Verwijderd: Standardisation

Some examples (can also be found via http://stand4all/links.html and http://ec.europa.eu/enterprise/policies/european-standards/standardization-policy/policy-activities/services/index_en.html) :

Verwijderd: standardisation

- M/376: Standardization Mandate to CEN, CENELEC and ETSI in support of European Accessibility Requirements for Public Procurement of Products and Services in the ICT Domain (PDF) (7 December 2005)
    - The CEN documents for phase 1 of this mandate are available on the website of CEN BT WG 185 pt.
    - The ETSI documents for phase 1 of this mandate are available on the website of Specialist Task Force 333 (accessible version) or Specialist Task Force 333 (ETSI version).
- M/420: Standardization Mandate to CEN, CENELEC and ETSI in support of European Accessibility Requirements for Public Procurement in the Built Environment (PDF) (21 December 2007).

Verwijderd: Standardisation

Verwijderd: Standardisation

There are several organizations focusing on the elderly and disability focus in Europe, to make sure that life will be possible for this growing group of people. For example, by Design for All. For a good idea on what is going on in Europe, it is important to know which organizations are active and in what way. For this training it is also interesting because it gives opportunities for cooperation and liaison.

EDF
One of these organizations is EDF. The European Disability Forum (EDF) is an independent European non-governmental organization (NGO) that represents the interests of 65 million disabled people in the European Union and stands for their rights.

EDF's mission is to promote equal opportunities for disabled people and to protect their Human Rights, making sure that no decisions concerning disabled people are taken without disabled people.

EDF was created in 1996 by its member organizations to defend issues of common concern to all disability groups, and to be an independent and strong voice for disabled citizens towards the EU institutions and other European authorities.

It is a democratic European platform that believes that a society in which disabled people are fully included, is a better society for all.

http://www.edf-feph.org/page_generale.asp?docid=14010

European blind union
EBU aims to protect and promote the interests of all blind and partially-sighted people in Europe. Its objects and powers are set out in Article II of its Constitution. EBU currently has 45 member countries, each represented by a national delegation. Its work is directed by an Executive Board of 13 elected members who are accountable to a General Assembly held every four years.

European deaf union
The European Union of the Deaf (EUD) is a European non-profit making organization whose membership comprises National Associations of Deaf people in Europe.

Established in 1985, EUD is the only organization representing the interests of Deaf Europeans at European Union level.
EUD aims to establish and maintain EU level dialogues, making sure deaf issues are raised. We do this in consultation with National Deaf Associations' members.

Age Europe
AGE, the European Older People's Platform, aims to voice and promote the interests of older people in the European Union and to raise awareness of the issues that concern them most. Everyone in the European Union is increasingly affected by decisions taken by its institutions : the Council of Ministers, the Commission, the European Parliament and the Court of Justice. Decisions affect the daily lives of all its inhabitants - including older people.

ANEC
Another organization focused on users, so not only people with disabilities, but active in the field of standardization is ANEC.

ANEC, the European consumer voice in standardization, defends consumer interests in the process of standardization and certification.

This means representing the European consumer interest in the creation of technical standards developed to support the implementation of European laws and public policies.
Although that may not sound important or interesting, standards provide the nuts and bolts of modern society. Ever thought why your mobile phone works away from home? Yes, standards. Ever thought why you need to carry a bag full of electrical adaptors when you travel abroad? That's right - a lack of standards!
But standards address more than issues of interoperability for consumers.
The use of standards can also:
- raise consumer protection and reduce the risk of accidents
- help promote environmental protection
- make the quality of services more consistent
- ensure people of all ages and abilities have equal access to products and services
- serve to underpin the digital age and the information society

DATSCG
In standardization there are several special interest groups, one of them is the Design for All and Assistive Technologies Standardization Co-ordination Group (DATSCG). This group addresses the area of eAccessibility. This WG aims to be a single standardization entry point for people with disabilities and the organizations that represent them. DATSCG is part of ICTSB (information and communications technologies standards board). So this means its focus is on ICT in standardization and not on every standard that is produced.

Position CEN
CEN is conscious about the special interest Group of consumers: people with disabilities. During the European Year of people with disabilities in 2003 for example the three European standards organizations fully supported this campaign and organized a large conference with the theme ''Accessibility for All', which covered accessibility in the public domain, in the home and on the move, as well as comparing the situation in Europe to that in other regions of the world.

(From the CEN-website <http://www.cen.eu/cenorm/news/success+stories/index.asp>)

For CEN, the high profile events of 2003 were the culmination of many years of hard work by dedicated experts. As a result, the CEN portfolio of published standards now includes many documents, which take into account the needs of people with disabilities, for example:

EN 12182 - Technical aids for disabled persons - General requirements and test methods

EN 81-70 - Safety rules for the construction and installations of lifts - Particular applications for passenger and good passengers lifts - Part 70: Accessibility to lifts for persons including persons with disability

EN 1970:2000 - Adjustable beds for disabled persons - Requirements and test methods

EN ISO 10535:1998 - Hoists for the transfer of disabled persons - Requirements and test methods

And it is not only in the physical domain that CEN has been working to improve conditions for people with special needs; e-Accessiblity is an important issue in the modern world and one that has also been tackled by CEN. Standards have been drafted to improve wheelchair access to machines with electronic card readers such as ATMs (Automated Teller Machine) and to facilitate the use of Smart Cards for people with a visual impairment by applying raised characters, to name but two.

These standards are an important step towards improving life for many people, providing them with access to products and services that were previously unavailable to them. This is not only important for people personally affected by disability but also for the European market, which, thanks to these standards, has a wider client base and greater potential.

Sub-topic 5: Developments in standardization
Sub-topic 5 is about solutions/opportunities within standardization. It focuses on initiatives that already exist and give power to consumers/end-users.

CEN/CENELEC Guide 2: Consumer interests and the preparation of standards
CEN/CENELEC developed a guide to cover consumer interests in standardization.
'Member bodies of CEN and CENELEC recognize and support the objectives of the EEC preliminary for a consumer protection and information policy, in particular that there should be 'consultation with and representation of consumers in the framing of decisions affecting their interests'.
It is a principle of standards activity that all interests affected by the work are taken into account.

Recommendations:
- Where a CEN or CENELEC committee is developing a European standard of interest to consumers, member bodies should seek means to encourage the active participation of consumers in national delegations.
- Standards work is by nature technical and complex. Where possible and necessary, member body staff should provide consumer representatives with briefing on technical issues and guidance on standards procedures.

CEN/CENELEC Guide 6: Guidelines for standards developers to address the needs of older persons and persons with disabilities
CEN/CENELEC developed also a guide especially developed for including user requirements of people with disabilities -> Guide 6.

The guide is a document for participants in standardization activities at CEN and CENELEC that contains guidance for the creation and the revision of standards to ensure greater accessibility of products and services. The document is a "Guide", in other words, not a European Standard (EN). The guide is identical to ISO/IEC Guide 71 was adopted by both the CEN Technical Board and the CENELEC Technical Board, and published in January 2002. The adoption of CEN/CENELEC Guide 6 resulted from a European mandate to the European standardization organizations. (wikipedia)

The guide is supposed to be used in standardization process. This is of course the focus of this training; how to make sure Guide 6 is implemented. We will have a good look at Guide 6 later in the training.

M376
Design for All and Assistive Technologies Standardization Co-ordination Group (DATSCG) addresses the area of eAccessibility as we discussed earlier.

EUROPEAN ACCESSIBILITY REQUIREMENTS FOR PUBLIC PROCUREMENT OF PRODUCTS AND SERVICES IN THE ICT DOMAIN – M/376
The aim of the mandate M/376 is to enable the use of public procurement and practice for ICT´s to remove barriers to participation in the Information Society by disabled and older people. The mandate was given by the European Commission to the European Standards Organizations (ESOs) to come up with a solution for common requirements and conformance assessment. The mandated work will happen in 2 phases. Phase 1 is about the production of an Inventory of European and international accessibility requirements and assessment of suitable testing and conformity schemes. The actual standardization

activities (with among others the production of an EN specifying for all ICT products and services within each of the technical areas the corresponding requirements for accessibility) will take place in Phase 2.
(http://www.ictsb.org/Working_Groups/DATSCG/Index.htm).

Motivation and background

Goal of this topic

- To understand what the drivers are for involving disabled and older people in standards development
- To inform you about some relevant EU wide initiatives

2

Point 1 – Explain to participants that involvement is not about being 'nice' it's only disabled and older people that can give a professional and personal view on how issues affect them.

Point 2 – Need to understand that there is already some important work going on at EU level.

The drivers for involvement

- Policy and legislative drivers
- Demographic changes and changes in society
- The business case
- The political and moral case

3

This sets out for the participants what the presentation will cover. Subsequent slides will make clear that there are many sound reasons for ensuring standardization takes account of and involves older and disabled people in the process.

Policy and legislative drivers

- The UN Convention on the Human Rights of Disabled People
- EU and Member State legislation on non-discrimination and rights of disabled people

4

Point 1 – Point out that the UN Convention on the Rights of Disabled People is a new 'legislative' measure that has been long overdue and requires signatory nations to specifically address barriers and discrimination disabled people face every day. If standards do not properly address the issues faced by older and disabled people, especially by using exclusion clauses to avoid catering for them, there could be a breach of the Convention.

Article 9 of the Convention is especially relevant to standards for it requires that:

•develop and monitor minimum access standards and guidelines for public services and facilities

•ensure that the private sector makes services to members of the public accessible

•provide accessibility training

•ensure signs in public buildings are in easy read and Braille

•ensure more assistance and sign language interpreters are available to support access to public buildings and facilities

•promote accessible information and access to Information and Communication Technology (for example computers and the internet) for disabled people

•promote inclusive design for new information and communication technologies so that, from the start, these are designed to be accessible to, and easy to use for, disabled people.

Point 2 – Some member states like UK and Ireland have quite good anti-discrimination legislation, but their legislation is not prescriptive; in other words it does not detail exactly what 'an accessible' building is, it just states that they should be accessible. So standards can help to define in specific terms what access means in relation to specific situations, so they could be used by organisations as tool to help them comply with the law.

UN Convention

- Purpose of the convention:

  To promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity

5

In 1994 the standard rules on the equalization of opportunities for persons with disabilities were accepted by the united nations. Although not a legally binding instrument, the Standard Rules represent a strong moral and political commitment of Governments to take action to attain equalization of opportunities for persons with disabilities. The rules serve as an instrument for policy-making and as a basis for technical and economic cooperation. There are 22 rules.

In 2006 the Convention on the Rights of Persons with Disabilities and its Optional Protocol was adopted at the United Nations Headquarters in New York, and was opened for signature on 30 March 2007. There were 82 signatories to the Convention, 44 signatories to the Optional Protocol, and 1 ratification of the Convention. The Convention entered into force on 3May 2008.

The purpose of the convention is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity. The rules are moral and political guides which the member states follow.

It's important to note that respect for the dignity of disabled people to live an independent life free of barriers is a key theme requirement of the convention.

UN Convention: Guiding Principles (1)

- Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons
- Non-discrimination
- Full and effective participation and inclusion in society
- Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity

6

There are eight guiding principles that underlie the Convention and its specific articles:

- Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons

- Non-discrimination

- Full and effective participation and inclusion in society

- Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity

- Equality of opportunity

- Accessibility

- Equality between men and women

- Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities

The presenter should emphasise the last bullet; one of the key issues in standards is the need to remove 'exclusion clauses' which state that certain things cannot be done in order to make them accessible for disabled people. This is an 'easy option' and perpetuates the social, political and economic exclusion of disabled people who are seen as 'different ' and 'special cases' thus situating them outside of society and not part of it.

UN Convention: Guiding Principles (2)

- Equality of opportunity
- Accessibility
- Equality between men and women
- Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities

7

There are eight guiding principles that underlie the Convention and its specific articles:

- Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons

- Non-discrimination

- Full and effective participation and inclusion in society

- Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity

- Equality of opportunity

- Accessibility

- Equality between men and women

- Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities

These rules and general principles on accessibility are set as a response to a shift in the world's population (more people with disabilities) and that although pre-existing human rights conventions offer considerable potential to promote and protect the rights of persons with disabilities, this potential was not being tapped.

In 2006 the international community accepted a new human rights agreement. This agreement has judicial consequences.

EU and Member State legislation

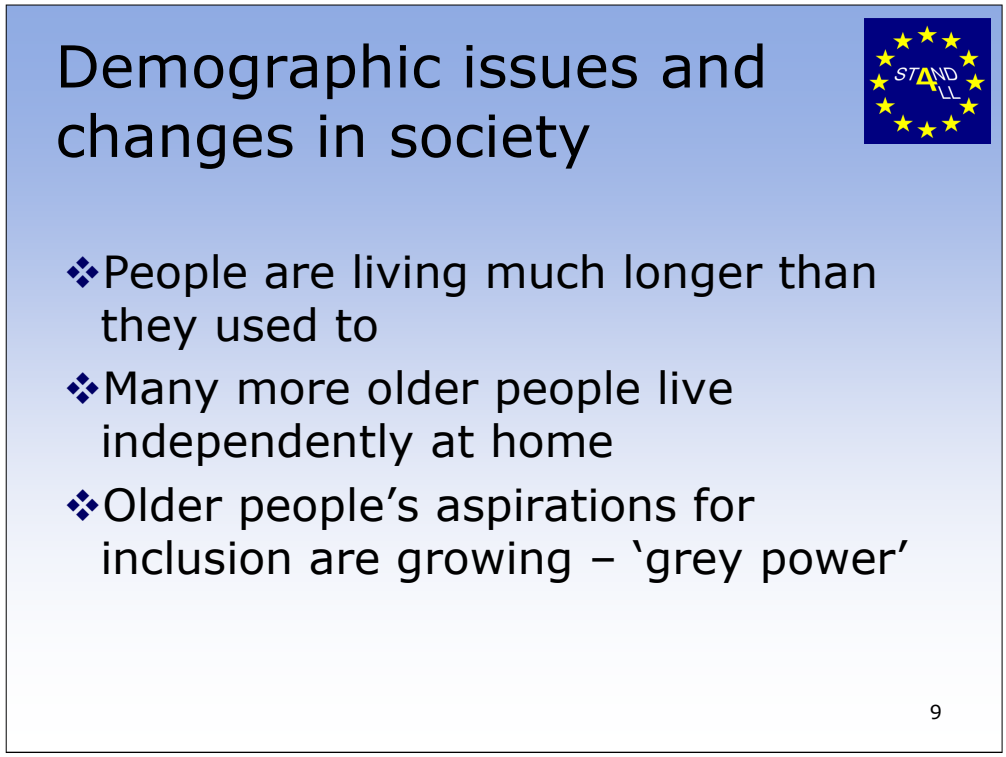
- EU Employment Equality Directive – will affect any service or product used in am employment context
- Member State legislation e.g. in the UK the Disability Discrimination Act which includes rights of access to employment, services, education, housing and transport

8

Point 1 - There is legislation at European level, admittedly not on rights of access to goods and services, but the employment equality directive of 2002 is still relevant, for example if you are providing office accommodation and facilities to your workers they will need to be accessible to disabled people as well, and standards

Point 2 - Reinforce point about standards help to comply with generalist equality legislation.

Point 3 – national legislation will vary and trainees should be encouraged to find out what applies in their country to assist when being involved in the development of national standards. Where training is being provided only within a country, then it would be helpful if the trainer provided such information.



Key points are that people live longer but are also expecting more and better products and services which means they must be inclusive.

In some EU states, such as the UK, older people are becoming more of a political force for change on a range of issues, especially since the pensions crisis where for various reasons people may not be getting as much pension or may have to wait longer for it.

Standards are a way of setting requirements to make those products and services better.

Useful statistics that can be mentioned:

The shift in the population is partly because people are living longer. This means that a great proportion of the population is elderly and that proportion is growing. The United Nations estimates that by 2050 one out of every five people will be over 60 years, and by 2150, one third of the worlds' population is expected to be 60 years of age or older.

In Europe we see the same trend. In 1995 there were 101 (15%) million of 65+, in 2050 Europe will have 173 (20%) million of 65+.

Other research show even more progressive rises:

SOURCE "Ageing well" Europa Press release 23 June 2008: "European Commission unleashes €600m for development of new digital solutions for Europe's elderly people.

By 2020, 25% of the EU's population will be over 65. To respond to this growing demographic challenge, the Council of Ministers approved today a Commission plan to make Europe a hub for developing digital technologies designed to help older people to continue living independently at home.

(http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/994&format=HTML&aged=0&language=EN).

Demographic issues and changes in society

- More disabled babies are being born and surviving into adulthood
- Many more disabled people living independently not institutions
- More disabled people are able to improve their life chances through education, employment and social participation so they demand access to services

10

Presenter to note that over the last 20 years the lives of disabled people have really changed. The issue of the rights of disabled people to be born, and to live full and independent lives regardless of their impairment, is much more recognised. The disability movement in the US and in Europe has pushed for an end to the isolation of disabled people in institutions where they often lived shorter, more restricted lives. Now that this is changing the political pressure to make society more inclusive is growing all the time.

The Business Case

- More older and disabled people expecting access to employment and services – they will purchase products that meet their requirements
- Making products and services inclusive can save money - no retrofitting

11

Presenter to note following from last slide that the higher aspirations and expectations of disabled people and the fact that many more disabled people have money to spend creates a market for good inclusive products and services, so industry supporters of standards can see a business benefit in using inclusive standards.

Also to note that trying to fix a problem 'after the event' is much more costly than following inclusive design principles in the first place.

The Business Case

- More disabled people are setting up their own businesses to provide products – competition will only increase
- Take the lead of Mac where access software is part of the operating system...smart companies know the way forward

12

Point 1 – more disabled people are starting to set up businesses to provide accessible products and services and so this will increase choice and create more market pressure to supply better goods and services.

Point 2 – this is an example, presenter should invite participants to think of their own and if possible come prepared with own further examples.

The Political/Moral Case

- Political awareness of disabled people about their position in society – recognising and understanding the causes of exclusion and oppression and how to tackle them
- The Social Model of Disability

13

Point 1 – need to emphasise that the link to standards is that if a standard is not inclusive, and is implemented by an organisation, then it will further entrench existing barriers.

Point 2 – Presenter needs to state they will explain what the social model is and how it's relevant on next slide.

14

The picture (someone in a wheelchair, looking up at a bank of luggage lockers where the controls are far too high to reach) sums up what's been said so far: the fact that this person cannot use the provision arises from poor design in the first place and the result is a barrier and loss of dignity for the disabled person (they would have to ask someone to help them access it).

NOTE TO PRESENTERS Remember to describe the picture for trainees who cannot see it.

Social Model of Disability

- Instead of locating the problem within the individual (**individual model of disability**), The **social model of disability** locates the problem of disability within society. The cause of the problems is society's failure to provide appropriate services and adequately ensure the needs of disabled people are fully taken into account in its social organisation

15

Disabled people reject the medical model which focuses on them not being 'normal' and needing to be made 'normal' through medical intervention

Social model developed by disabled people – the problem is society, it has not designed its attitudes, ways of doing things and physical environment to include all disabled people and that is what disables us.

Instead of "treating or rehabilitating the patient", the social model focuses on full functional participation in society. The individual and social models of disability are conflicting models and difficult to integrate (van Roosmalen & Ohnabe, 2007, 53). Anti-discrimination legislation, inclusive design, rehabilitation engineering, and more inclusive standards all play a role within the social model of disability and can enable persons with disabilities to participate in society.

More information on the individual model of disability, the medical model of disability and the social model of disability can be found in the manual.

Design for All

- Design for All (DfA)/Inclusive design:
- Design for All is design for human diversity, social inclusion and equality
- To achieve this, the built environment, everyday objects, services, culture and information must be accessible, convenient for everyone in society to use and responsive to evolving human diversity.

16

Design for All is design for human diversity, social inclusion and equality. This holistic approach constitutes a creative and ethical challenge for all planners, designers, entrepreneurs, administrators and political leaders.

People also speak about Inclusive Design: The design of mainstream products and/or services that are accessible to, and usable by, as many people as reasonably possible ... without the need for special adaptation or specialized design. (The British Standards Institute (2005)British Standard 7000-6:2005)

Design for All/Inclusive Design aims to enable all people to have equal opportunities to participate in every aspect of society. To achieve this, the built environment, everyday objects, services, culture and information – in short, everything that is designed and made by people to be used by people – must be accessible, convenient for everyone in society to use and responsive to evolving human diversity.

The practice of Design for All makes conscious use of the analysis of human needs and aspirations and requires the involvement of end users at every stage in the design process. In should be embedded within the design and development process, resulting in better designed mainstream products that are desirable to own and satisfying to use.

(From The EIDD Stockholm Declaration©, 2004 (www.designforalleurope.org))

(The British Standards Institute (2005)British Standard 7000-6:2005)

Some relevant EU wide initiatives

There is a range of European legislation and initiatives which are relevant to this topic. The following slides provide some examples. It is noted that to maintain currency of the slides, the trainer should check whether any new legislation, directives or mandates have been created since this presentation was compiled in early 2010.

Useful information can be found on the Europa website (http://ec.europa.eu), for example on the home page of DG Employment, Social Affairs and Equal Opportunities (http://ec.europa.eu/social/home.jsp?langId=en). For standardisation issues, the DG Enterprise and Industry website standards pages can be consulted (http://ec.europa.eu/enterprise/policies/european-standards/index_en.htm).

EU Policy (1)

- CoE Resolution ResAp (2001)1 "on the introduction of the principles of universal design into the **curricula** of all occupations working on the **built environment**" ("Tomar Resolution")
- => "Universal design"
- ResAP(2007)3 "Achieving full participation through Universal Design"

18

The Council of Europe Committee of Ministers Resolution ResAP(2001)1 on the introduction of the principles of **universal design** into the
curricula of all occupations working on the built environment was adopted by the Committee of Ministers
on 15 February 2001, at the 742nd meeting of the Ministers Deputies.

It was undertaken as part of integrating disabled people into the community, in line with the principles of independent living, by eliminating barriers.

Resolution ResAP(2007)3 "Achieving full participation through Universal Design" was adopted by the Committee of Ministers on 12 December 2007
at the 1014th meeting of the Ministers' Deputies with the purpose of recommending that member states integrated Universal Design principles in policy, legislation and practice, using guidelines supplied in an Annex to the document.

It took account of various earlier resolutions and declarations, including the 2001 ResAP, above, and subsequent recommendations such as: Recommendation Rec(2006)5 of the Committee of Ministers to member states on the "Council of Europe Action Plan to promote the rights and full participation of people with disabilities in society: improving the quality of life of people with disabilities in Europe 2006-2015". This states that "the application of Universal Design principles is of paramount importance for improving the accessibility of the environment and the usability of products".

NOTE Universal design is another term which relates to inclusivity, it is typically used in relation to architectural planning where it is intended to describe buildings, products and environments that are aesthetically pleasing and inherently accessible to all, including physically disabled people.

EU Policy (2)

- Recommendation Rec(2006)5 of the Committee of Ministers to member states on the Council of Europe Action Plan to promote the rights and full participation of people with disabilities in society: improving the quality of life of people with disabilities in Europe 2006-2015
- EU Disability Action Plan (DAP) 2008-2009

19

Council of Europe Committee of Ministers Recommendation Rec(2006)5 of the Committee of Ministers to member states on the Council of Europe Action Plan to promote the rights and full participation of people with disabilities in society: improving the quality of life of people with disabilities in Europe 2006-2015 was adopted by the Committee of Ministers on 5 April 2006, at the 961st meeting of the Ministers' Deputies. Essentially it is about promoting the Council of Europe action Plan which covers a very wide range of topics.

The Action Plan is described as being intended to provide a roadmap for policy makers, to 'enable them to design, adjust, refocus and implement appropriate plans, programmes and innovative strategies' and acknowledges the basic principle that society has a duty towards all its citizens 'to ensure that the effects of disability are minimised through actively supporting healthy lifestyles, safer environments, adequate health care, rehabilitation and supportive communities.'

Many of these actions are highly relevant to standards.

https://wcd.coe.int/ViewDoc.jsp?id=986865

The objectives of the broader plan above were to embed disability issues in mainstream legislation.

The focus of the EU Disability Action Plan (DAP) 2008-2009 was accessibility in the labour market and, of particular relevance to standardization, boosting accessibility of goods, services and infrastructures.

http://ec.europa.eu/social/main.jsp?catId=430&langId=en

Relevant Organisations

There are several organizations focusing on older and disabled people and their issues in Europe. The following slides describe some. Trainers may wish to add examples of organizations in their own country where training is being delivered at a national level.

The European Disability Forum (EDF) is an independent European non-governmental organisation (ENGO) that represents the interests of 65 million **disabled people** in the European Union and stands for their rights. It is a generic organization for any kind of disability.

EDF's mission is to promote equal opportunities for disabled people and to protect their Human Rights, making sure that no decisions concerning disabled people are taken without disabled people.

EDF was created in 1996 by its member organisations to 'defend issues of common concern to all disability groups, and to be an independent and strong voice for disabled citizens towards the EU institutions and other European authorities'.

It believes that a society in which disabled people are fully included, is a better society for all.

www.edf-feph.org

There are several European organizations dedicated to people with specific disabilities:

European blind union

EBU aims 'to protect and promote the interests of all blind and partially-sighted people in Europe'. EBU currently has 45 member countries, each represented by a national delegation. Its work is directed by an Executive Board of 13 elected members who are accountable to a General Assembly held every four years. Its objects and powers are set out in Article II of its Constitution.

www.euroblind.org

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The European Union of the Deaf (EUD) is a European non-profit making organization whose membership comprises National Associations of Deaf people in Europe. Established in 1985, EUD is stated to be the only organization representing the interests of Deaf Europeans at European Union level.

EUD aims to establish and maintain EU level dialogues, making sure deaf issues are raised and does this in consultation with National Deaf Associations' members.

www.eud.eu

Age Europe

AGE, the European Older People's Platform is a European network of around 150 organisations of and for people aged 50 plus. It aims to voice and promote the interests of older people in the European Union and to raise awareness of the issues that concern them most.

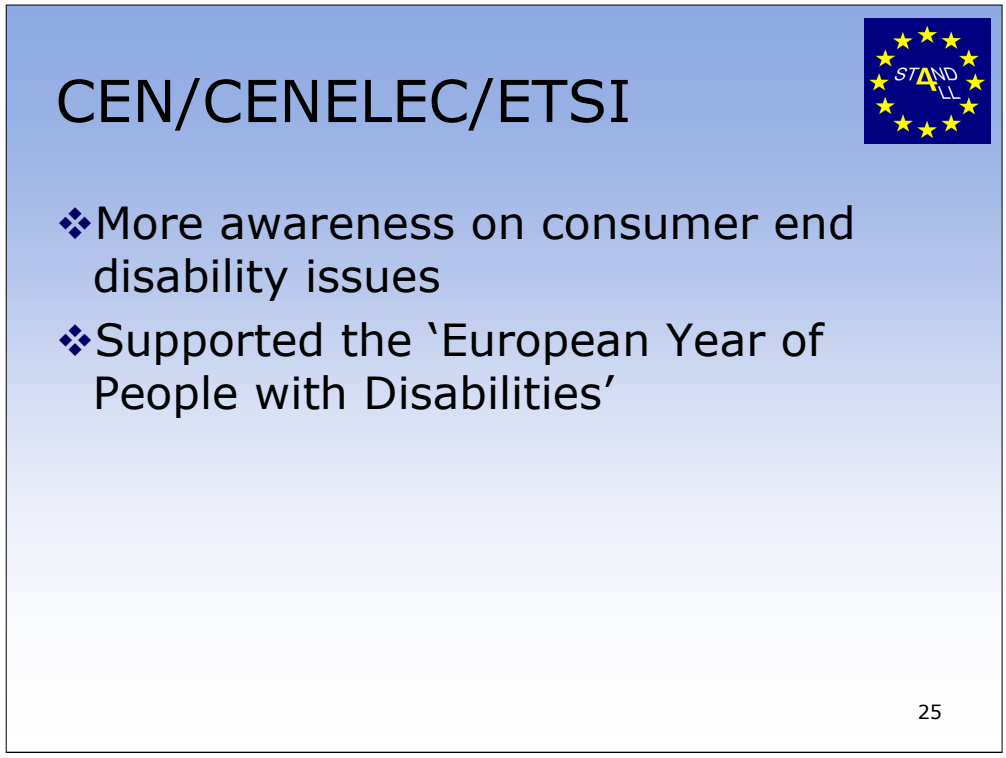
www.age-platform.eu

Another organization focused on users, not only people with disabilities, which is active in the field of standardization is ANEC.

ANEC describes itself as the 'European voice of consumers in standardization'. It has observer status on the Technical Committees of the European standards bodies and trains consumer representatives to provide input to those committees, linking with relevant national consumer organizations. It operates with a series of working groups focusing on key priority areas such as child safety, the environment, services and the digital age.

www.anec.eu

In standardization there are several special interest groups, one of them is the Design for All and Assistive Technologies Standardization Co-ordination Group (DATSCG). This group addresses the area of eAccessibility. This WG aims to be a single standardization entry point for people with disabilities and the organisations that represent them. DATSCG is part of ICTSB (information and communications technologies standards board). So this means its focus is on ICT in standardization and not on every standard that is produced.



The European standards organizations CEN, CENELEC and ETSI which develop standards across a broad range of topics all have work underway in relation to accessibility. During the European Year of people with disabilities in 2003, they together organized a large conference with the theme ''Accessibility for All', which covered accessibility in the public domain, in the home and on the move, as well as comparing the situation in Europe to that in other regions of the world.

(From the CEN-website <http://www.cen.eu/cenorm/news/success+stories/index.asp>)

Over the years, a large number of standards have been produced specifically addressing aspects of accessibility, some relating to specific assistive devices and, more recently, others about ensuring accessibility within mainstream products.

Two examples of standards which have been around for some time:

EN 12182 - Technical aids for disabled persons - General requirements and test methods

EN 1970:2000 - Adjustable beds for disabled persons - Requirements and test methods

It is not only in the physical domain that CEN has been working to improve conditions for people with special needs; e-Accessiblity is an important issue in the modern world and one that has also been tackled by CEN. Standards have been drafted to improve wheelchair access to machines with electronic card readers such as ATMs (Automated Teller Machine) and to facilitate the use of Smart Cards for people with a visual impairment by applying raised characters, to name but two.

These standards are an important step towards improving life for many people, providing them with access to products and services that were previously unavailable to them. This is not only important for people personally affected by disability but also for the European market, which, thanks to these standards, has a wider client base and greater potential.

Title page for subsequent slides…

Standardisation requests (mandates) are the mechanism by which the Commission requests the European Standards Organisations (ESOs), CEN, CENELEC and ETSI, mentioned earlier. to develop and adopt European standards in support of European policies and legislation.

Draft mandates are drawn up by the Commission services through a process of consultation with a wide group of stakeholders. Before being formally addressed to the ESOs, they are submitted for opinion to the Member States in the Standing Committee of the 98/34/EC Directive

The following are some mandates of particular relevance to accessibility (The link, below, has a further link which gives access to a database of mandates: http://ec.europa.eu/enterprise/policies/european-standards/standardisation-requests/index_en.htm)

Mandate 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 (e.g. elderly and disabled). This resulted in the adoption of ISO Guide 71 Guidance to standards developers on the needs of older and disabled people, as CEN Guide 6. This document will be explained in another part of this training.

Mandate 273 - Mandate to the European Standards Bodies for standardization in the field of **information and communications technologies** (ICT) for disabled and elderly people. This mandate led to a large programme of standardization work in the ICT area taking into account accessibility.

These two mandates resulted in guidance to be used by people developing standards on the topics identified:

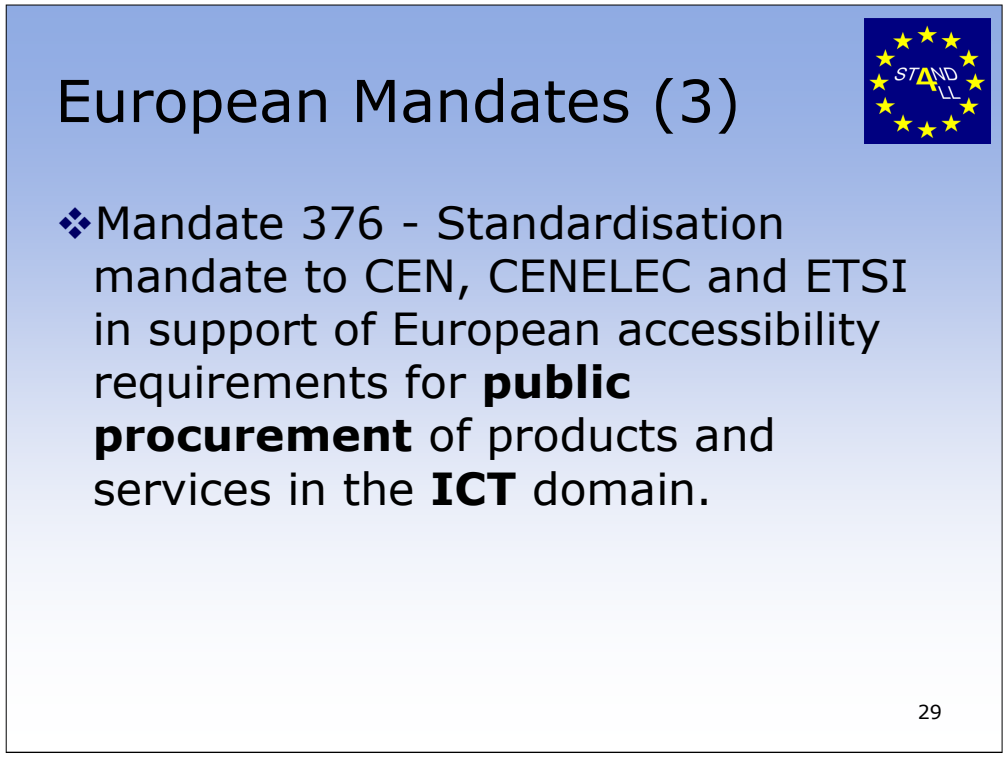
Mandate 292 resulted in CEN/CENELEC Guide 11 Product information relevant to consumers - Guidelines for standard developers

Mandate 293 resulted in CEN/CENELEC Guide 14 Child safety guidance for its inclusion in standards

All the CEN and CEN/CENELEC Guidance documents can be downloaded from:

http://www.cen.eu/boss/supporting/Reference%20documents/guides/Pages/default.aspx

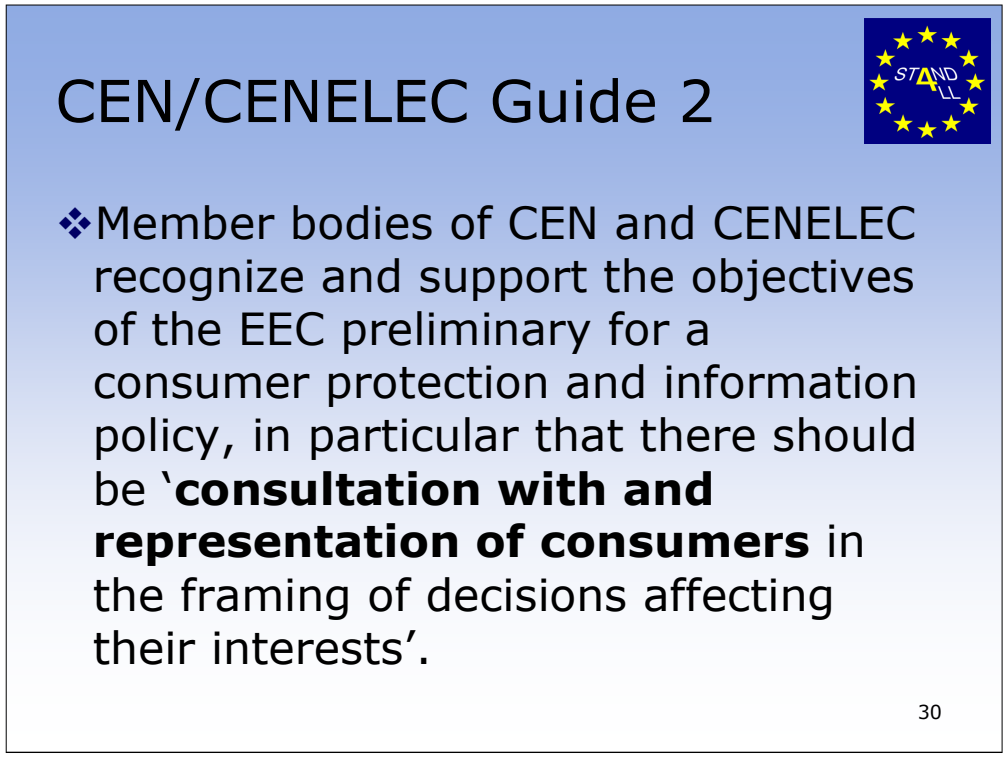
These documents are important as is safety but there is a need to be aware that standards safety can be seen as paramount, which can result in action being taken to exclude use by disabled people, so a balance needs to be found. Similarly there are sometimes apparent conflicts in the requirements for the safety of children and the needs of older or disabled people (for example child resistant closures on medicines which are difficult for some older people to open). Increasingly work is underway to balance all needs.



Design for All and Assistive Technologies Standardization Co-ordination Group (DATSCG) addresses the area of eAccessibility as we discussed earlier.

EUROPEAN ACCESSIBILITY REQUIREMENTS FOR PUBLIC PROCUREMENT OF PRODUCTS AND SERVICES IN THE ICT DOMAIN – M/376

The aim of the mandate M/376 is to enable the use of public procurement and practice for ICT´s to remove barriers to participation in the Information Society by disabled and older people. The mandate was given by the European Commission to the European Standards Organisations (ESOs) to come up with a solution for common requirements and conformance assessment. The mandated work will happen in 2 phases. Phase 1 is about the production of an Inventory of European and international accessibility requirements and assessment of suitable testing and conformity schemes. The actual standardisation activities (with among others the production of an EN specifying for all ICT products and services within each of the technical areas the corresponding requirements for accessibility) will take place in Phase 2. (http://www.ictsb.org/Working_Groups/DATSCG/Index.htm).



CEN/CENELEC Guide 2: Consumer interests and the preparation of standards

Cen/cenelec developed a guide to cover consumer interests in standardization. This is important for consumers in general – recognising the importance of their participation in the standards development process, and also for disabled consumers – who from personal experience are better equipped to be aware of the impact of some provisions in standards on those with impairments.

Key parts from Guide 2 are:

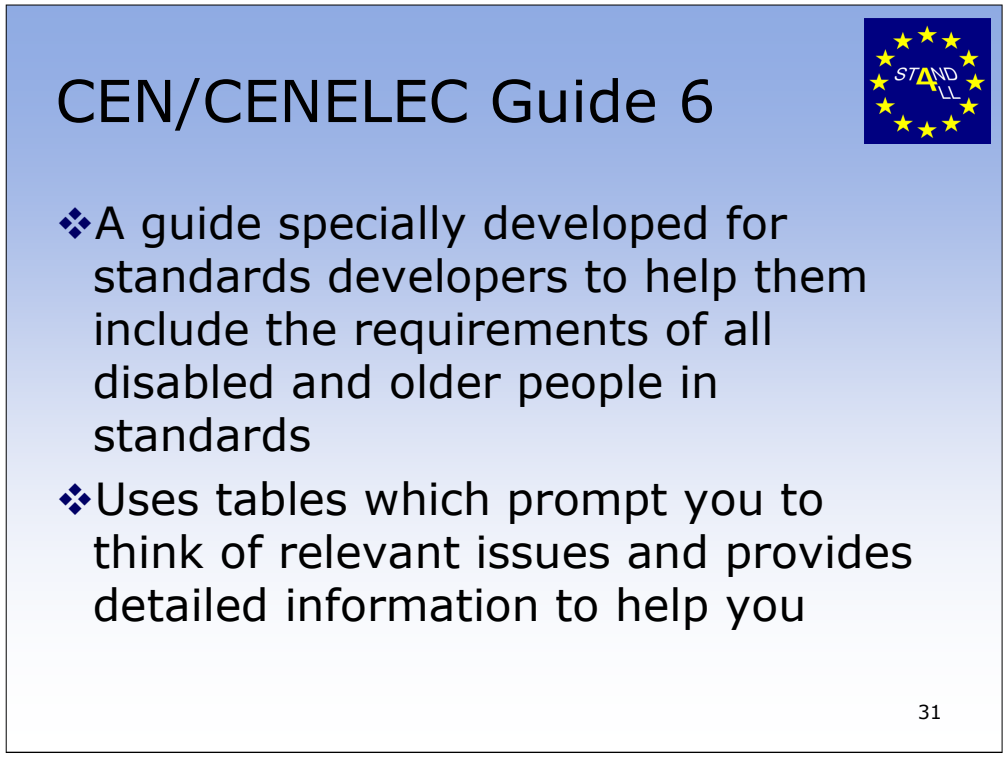
'Member bodies of CEN and CENELEC recognize and support the objectives of the EEC preliminary for a consumer protection and information policy, in particular that there should be 'consultation with and representation of consumers in the framing of decisions affecting their interests'.

It is a principle of standards activity that all interests affected by the work are taken into account.

Recommendations:

Where a CEN or CENELEC committee is developing a European standard of interest to consumers, member bodies should seek means to encourage the active participation of consumers in national delegations.

Standards work is by nature technical and complex. Where possible and necessary, member body staff should provide consumer representatives with briefing on technical issues and guidance on standards procedures.



As previously indicated, the consequence of Mandate 283 was CEN/CENELEC Guide 6. this will be described in more detail in another part of the training programme.

CEN/CENELEC Guide 6: Guidelines for standards developers to address the needs of older persons and persons with disabilities

The guide is a document for participants in standardization activities at CEN and CENELEC that contains guidance for the creation and the revision of standards to ensure greater accessibility of products and services. The document is a "Guide", in other words, not a European Standard (EN). The guide is identical to ISO/IEC Guide 71 was adopted by both the CEN Technical Board and the CENELEC Technical Board, and published in January 2002.

The guide is supposed to be used during the standardization process. This is of course the focus of this training; how to make sure Guide 6 is implemented.

Redefining Experts

- By working together disabled people and committee members can understand complex issues and work together to deal with them
- It's exciting – many issues and solutions will never have been thought about before!

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Points self explanatory but the last one is trying to enthuse participants that not all the answers are known, but we can learn a lot from each other and maybe think of some new solutions.

STAND4ALL

Topic
'User participation in standardization'

User participation in standardization; How to use Guide 6 in the Standardization Process?

Several issues stand in the way of standards that address the needs of older persons and persons with disabilities. These issues a lack of awareness of the principles of CEN/CENELEC Guide 6, and a lack of knowledge about how Guide 6 can be used in standardization. This topic addresses these issues and makes trainees more familiar with the use of the Guide.

The topic will consist of the following parts:

1. the barriers to end-user representation in standardization, and how the USEM principles and standardization principles deal with these barriers;
2. factors to consider in the design of accessible products and services;
3. how to use the tables in clause 7 of Guide 6;
4. a group assignment on the use of the tables in clause 7 of Guide 6.

The goals of this topic:

- Trainees have basic knowledge of the principles of Guide 6 and how it is set up.
- Trainees know how to use Guide 6 in standardization (CEN, CENELEC, ETSI).

Annexes:

- STAND4ALL document: 'Implementing Guide 6 in the Standardization Process'.
- Presentation handouts
- Description of group assignment

Some examples where to find information related to this topic:

- Website USEM project for the USEM principles (www.usem-net.eu)
- Website CEN for information on principles in standardization (http://www.cen.eu/cenorm/workarea/handson/handsonguidejan091.pdf)
- CEN for Guide 6

Implementing Guide 6 in the standardization Process

The goals of this topic are:

Trainees have basic knowledge of the principles of Guide 6 and how it is set up.

Trainees know how to use Guide 6 in standardization (CEN, CENELEC, ETSI).

The topic consist of the following parts:

- First part: Discussion on the barriers to end-user representation in standardization
- Second part: Discussion on factors to consider in the design of accessible products and services.
- Third part: Review of the structure of Guide 6 and provides examples of factors to consider during the standardization process.
- Fourth part: How to use the tables in clause 7 of Guide 6. This part explains how the tables can be used, in order to prepare the trainees for the group assignment.
- Fifth part: A group assignment on the use of the tables in clause 7 of Guide 6.

This topic is should be threaten as interactive as possible. The trainees need to have Guide 6 in front of them during this Topic, both to follow the presentation as to carry out the assignment. This topic needs 60 minutes.

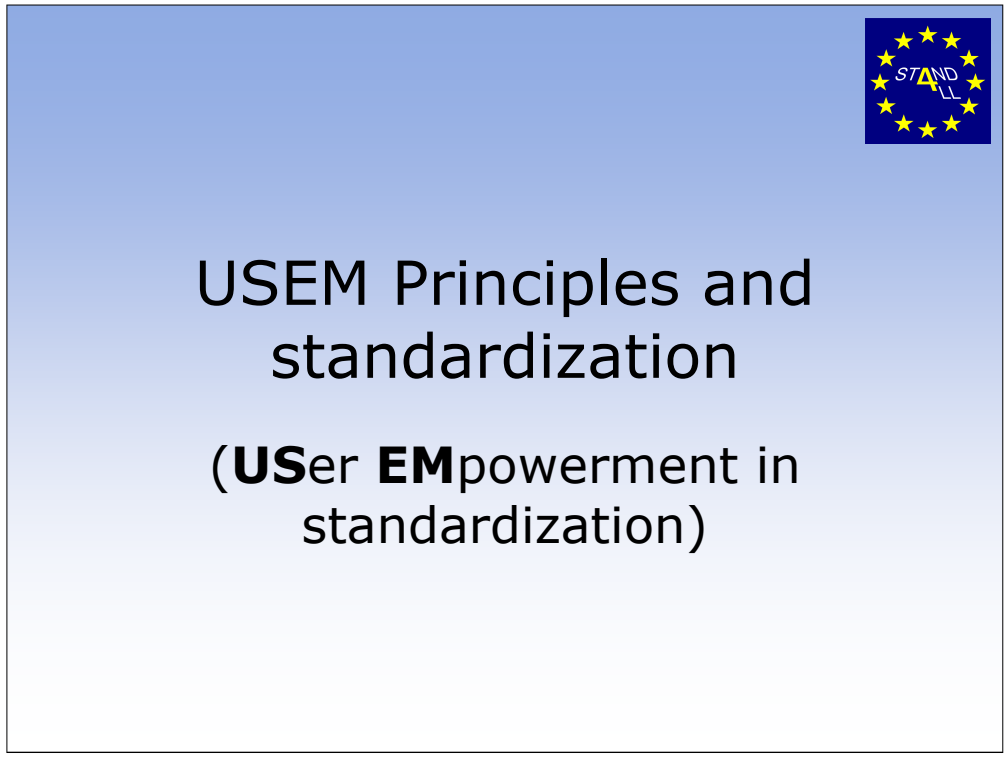
Objectives

- You know the barriers to user participation
  &
  how they can be addressed.

- You know how to use CEN/CENELEC Guide 6 in standardization.

2

Several issues stand in the way of standards that address the needs of older persons and persons with disabilities. These issues a lack of awareness of the principles of CEN/CENELEC Guide 6, and a lack of knowledge about how Guide 6 can be used in standardization. This topic addresses these issues and makes trainees more familiar with the use of the Guide.



In order to explain what the barriers for user participation are and how they can be addressed, the USEM concept is important. The USEM concept is therefore introuced and explained first.

The USEM concept was developed almost a decade ago to involve lay people in research and development activities. USEM stands for User Empowerment in standardization

The USEM project is one of the initiatives that aim to increase the participation of end-users in standardization. The USEM project formulated six principles that should govern the involvement of end-users in standardization activities.

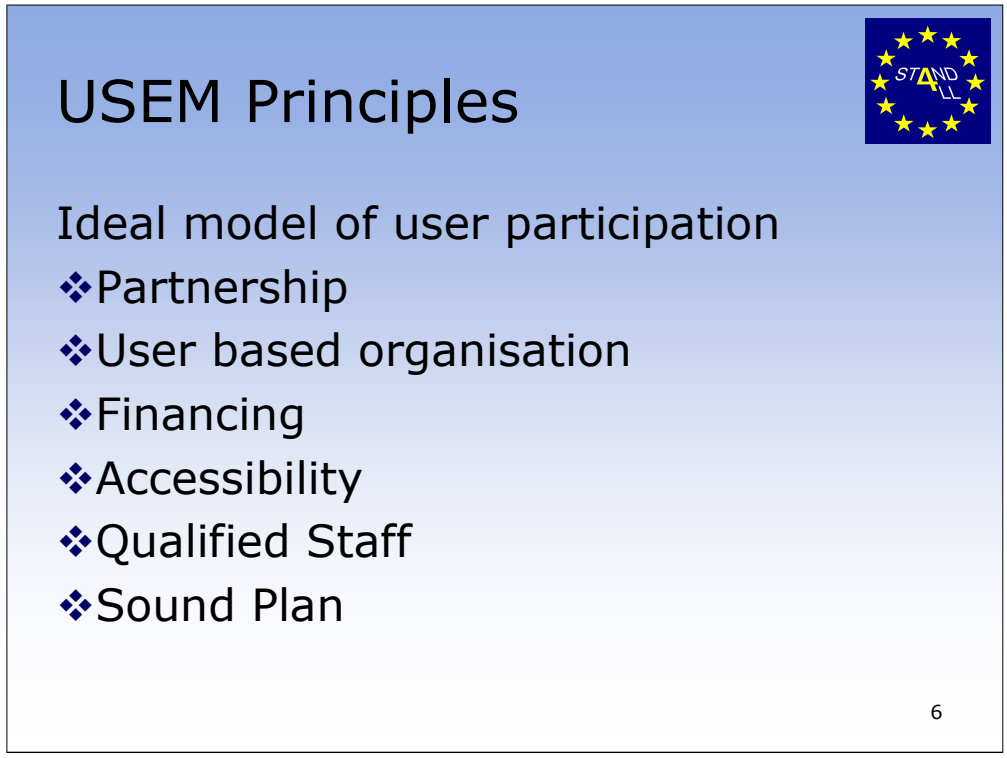
In standardization, issues of participation of lay older people and people with disabilities are not (highly) addressed. Even though representation of older persons and persons with disabilities in standardization work is still too low, it is possible to demonstrate that the USEM principles map to principles used by standardization organizations.

USEM Principles

- The USEM concept is part of the core curriculum for the training of end users. It is based on six principles which govern the involvement of end users in standardization activities

5

Even though representation of older persons and persons with disabilities in standardization work is still very low, it is possible to demonstrate that the USEM principles map to principles used by standardization organizations.



The different principles will be explained in more detail.

If you want to find more information on the USEM concept, have a look at www.usem-net.eu.

The co-operation will be based upon the spirit of partnership and will have a positive approach. Partnership means the state of being of a person or organization that shares or takes part with others in a project or business with shared risks and profits. Partnership can be viewed as a key notion of the USEM concept.

Principle 1-Partnership

- Guide 2: beyond "openness":
  - "At national level there should be provision for consumer participation in the initiation and planning…"
  - "At national level consumer interests should be invited to participate…"
- => Refer to Guide 2 to put planning for user participation in context.(Consumer Interests and the preparation of European standards)

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CEN/CENELEC Guide 2 indirectly supports the inclusion of older persons and persons with disabilities because it recommends that national members of CEN and CENELEC provide for consumer participation in the planning of standardization work and in policy matters relevant to consumer interest.

With regard to the European level, the guide states:

Where a CEN or CENELEC committee is developing a European Standard of interest to consumers, Member bodies should seek means to encourage the active participation of consumers in national delegations.

The guide also recognises that the technical nature of standardization work can be a barrier for end-user participation, and recommends the following:

Standards work is by nature technical and complex. Where possible and necessary, Member body staff should provide consumer representatives with briefing on technical issues and guidance on standards procedures.

Principle 2- User Based Organisation

- USEM: Users are members and/or representatives of user organizations.
- ESO: Like any other participant in standardization, user participants are expected to defend the positions of the constituency on whose behalf they participate.
- Users can fall back on their organisation (e.g. working group)

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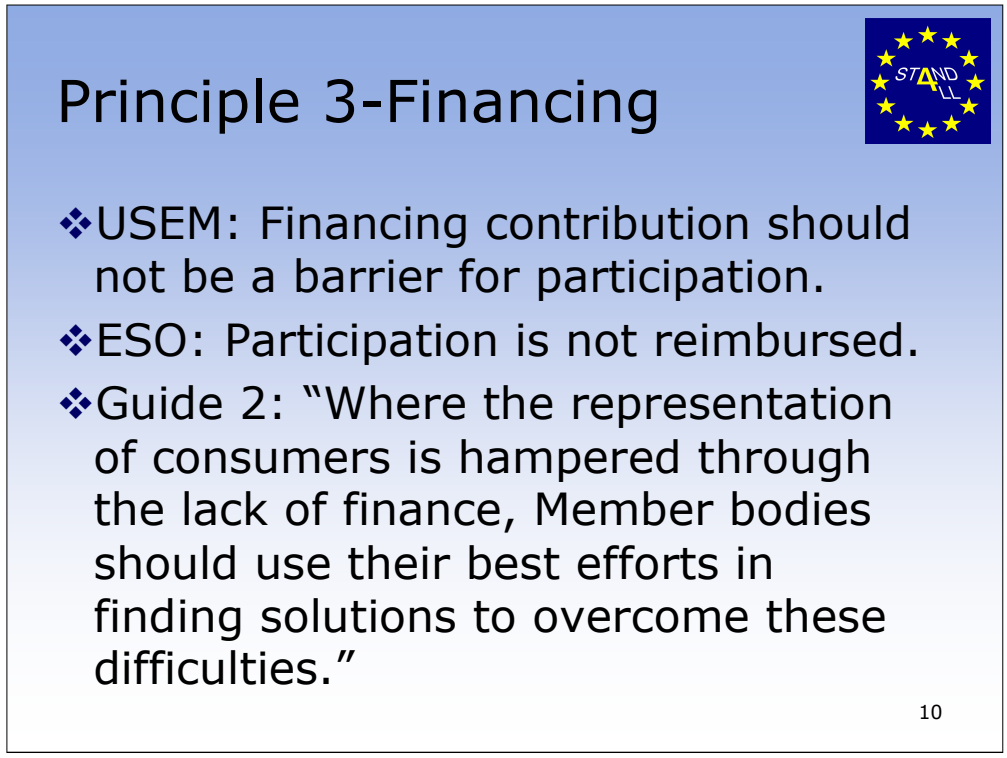
The corresponding principle in standardization states that like any other participant in standardization, user participants are also expected to defend the positions of the constituency on whose behalf they participate.

(See for example recommendation 3 in CEN/CENELEC Guide 2 “Consumer interests and the preparation of standards”: “Where a CEN or CENELEC committee is developing a European Standard of interest to consumers, Member bodies should seek means to encourage the active participation of consumers in national delegations.”)



All partners in the project receive appropriate payments for their contribution.

The contribution of users is not handled as a volunteering activity, but as a fully valuable contribution to the project.

In standardization, participants pay for participation. For consumers/end-users this is difficult to arrange. This must be taken into account.

Recommendation 6 of CEN/CENELEC Guide 6 states "Where the representation of consumers is hampered through the lack of finance, Member bodies should use their best efforts in finding solutions to overcome these difficulties."

Principle 4- Accessibility

- USEM: Accessibility of all relevant materials and premises is guaranteed.
- ESO: All participants have access to the relevant information.

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All project materials, communications and premises should be made accessible to the users.

Alternative formats for print material, appropriate communication media, accessible meeting sites, rooms and hotel accommodation, personal assistance.

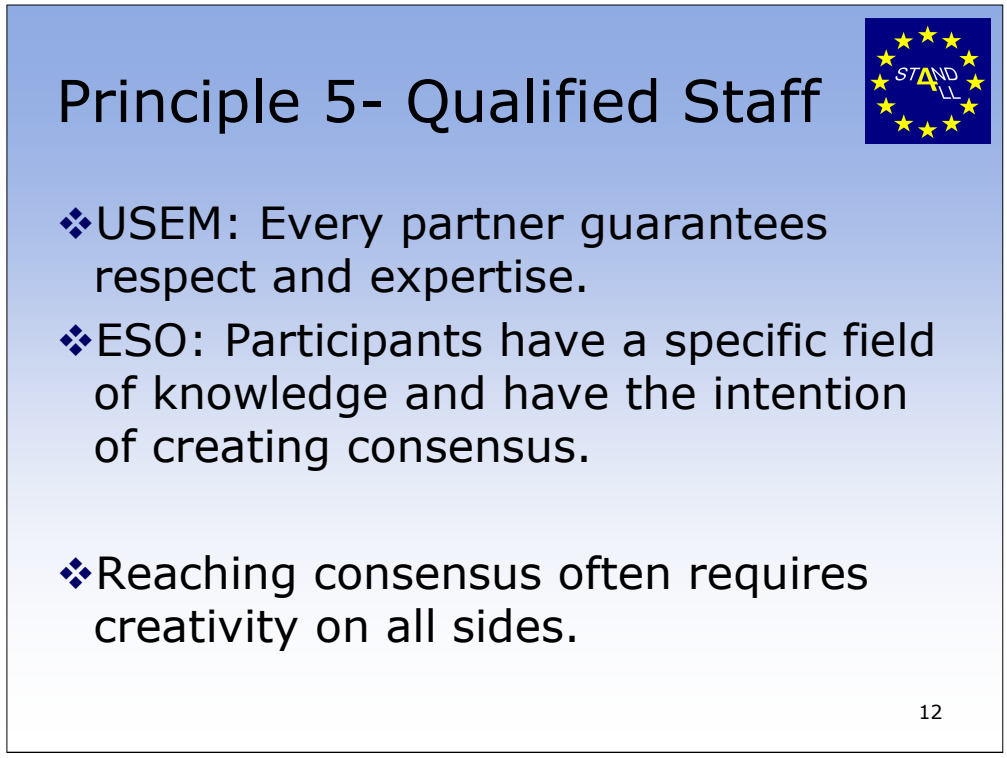
Issue beyond individual TCs:

- Templates, reference manuals and documents need accessibility review
- Platform for sharing documents: ditto
- Accessible premises:

  Retrofit or

  Requirement for new building

  - Accessible meetings:
    also requires education for ESO/NSB staff



Every partner has to provide qualified staff members to the project.

Staff members provide the right attitude, respect, expertise and skills for the project. They accept project rules and constraints like timing, budgets, confidentiality, etc.

Comment:

For successful participation it is important that everyone understands the processes of standards making, to acknowledge the expertise of other stakeholders and to interact in a respectful meaningful way. It was important for the user experts, that it is not expected that they become the “better engineers” but to contribute from their user experience. However, this is also an issue to understand for the technical experts. The must not claim to be the “better elderly or disabled user”.

Principle 6- Sound Plan

- USEM: Detailed plan for the project (including timing of drafts, meetings and opportunities for commenting/influencing the standards work and expectation of user participation).
- ESO: Any standard development process follows a timetable with possibilities to influence, which is known when the project starts.

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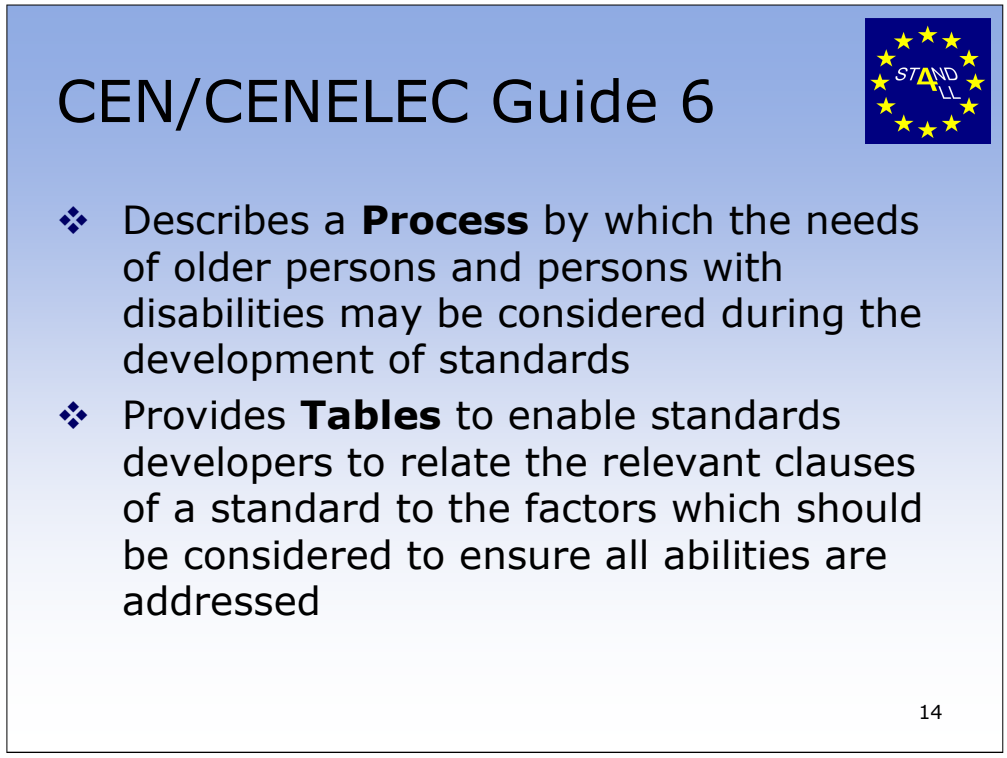
Detailed plan for the process and user involvement process.

The plan contains details regarding the availability of drafts, meetings and opportunities for commenting / influencing the standardization work and expectation of user participation. It contains also appropriate work packages and tasks of user participation. User participation is planned and described with the same detail as all other items of the project plan, including responsibilities, methods, timing, and budgets.

In practise it needs serious consideration to organise the process in a way that users can really participate.

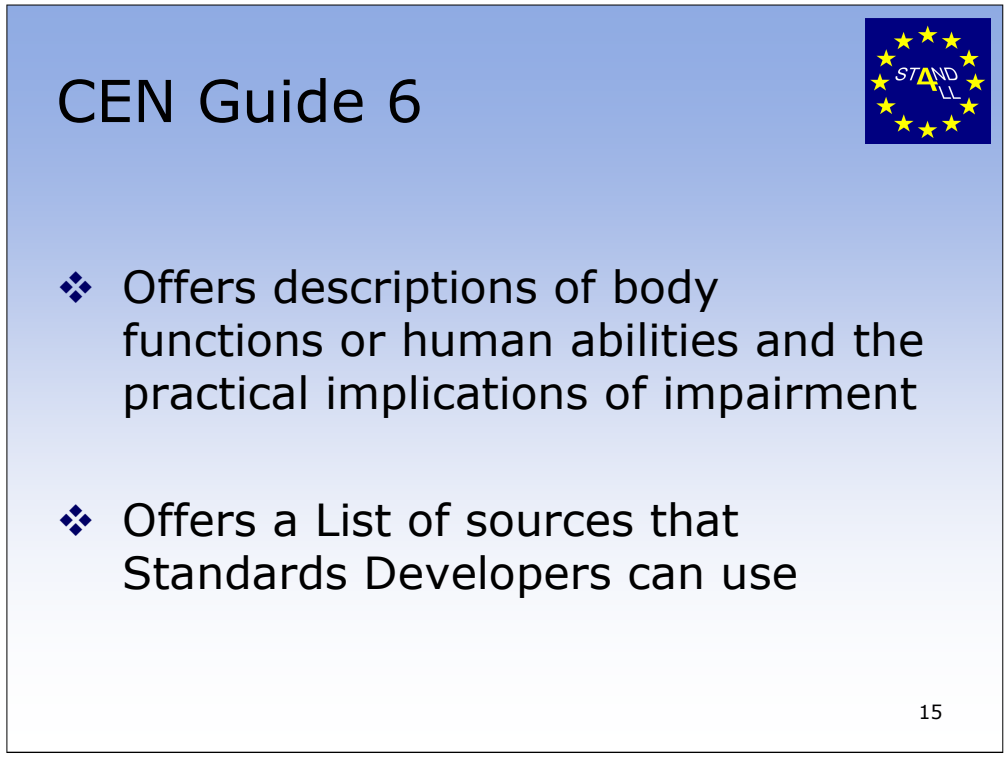
Business plan provides an overview of interested stakeholders and the actual work plan.

= Good opportunity to plan user involvement.



CEN/CENELEC Guide 6: Guidelines for standards developers to address the needs of older persons and persons with disabilities is a document for participants in standardization activities at CEN and CENELEC that contains guidance for the creation and the revision of standards to ensure greater accessibility of products and services.

The document is a "Guide", in other words, not a European Standard. The guide is identical to ISO/IEC Guide 71 was adopted by both the CEN Technical Board and the CENELEC Technical Board, and published in January 2002. The adoption of CEN/CENELEC Guide 6 resulted from a European mandate to the European standardization organisations, and the European Commission is funding projects to promote the use of the Guide.



CEN/CENELEC Guide 6 is a document for participants in CEN technical bodies: Technical Committees or TCs, Working Groups or WGs, Task Forces, Workshops etcetera. These technical bodies are responsible for addressing the needs of persons with disabilities and older people in the standards, specifications, reports or other documents that they produce.

CEN/CENELEC Guide 6 has three goals:

- to inform how human abilities (and disabilities) affect the usability of products, services and the built environment,
- to describe how requirements in standards relate to accessibility and usability of products and services,
- to raise awareness about the benefits of accessible design.

Structure of Guide 6

(…)

Clause 5. Using Guide 6

Clause 6. Developing standards – Issues to consider during the standards development process

Clause 7. Tables of factors to consider …

Clause 8. Factors to consider

Clause 9. Describes human abilities and the consequences of impairment

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The Guide consists of a few introductory sections followed by 10 other chapters which are called "clauses".

The most important chapters are presented here:

•Clause 6 briefly describes a process that allows technical committees to consider the needs of older persons and persons with disabilities. It divides the standardization process into five steps; for each step, the Guide lists one or more issues that need to be addressed.

•Clause 7 and 8 provide tables that relate several types of clauses in a standard (for example, on packaging, the user interface and the built environment) to factors that need to be considered when addressing disabilities.

•Clause 9 provides descriptions of body functions or disabilities and their implications when using products and services.

The last chapter is a bibliography that provides a list of resources for more specific guidance.

Clause 6

Developing Standards – Issues to consider during the standards development

- Define standards project
- Ensure committee is well equipped
- Develop content of the Standard (CEN Guide 6)
- Review Process
- Publish Standard

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Clause 7

Tables of factors to consider during the standards development process

- Each **Table** identifies **typical clauses** or **sections** of a **Standard**
- Within each Table, the **first column identifies**, through **key words** , the **factors** which should be considered
- The **key words** are number as they are **described** in **Clause 8** of the Guide

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Clause 7 of Guide 6 contains tables of factors to consider to ensure that standards provide for accessible design, these factors are explained in some more detail in Clause 8.

Clauses 7 and 8 of Guide 6 define seven design fields that are relevant to accessible design.

Clause 7 and 8

Table1-Clauses on Information
Table 2-Clauses on packaging
Table 3-Clauses on materials
Table 4-Clauses on installation
Table 5-Clauses on the user interface
Table 6-Clauses on maintenance, storage and disposal
Table 7-Clauses relating to the built environment

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The **seven design fields** in clauses 7 and 8 are:

information on how a product or service should be used;

•packaging, including labels, the materials used, the opening and the disposal of packaging;

•the materials used in a product;

•the installation of a product;

•the user interface;

•the maintenance, storage and disposal;

•the built environment (for example, wider doors and corridors for wheelchairs, and access for working dogs).

Transport and transportation services are not mentioned in clause 7.

Each of the tables in clause 7 lists sensory, physical and cognitive abilities, and allergies (as column headers), and factors to consider in the design of products and services (as row headers) on the other hand. Each of the row and column headers contains a reference to the relevant subclause in clause 9 (for the impairments and allergies) and in clause 8 (for the factors to consider). The tables in clause 7 are not reproduced in ISO/TR 22411.

Clause 8

Factors to consider, e.g.

- Alternative format
- Location and layout of information and controls and positioning of handles
- Lighting levels and glare
- Colour and contrast
- Size and style of font and symbols in information
- Clear language in written or spoken information
- Graphical symbols and illustrations
- Loudness and pitch of non-spoken communication
- Slow pace of information presentation
- Distinctive form of product, control or packaging

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Clause 8 lists the factors to consider and so in this slide and the next slide, we provide an overview of this list.

After that, concrete examples for some of these factors are given.

Clause 8

Factors to consider cont'd

- Ease of handling
- Expiration date marking
- Contents labelling and warning of allergens
- Surface temperature
- Accessible routes
- Logical process
- Surface finish
- Non allergenic/toxic materials
- Acoustics fail safe
- Ventilation
- Fire safety materials

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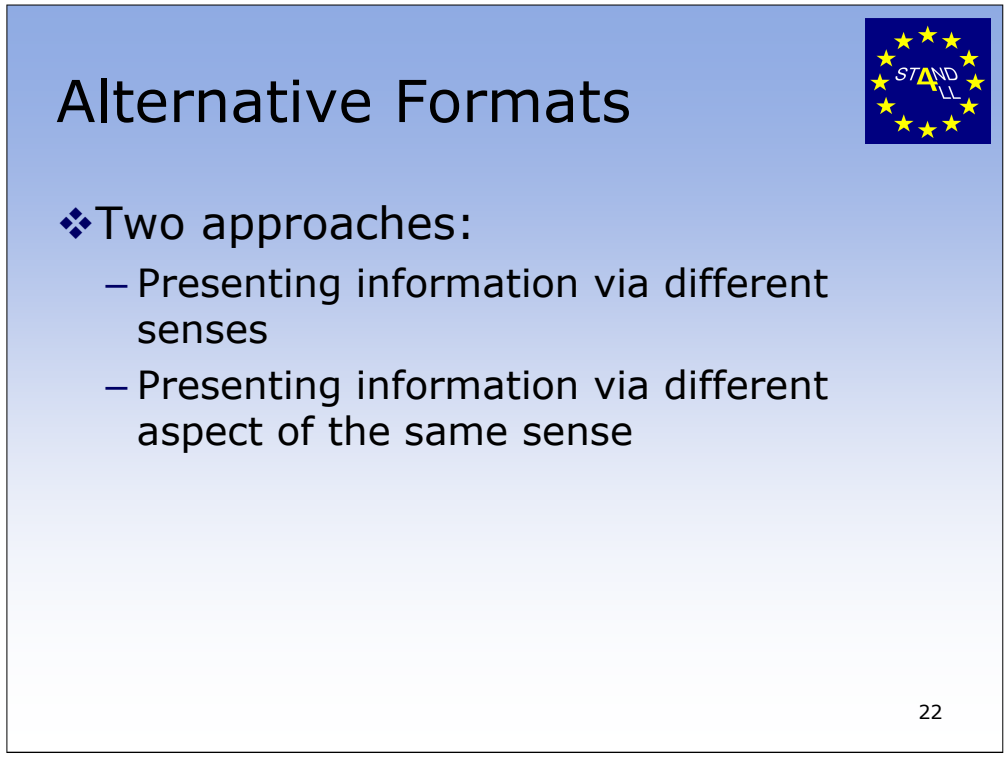
The list continues.

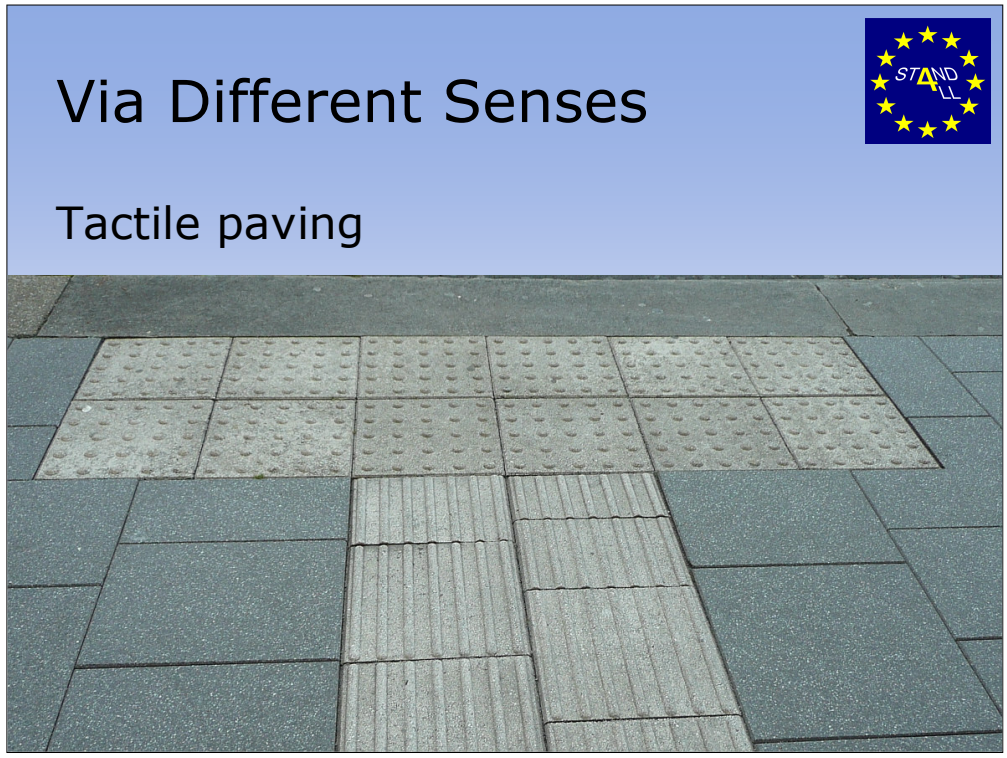


Alternative formats

An alternative format is a “different presentation which may make products and services accessible by the use of another mobility or sensory ability” (definition from Guide 6; “mobility” should probably be “modality”). There are two approaches:

Presenting information via different senses;

Presenting information via different aspect of the same sense.



Now, we will present some examples of “Alternatvive formats Via Different Senses

Example 1: Tactile paving

Tactile paving (also called *truncated domes*, *detectable warnings*, *Tactile Ground Surface Indicators*, *detectable warning surfaces*) is a system of textured ground surface indicators found on many footpaths, stairs and train station platforms to assist blind and vision impaired pedestrians.

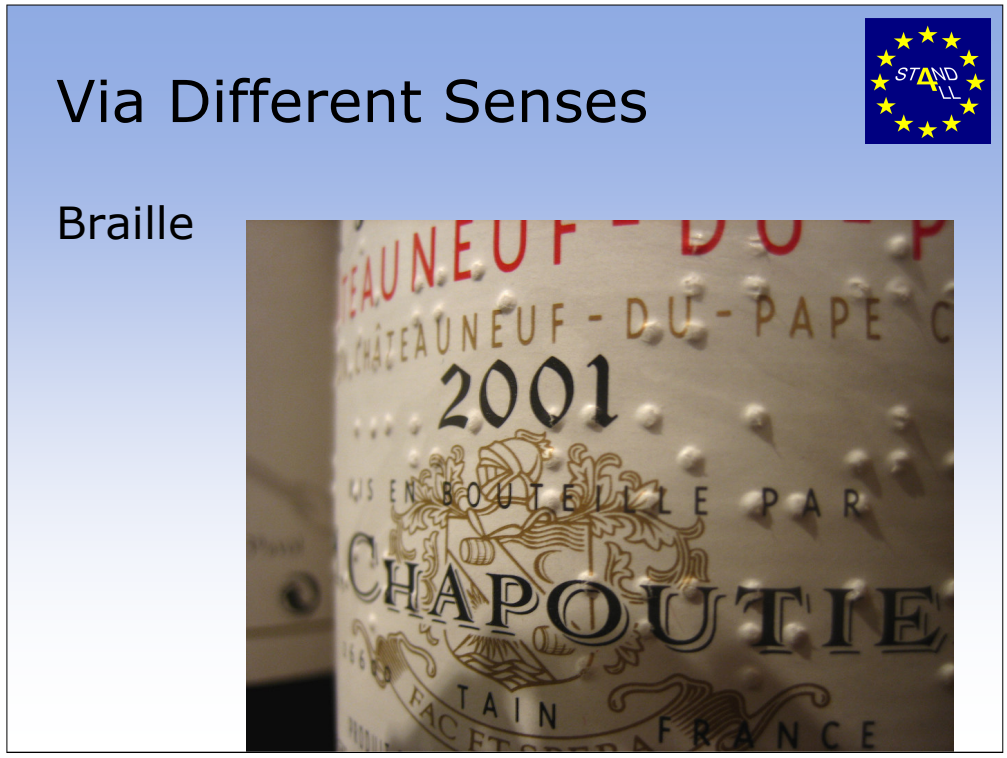
Tactile warnings provide a distinctive surface pattern of "truncated domes" or cones (which are small domes or cones that have had their tops cut off, or truncated) or "truncated bars" detectable by long cane or underfoot which are used to alert people with vision impairments of their approach to streets and hazardous drop-offs. People who are blind or visually impaired are alerted of impending danger from vehicle impact or a grade change. There is a disagreement in the design community and the community of users if the interior use of these bars represents a tripping hazard.

Example 2: Closed or open captions for video:

The term "closed" in closed captioning indicates that not all viewers see the captions—only those who choose to decode or activate them. This distinguishes from "open captions" (sometimes called "burned-in" or "hardcoded" captions), which are visible to all viewers

Most of the world does not distinguish captions from subtitles.

However, "subtitles" assume the viewer can hear but cannot understand the language or accent, or the speech is not entirely clear, so they only transcribe dialogue and some on-screen text. "Captions" aim to describe to the deaf and hard of hearing all significant audio content—spoken dialogue and non-speech information such as the identity of speakers and, occasionally, their manner of speaking—along with music or sound effects using words or symbols.



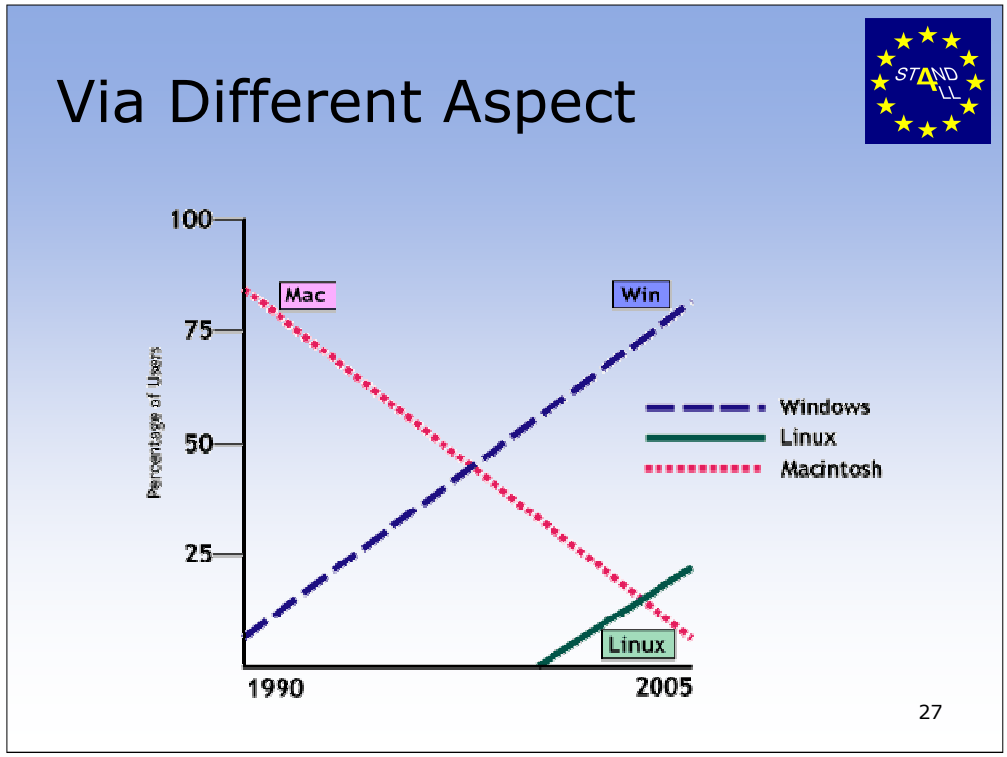
Example 3: Braille

The Braille system is a method that is widely used by blind people to read and write. It is named after Louis Braille, the French man who invented it. Today, the system is used by blind people to read and write. The Braille system uses an alphabet of letters, or characters. Each character is made of a series of dots that rise out of the paper in a special pattern. Blind people read braille by using their fingers to feel the characters.

Example 4: Headphone jack in ATM

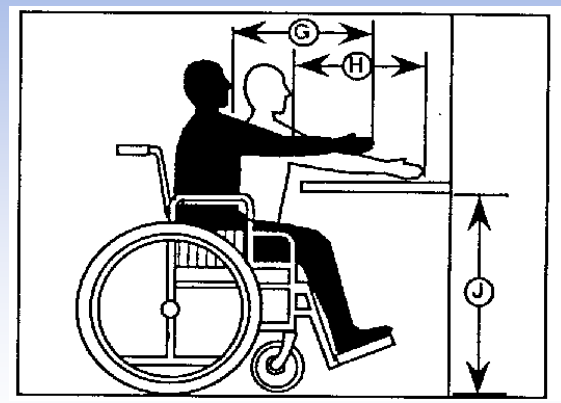
A Headphone jack in ATM is simply called a 'Talking ATM'

Talking ATMS are automatic teller machines that provide the ability to conduct transactions using both visual and auditory components. Essentially, a talking ATM will provide a means of persons with visual impairments to utilize the ATM by making use of audible instructions. While many ATMs today include an audio component that makes use of a speaker system, the talking ATM employs the feature of a headphone jack or telephone handset that allows the user to conduct the transaction with a degree of security



Presenting information via different aspects of the same sense means providing additional cues, for example providing two different visual implementations of the same content.

Location and Layout



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Different persons have different needs with regard to the position of information and controls on a product or in a building, and the point at which information is available for a service. For example, the controls of an ATM or another machine need to be placed in a way that they can be operated easily by someone standing or seated in a wheelchair.

Lighting Levels and Glare

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Glare is difficulty seeing in the presence of bright light such as direct or reflected sunlight or artificial light such as car headlamps at night.

Glare can be generally divided into two types, discomfort glare and disability glare. Discomfort glare results in an instinctive desire to look away from a bright light source or difficulty in seeing a task. Disability glare renders the task impossible to view, such as when driving westward at sunset. Disability glare is often caused by the inter-reflection of light within the eyeball, reducing the contrast between task and glare source to the point where the task cannot be distinguished. When glare is so intense that vision is completely impaired, it is sometimes called **dazzle**. Glare is a very common problem for older persons.

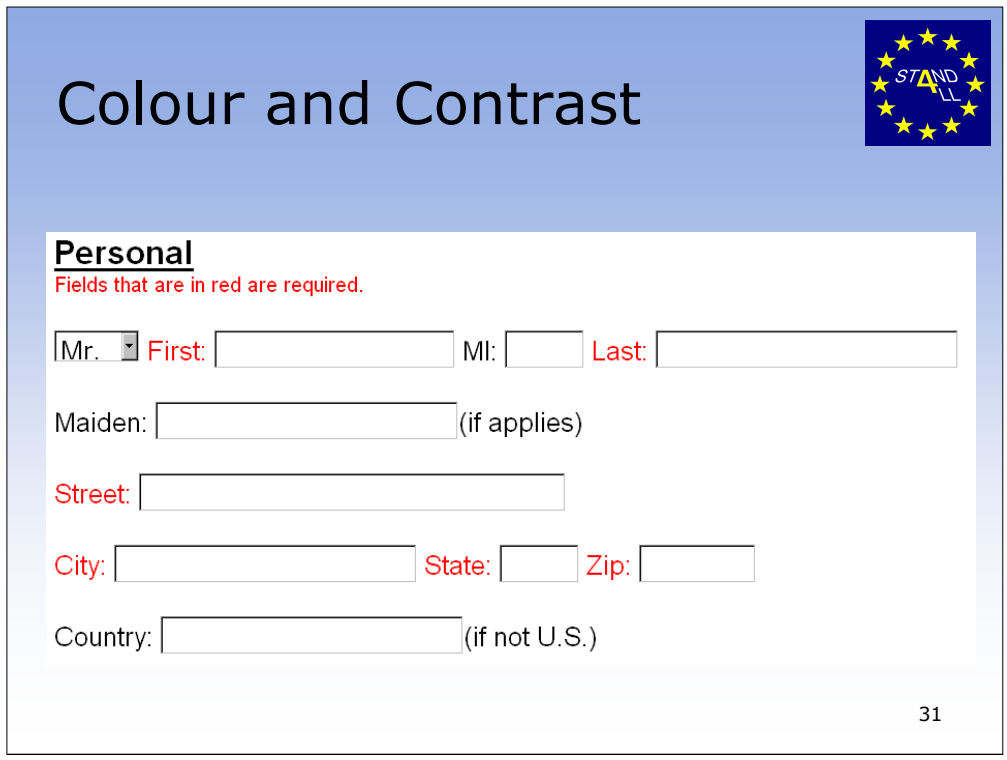
Colour and Contrast

The green apple has been poisoned!

30

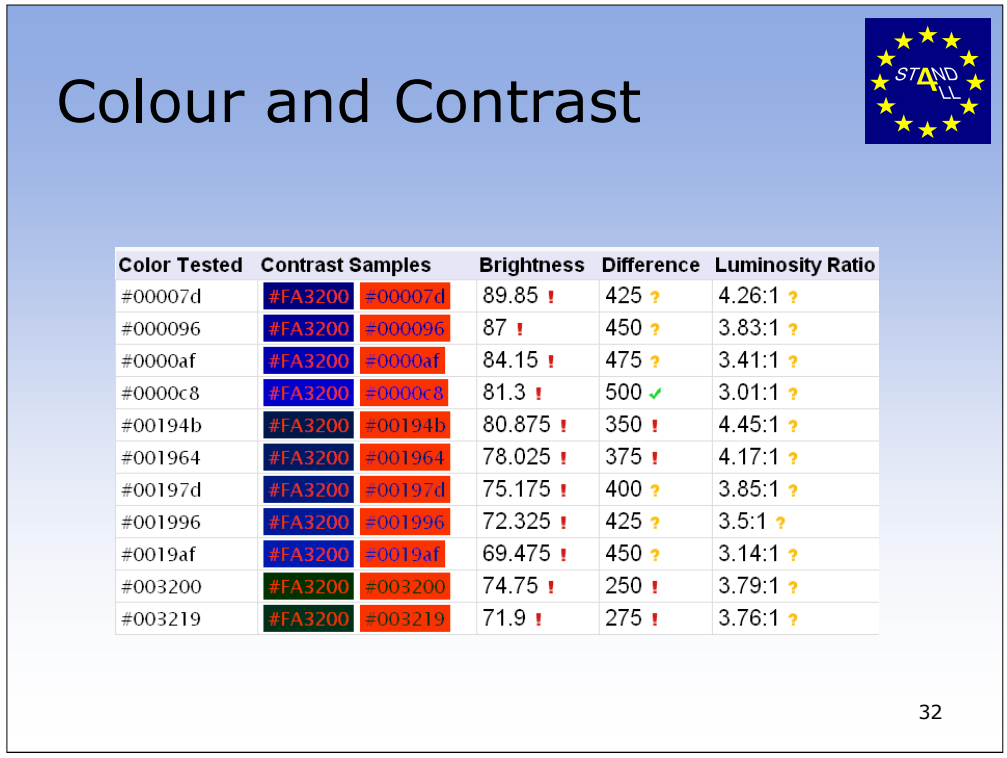
Colour is an important way of marking and distinguishing information.

However, some persons cannot perceive colour, for example because they are colour blind. There are several types of colour blindness, but the most common type of colour confusion is between red and green.



There is a perception that web and multimedia accessibility means black and white text, and that colour is something to be avoided.

There are many groups of people who may experience colour-related access barriers when trying to access multimedia content. People with a colour deficit (colour blindness) may be unable to distinguish between specific colour pairs, while people with no functional vision, and who are listening to content, will also be unable to detect information presented using colour alone.



Colour combinations with insufficient contrast may result in material that is difficult to read for many people. The same problems may be experienced by anyone accessing the resource using a device that has limited (or no) capability to display colours.

Also, certain text and background colour combinations can induce temporary conditions in people who otherwise have no significant visual impairment - for example, blue/red combinations can induce a temporary condition known as chromostereopsis. Even differences between colour displays of flat screen and cathode ray tube (CRT) monitors may cause confusion.

Style & size of fonts & symbols

Fonts for screen or print

Arial	Verdana	Trebuchet MS	Tahoma	Times New Roman
Il1i¦¡ OOQ aeso S568	Il1i!i| OOQ aeso S568	Il1i!¡| OOQ aeso S568	Il1i!i| OOQ aeso S568	Il1i!¡| OOQ aeso S568
Il1i!¡| OOQ aeso S568	Il1i!i| OOQ aeso S568	Il1i!¡| OOQ aeso S568	Il1i!i| OOQ aeso S568	Il1i!¡| OOQ aeso S568

33

Font style is a factor that affects the legibility of text and signs. Different classes of typefaces (fonts) have different innate levels of readability.

At ISO level, a document was developed that explains what font design characteristics can improve the readability for older persons and persons with low vision.

On top of that, it should be clear not to use more than 3 different typefaces throughout a single web page design/ document.

Graphical Symbols and Illustrations

E.g. ISO 7001

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Graphical symbols and illustrations are useful ways for conveying meaning and identifying objects.

Graphic symbols are often functionalist and anonymous, as these pictographs illustrate. These are international standards for graphical symbols (more via ISO 7001).

Symbols that are not properly designed can be confusing.

We'll show that in next slides.

Graphical Symbols and Illustrations

Some symbols are not so obvious...

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Examples of bad designed symbols.

Ease of Handling

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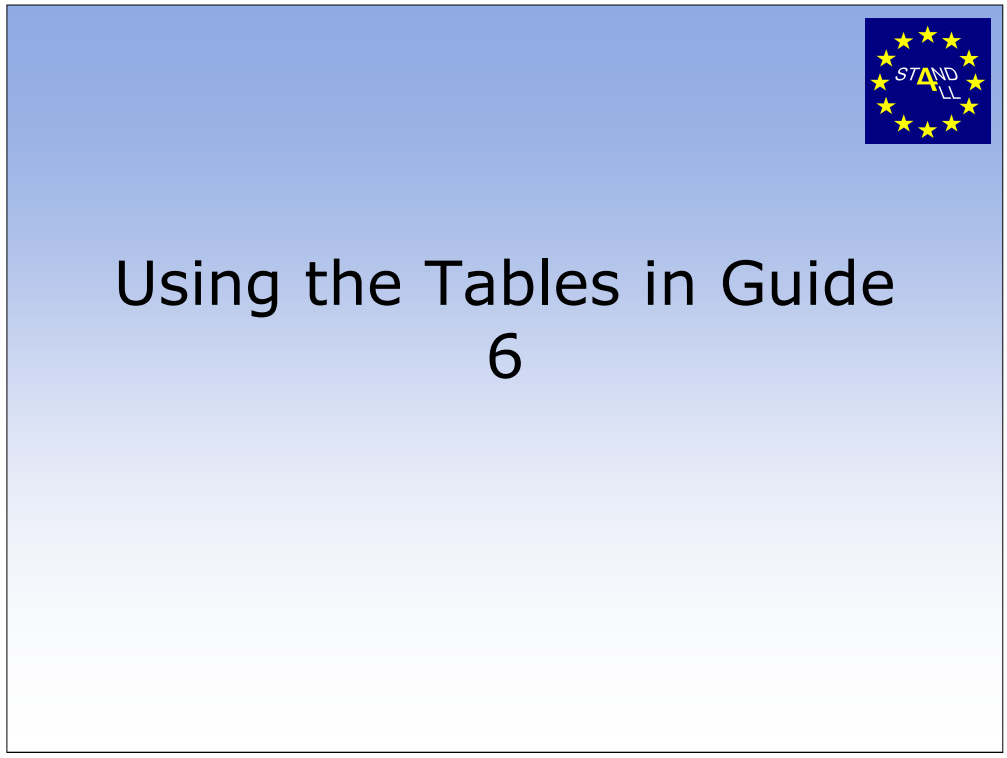
The size, shape and mass of a product will affect how easy it is to handle. Ease of handling includes aspects such as the required strength, the angle of rotation of a person's joints, the frequency of actions, and the precision required for certain movements.

Clause 9 provides descriptions of body functions or impairments and mentions their implications when using products or services.

Clause 9 also provides some description of the causes and consequences of impairment. It also includes a section on allergies which can impose limitations on an individual's activities and which are in some cases potentially life-threatening. It is desirable that all standards writers read all of clause 9, to increase awareness of the issues.



The topic should now be threaten as interactive session, as we are going to use the Tables in CEN CENELEC Guide 6.

Clause 7: Tables

1. Select the tables that are relevant to the product or service to be standardised
2. Identify the human abilities that are relevant to the product or service
3. Within each relevant table: identify factors that need to be considered (rows)
4. Translate the relevant factors into recommendations/requirements
5. Compare the recommendations/ requirements with the clauses in the standard or draft

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Clause 7 of CEN/CENELEC Guide 6 provides 7 tables that are intended as a tool to identify factors that will affect the use of a product or service by people with different levels of ability.

We will now follow the steps presented in the slide:

- Decide upon the factors that need to be considered. (The numbers next to the keywords refer to subclauses in clause 8.
- Select the tables that are relevant to the product or service that is being standardised. In other words, consider what types of clauses will need to be included into the standard.
- Look at the human abilities for which the factors with shaded table cells are particularly relevant. (The numbers next to the abilities refer to subclauses in clause 9.)

Clause 7: Additional Detail

Subclauses in Clause 8 | Subclauses in Clause 9

Factors to consider in standards clauses on information (labelling, instructions and warnings)	9.2 Sensory					
	Seeing 9.2.1	Hearing 9.2.2	Touch 9.2.3	Taste/ smell 9.2.4	Balance 9.2.5	Dexterity 9.3.1
8.2 Alternative format						
8.3 Location/layout						
8.4 Lighting/glare						
8.5 Colour/contrast						
8.6 Size/style of font						
8.7 Clear language						
8.8 Symbols/drawings						

Example:

Factors that need to be considered: Information (this includes 'labelling', 'instructions', 'warnings').

The following subclauses are relevant from clause 8:

•Alternative format

•Location, layout

•Lighting, glare

•Colour, contrast

•Size, style, font

•Clear language

•Symbols, drawings

The following subclauses are relevant from clause 9:

•Seeing

•Hearing

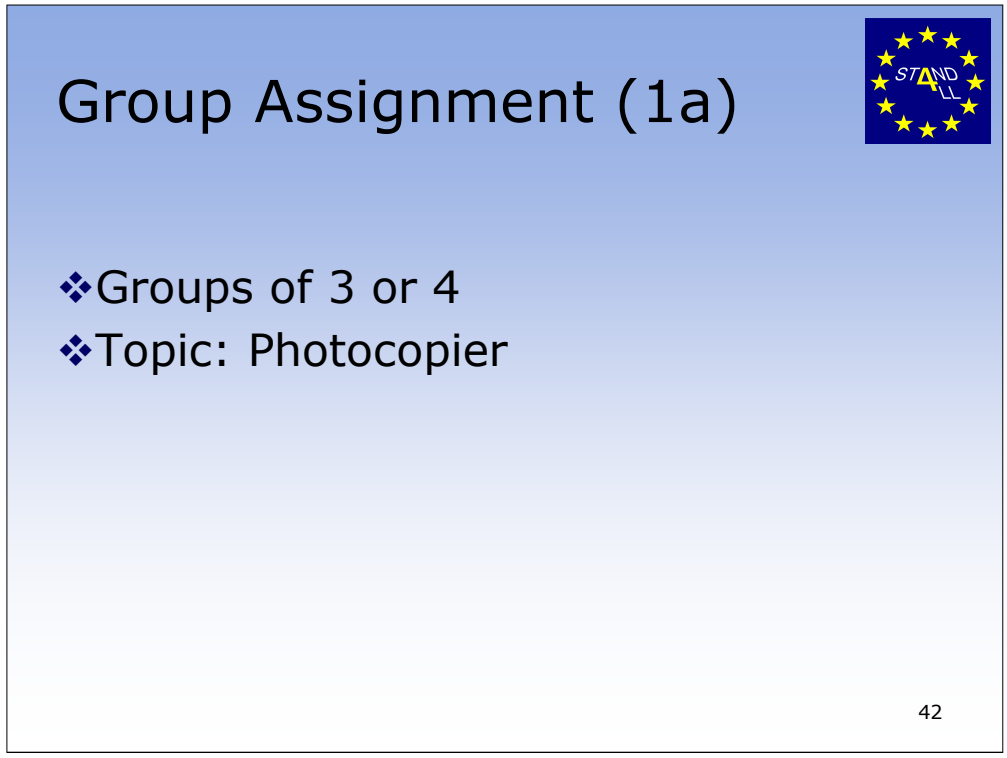
•Touch

•Taste, smell

•Balance

•Dexterity

In this part of the topic, we'll assess your capability to conduct an exercise via the Group Assignment.



We'll divide the group of trainees into smaller groups of 3 or 4 persons.

Having quick, easy and understandable access to a photo copier is very beneficial, therefore the exercise is to:

Develop a standard for a photocopier.

Group Assignment (1a)

Keys steps of installing and using a photocopier

- Unpack
- Instructions (Customer Services)
- Install (physical location)
- Install (electrical)
- Install (software)
- Insert Toner/Paper
- Operation
- Maintenance
- Disposal

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Modern photo copiers, although made by many different manufacturers, have the same basic install and using functions.

The machine takes an original, makes a copy and prints the copy onto the printing medium – usually paper.

Different steps should be followed in order to successfully install and use a photocopier.

Group Assignment (1a)

- Use Guide 6 to specify accessibility requirements:
  - Define Scope of the Standard
  - For the purpose of this exercise the scope is the "Operation of the Photocopier"
  - Exclude everything else
  - Select relevant tables in Clause 7 based on the Scope of the Standard

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Define Scope of the Standard: For example: "This standard is applicable to plain paper copying machines equipped with automatic document feeder or handling capability".

Bear in mind that the standard should specify the terminology, requirements, basic performance criteria and test methods

Group Assignment (1a)

- Use Guide 6 to specify accessibility requirements:
  - Select relevant tables in Clause 7 based on the Scope of the Standard
  - Tables 1,2,3,4,5

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A photocopier is a physical object with a user interface, so the following tables are relevant:

Table 1: clauses on information.

Table 2: clauses on packaging (for persons who package the machine in a factory and for persons who unpack it before installation).

Table 3: clauses on materials.

Table 4: clauses on installation (for persons who install a photocopier).

Table 5: clauses on the user interface.

Table 6: clauses on maintenance, storage and disposal (for staff in charge of these tasks).

Group Assignment (1b)

- Stay in the same groups
- Use Table 5 – User Interface
- Task: Photocopy 10 sheets of paper
- What are the key steps in carrying out this task
- Review Table 5 and identify the keys factors that impact on usability of this task

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For the sake of brevity, we will focus on factors related to the user interface (table 5) for persons with physical impairments. This means that we need to consider the needs of

persons who have difficulties using their hands or arms (dexterity),

persons who have difficulties moving and manipulating objects (for example reaching and pushing),

persons who have difficulties maintaining or changing the position of the body,

persons with limited strength and/or endurance.

Group Assignment (1b)

Input: Review Table 5 and identify the **keys factors** that impact on usability of this task (8.2 – 8.21)

Output: Group Assignment Summary

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In this step, we look at the columns in table 5 that we selected in the previous step and identify factors (i.e. rows) that need to be considered. For each of the selected abilities, we check which factors are relevant. CEN Guide 6 uses grey shading to identify factors that are especially significant but points out that the other factors can also be relevant and need to be considered.

The grey table cells in Table 5 lead us to consider the following factors for persons with physical disabilities:

alternative format,

location/layout,

ease of handling,

surface finish,

fail-safe.

Each of these factors needs to be considered from the point of view of the groups of users listed at the end of step 2.

Output:

The groups have used Guide 6 to see how requirements of older persons and persons with disabilities can be included in the development of a standard for a photocopier. In this last section, the groups will report what their recommendations are.

This leads to recommendations such as those in the following non-exhaustive list:

•Users, including wheelchair users, can reach each part of the machine that needs to be accessed when using or maintaining the machine. (This is a partly a matter of the placement of the machine, partly a matter of the location of controls, trays, etcetera. A real recommendation would include sizes of wheelchairs or refer to relevant standards.)

•Controls and operating mechanisms are operable with one hand and without force for gripping or twisting. The force needed to activate the controls is not too great

•Seats are available for persons with mobility impairments.

Additional Information and Guidance

Related Standards / Guides

- ISO/TR 22411:2008
  - "Ergonomics data and guidelines for the application of ISO/IEC Guide 71 ..."
- Sector guides:
  - CWA 14661: "Guidelines to Standardisers of ICT products and services in the CEN ICT domain"
  - CWA 15778:2008: "Document Processing for Accessibility"

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ISO/TR 22411:2008

"Ergonomics data and guidelines for the application of ISO/IEC Guide 71 ..."

This document presents ergonomics data and guidelines for applying ISO/IEC Guide 71 in addressing the needs of older persons and persons with disabilities in standards development. It provides ergonomics data and knowledge about human abilities — sensory, physical and cognitive — and allergies, as well as guidance on the accessible design of products, services and environments.

CEN document on 'Design for All and Assistive Technologies in ICT' is CWA 14661: 2003. It contains guidelines to standardisers of ICT products and services

in the CEN ICT domain (aimed to be a kind of ICT-sector guide, complementing CEN/CENELEC Guide 6)

CWA 15778 provides a first elaboration on how the accessibility of publishing content can be enhanced by altering existing publishing workflows and introducing accessibility considerations where appropriate. For reaching this goal, in each step where accessibility is introduced, relevant formats and conversions are detailed out, as well new workflow items described.

Related Standards / Guides

- Sector guides:
  - CWA 45546-1: "Guidelines to standardisers of Collective Transport Systems - Needs of older people and persons with disabilities - Part 1: Basic Guidelines"
  - The Build-for-All Reference Manual (2006)

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CWA 45546-1 provides guidance to writers of relevant standards relating to collective transport on how to take account of the needs of all passengers with reduced mobility, especially older persons and persons with disabilities. This document pursues the furtherance of globally accessible collective transport, e.g. transport that can be used by everyone. Specifically, this document aims to:

-Provide information and raise awareness on how passenger transport systems should be designed and the circumstances that should be taken into account so each of their elements is fully accessible.

-- Draw attention to the importance of taking account of the needs of people with disabilities when developing standards.

-- Raise awareness of the social importance of accessible collective transport (transport services for all).

-- To demonstrate that the benefits of accessible transport improve the quality of service (comfort, safety, convenience, etc.) for all users.

The Build-for-All project launched the "Build for All Reference Manual" which aims to advise the public sector how to ensure that all its buildings will be accessible and usable by all EU citizens. The Manual is supported by the European Commission. It consists of a Handbook and a Toolkit. More information via: http://www.build-for-all.net/en

Photo & Image Credits

- YouTube Captions demo: www.youtube.com/watch?v=QRS8MkLhQmM
- Chateu Neuf du Pape 2007 à la Braille: www.flickr.com/photos/adactio/89778576/
- Chart Mac – Win – Linux: webstandards.psu.edu/book/export/html/23
- "The green apple has been poisoned": www.naturewallpapers4u.com/2008/11/apple-desktop-wallpaper-wide-screen.html adapted with Vischeck.

Photo & Image Credits

- Wheelchair: http://msucares.com/pubs/publications/p1825.htm
- Avoiding screen glare: http://forum.santabanta.com/showthread.htm?t=132048
- ISO 7001: Public Information Symbols: see www.tiresias.org/research/guidelines/pictograms.htm
- Symbols: preferred contrast (Fennell 2006): www.tiresias.org/research/reports/colour_contrast_preference.html
- "Don't slip on giant keys": www.flickr.com/photos/my__spot/3901834337/
- "Gruesome" by Drew McLellan (Creative Commons): www.flickr.com/photos/drewm/280526485/
- Ease of handling: http://www.esn-network.com/281.html

Group Assignment

Implementing Guide 6 in the Standardization Process

Divide yourselves into groups of 3 or 4. If possible, make sure that more than one disability is represented in each group. Your task consists in using Guide 6 to specify accessibility requirements for passenger lifts.

1.a. Start by selecting the tables in **clause 7** that are relevant to a photo copier.

The next questions are focussed on table 5 of Guide 6: 'factors to consider in clauses on the user interface'.

1.b. Shortly discuss the **impairments and allergies** that are relevant to photo copiers. (You may do this by putting each impairment or allergy into one of three categories: "relevant", "maybe relevant" and "not relevant".)

Then, study table 5 and check what **factors** you will need to consider in the standard. (Refer to the lists of end-users and relevant factors.)

If you need additional information on the factors to consider, go to the relevant sections in **clause 8**. Determine whether each of these factors can be addressed by providing an alternative, by a different design, by means of assistive technology or something else. While doing this, take note of anything that might be missing in Guide 6.

At the end of the exercise, one person will **report** to the complete group about the following aspects:

1. The list of relevant impairments and allergies.
2. The factors that you selected.

And maybe additionally:

3. Requirements based on the relevant impairments and factors. Make sure that – at a minimum – both sensory and physical impairments are considered.
4. Any aspects that CEN/CENELEC Guide 6 does not cover.

STAND4ALL

Topic Interactive session

‘Roleplay’or ‘Simulation of a TC meeting’

For this topic there are two variants. Both are described here.
The first is the ‘Roleplay’ the second is the ‘Simulation of a TC Meeting’.

The documents for the **Roleplay** are:

- Short description of a roleplay
- Presentation
- Roleplay description in detail

The documents for the **Simulation of a TC Meeting** are:

- Short description of Simulation of a TC Meeting
- Presentation
- Description of the standardization meeting
- Extract from Directive 2009/48/EC ‘Safety of Toys’, ANNEX V ‘Warnings’
- EN 71.1:2005+A9:2009 Safety of Toys – Part 1: Mechanical and physical properties (Clause 6 & 7)
- FACTSHEET Annex V Warnings

Roleplay

The goal of this session is: understanding the real situation in a CEN/TC meeting or WG-meeting with user representatives there.

The aim of the role play is to discuss the needs of revision of EN 81-70 *"Accessibility to lifts for persons including disabilities"* after 5 years of publication and point out the positions of the different parties concerned in view of a necessary revision.
Trainees will be asked to "impersonate" the different stakeholders representatives at the final meeting of CEN TC 10 before the launch of the public enquiry about revision.

With the roleplay the trainees will use the information gained during the training in a real-life setting. By playing a role in a standardization committee the interesting parts of participation.

The time for this topic is divided in time for:

- Preparation on the roleplay
- The roleplay itself
- Retrospective view on the roleplay

Goal: understanding the real situation in a CEN/TC meeting and discovering the skills and strategies which are needed; discovering also alies and supporting groups among the participating representatives
Trainees are asked to make use of their 'negotiating skills" and standardization knowledge acquired during the training.

Annexes:

- Presentation with the main key issues
- Role play description in detail

ANEC
The European consumer voice in standardization and conformity assessment

ROLE-PLAY

Monika Anna Klenovec, Access Consultant

Goal of this topic

Understanding the real situation in a CEN/TC meeting and discovering the skills and strategies which are needed; discovering also aliens and supporting groups among the participating representatives

Different approach for consumer participation in …

- **New Work Items and standard development**

or

- **Revision of published standards**

Practical experiences of consumer participation after publication of EN 81-70

Role play

Negotiation exercise – Case Study

Revision of EN 81-70 …
Accessibility to lifts for persons including persons with disability

Photos are telling more than 1000 words!

Negotiation exercise – Case Study

EN 81-70 Accessibility to lifts for persons including persons with disability

Table 1 — Minimum car dimensions for cars with a single entrance or two opposite entrances

Type of lift	Minimum car dimensions [a]	Accessibility level	Remarks
1	450 kg Car width : 1 000 mm Car depth : 1 250 mm	This car accommodates one wheelchair user.	Type 1 ensures accessibility to persons using a manual wheelchair described in EN 12183 or electrically powered wheelchair of class A described in EN 12184.
2	630 kg Car width : 1 100 mm Car depth : 1 400 mm	This car accommodates one wheelchair user and an accompanying person.	Type 2 ensures accessibility to persons using a manual wheelchair described in EN 12183 or an electrically powered wheelchair of class A or B described in EN 12184. Class B wheelchairs are intended for some indoor environments and capable of navigating some outdoor obstacles.
3	1 275 kg Car width : 2 000 mm Car depth : 1 400 mm	This car accommodates one wheelchair user and several other users. It also allows a wheelchair to be rotated in the car.	Type 3 ensures accessibility to persons using a manual wheelchair described in EN 12183 or an electrically powered wheelchair of class A, B or C described in EN 12184. Class C wheelchairs are not necessarily intended for indoor use but are capable of travelling over longer distances and navigating outdoor obstacles. Type 3 provides sufficient turning space for persons using wheelchairs of class A or B and walking aids (walking frames, rollators etc.).

[a] Car width is the horizontal distance between the inner surface of the structural walls, measured parallel to the front entrance.
Car depth is the horizontal distance between the inner surface of the structural walls, measured perpendicular to the width.

Role Play

ANEC

Revision of EN 81-70 Accessible *Lifts*

Facts:

- **lift typ 1 lift (1000 mm x 1250 mm) too small for powered wheel-chairs - contradicts scope and Annex A and many national standards**
- **small door width: 800 mm instead of 900 mm**
- **no place for an accompanying person – independent use (with assistance)?**
- **control devices: 900 mm – 1100/1200 mm; preferred: 850 mm - 1000 mm**

Role Play

Revision of EN 81-70 Accessible *Lifts*

Legal requirements … ?

- **NEW: UN Convention of Human Rights for Persons with Disabilities**
- **EU Directives: Lift Directive**
- **ECA – European Concept of Accessibility**
- **Mandate 283 etc.?**
- **CEN/CENELEC Guide 6**
- **Standards: ISO, EN, national standards**
  lift car: min. size 1100 mm x 1400 mm!!!

Role Play – in 2 groups

Participating persons in each group

- ✓ **Convenor of TC 10 Lifts (A) –** Trainer from Standard Bodies
  Representative from lift manufacturer – global player
- ✓ **(Secretariat of TC 10) (B)**
- ✓ **(1) R&D Test Institute representative**
- ✓ **(2) Lift manufacturer representative – global player C**
- ✓ **(3) Lift manufacturer representative – global player D**
- ✓ **(4/5) Representative from lift manufacturer – small company E from Italy/company F from Spain**
- ✓ **(6) Lift manufacturers Association representative**
- ✓ **(7) Wheelchair Producer**
- ✓ **(8/9) Consumer representatives**
- ✓ **(10) Elderly consumer representatives**

Role-Play Tipps

- Project plan and time table – short time and long time strategy
- How you start the project?
- What information you need before you attend the meeting?
- Identify skills and strategies you need – consider ANEC's presentation
- At which time you present your subject during the TC meeting?
- Attend the TC or WGs meeting? Different approach?
- Is lobbying an issue in this case? Who may be interested in the subject?

Role-Play Tipps

How to start? …

- read carefully the general informations about the subject – see handout
- study your personal role description
- meet with your companion who plays the same role in the other group and discuss your strategy

Role-Play Tipps

- are there other persons / representatives who would support your strategies? – contact them
- think about the advantages or common goals for all different representatives concerning your strategy

- return in 20 minutes for the start of the role play!

Good luck for your role play!

Thank you for your attention!

www.anec.eu

Role play

Revision of EN 81-70: Safety rules for the construction and installation of lifts – Particular applications for passenger and good passengers lifts – **Accessibility to lifts for persons including persons with disability**

DISCLAIMER: although based on a real situation, the participants and the positions expressed in this case study are purely fictional and do not reflect by any means any official position.

Background

prEN 81-70 «
Part 70: Accessibility to lifts for persons including persons " is already published.

- The aim of the role play is to discuss the needs of revision of EN 81-70 after 5 years of publication and point out the positions of the different parties concerned in view of a necessary revision
- Trainees will be asked to "impersonate" the different stakeholders representatives at the final meeting of CEN TC 10 before the launch of the public enquiry about revision
- Trainees are asked to make use of their 'negotiating skills" and standardization knowledge acquired during the training

Political background situation

Member States are bound by national building codes obligations with regards to accessibility of the built environment. The ratified UN Convention of Human Rights for persons with Disabilities becomes more and more important and legally binding also for the Member States in Europe.

However, lifts fall under harmonised legislation. The EU lift directive is relevant for the Member States and the harmonised lift standard EN 81-70 is part of national standardization.

UK, Germany and France have recently announced plans aimed at combating the current economic and financial crises with massive investment in public works, including public housing and public places such as theatres, offices and railway station.

For accessible buildings no European or International Standard is available. Only in ISO/TR 9527 the main building requirements for accessibility can be found. The European Concept of Accessibility (ECA) has included an ANNEX where the main accessibility requirements of the national standards of the Member States are summarized. Therein the minimum lift car size of an accessible lift is mentioned with 1100 mm x 1400 mm which is in many countries state of the art and also in ISO/TR 9527.

Three topics of the agenda during the CEN/TC 10 meeting
(can also be reduced to 2 topics)

In agenda item 7 the main topics of future revision of EN 81-70 during a fictional standardization meeting of CEN/TC 10 are summarized with additional explanation. Several comments and proposals have been sent to CEN/TC 10 according this revision enquiry:

7 Proposals to revise EN 81-70

7.1 Size of different lift cars (see table 1):

— car type 1: 1000 mm x 1250 mm (too small for electrical wheelchairs and large manual wheelchairs, no accompanying person is possible, too small for persons with walking aids, who cannot turn around);
Proposal from ANEC representative to delete car type 1 from the standard or at least to give clear instructions that this lift can not be used by the majority of persons with powered wheelchairs; should only be applied for adaptation of existing buildings with minor importance and less users if no larger lift car is possible.

— car type 2: 1100 mm x 1400 mm (minimum size for person in wheelchair with an assistance – for manual and electrical

wheelchairs); this lift car type is supported by all users as the minimum car size.

— car type 3: 1400 mm x 2000 mm (for persons in wheelchairs – manual and electrical – also with an assistance, for persons with walking aids).
Proposal from the wheelchair manufacturers who promote this car size due to increasing number of persons with powered wheelchairs and with walking aids of elderly persons. It should be explained very clearly that only this car type 3 is sufficient for **all users** – with powered wheelchairs and with walking aids.

7.2 Height of control devices (see table 2):

Height of control devices is now 900 mm until 1100 mm. These two measures should be reduced too preferred 850 mm to 1000 mm – especially for persons in powered wheelchairs with reduced arm function. A proposal has been sent to CEN/TC 10 by consumer representatives and is supported by EDF (European Disability Forum). Global lift companies are not in favour due to higher buildings where more place is needed for more control buttons.

Wheelchair manufacturers strongly support this proposal. Their main user groups with powered wheelchair need the lower range for their reduced hand mobility.

7.3 Size and design of control buttons

In the general part of the standard the size of control buttons is 490 mm^2 (about 25 mm diameter). Only in the informative Annex G "Other Devices" extra large control devices are mentioned for horizontal panels. The wheelchair manufacturer's organisation and EDF promote to use only horizontal panels for all control buttons in accessible lifts to meet the needs of persons with mobility impairments especially with powered wheelchairs. They have sent a proposal to CEN/TC 10 which has to be discussed in this meeting. This proposal is also supported by EBU (European Blind Union) where they mentioned also the importance of larger control devices projecting from the surrounding panel.
Lift companies (especially the smaller companies) are strongly against this proposal due to the higher costs. The global players

of the lift manufacturers are also not in favour but it can be a matter of negotiation when only the horizontal panels will be produced. On the other hand there may be a problem in higher buildings where is too less place for horizontal arrangement of extra large control buttons.

Different roles in the role play

The interests represented in the case study are (minimum **5 roles** /maximum 10 roles)

- **CEN/TC Convenor A** (Stand4All trainers from national standards bodies)
- CEN/TC Secretary B (facultative) - " -

1. **National certification institutes (representing also national legislation and EU Directives) for lifts**
2. **Lifts manufactures: global players** (company C)
3. **Lift manufactures: global player** (company D)
4. **Lifts manufactures: smaller companies** (e.g. company E from Italy)
5. Lifts manufactures: smaller companies (e.g. company F from Spain) (facultative)
6. Lifts manufactures Association (facultative)
7. Wheelchair manufacturers (facultative)
8. **Consumers representatives: users representing different impairments e.g. representing ANEC or other NGO organisations (1 or 2)**
9. Consumer representatives: users representing ANEC with special focus on persons with impaired vision (facultative)
10. Elderly consumer representatives (facultative)

The meeting is conducted by the **CEN/TC convenor (role A)** and supported by the CEN/TC secretary (role B - facultative). These

roles should be played by trainers of STAND4All who are familiar with standardization meetings and proceedings. If no person as CEN/TC secretary is available the convenor has to check also the target dates and all other details during the revision stage of the standard.

The CEN/TC convenor should always have in mind his/her neutral position. His/her main goal is to find a solution by consensus in all contradicting issues and proposals although he is a representative of a global player of the lift manufactures industry.

The CEN/TC secretary is an officer of a national standards organisation and responsible for the target dates of revisions of the standards and all organisatorial details.

Task 1

Adopting the role assigned to you, work with your group (either with the same representative of the parallel role-play and/or with other players who may support your proposal – consider descriptions of different Agenda topics) to identify the key issues and arguments for your position in the negotiation exercise.

Work out a strategy for achieving your goal.

Task 2

Conduct the role play exercise, playing your role to try to win your case.

1. National Certification Institutes (O)

Member States are bound by national building codes obligations with regards to accessibility of the built environment. However, lifts fall under harmonised legislation, the EU lift directive. National certification institutes represent also their national view within the TC meetings and are prepared to check all relevant testing details within the lift standard in connection with the EU lift directive.

National Certification Institutes will support user's view in deleting lift type 1 which is too small for all users from the table

They understood the problem of persons especially in powered wheelchairs who cannot use lift type 1 which is too small.

Both refurbishing and new constructions are concerned. In developed countries lifts are included in all new residential houses with several floors. It is more or less standard to use lift type 2 due to many national building regulations where this is an obliged requirement since years.

Position and main arguments:

National certification bodies are more or less aware about deleting lift type 1 from the table of EN 81-70 during the revision and they know that this small lift type is not any more state of the art.

CEN/CLC Guide 6 is generally known but not in details.

They understand the needs for bigger space within the lift for persons using a wheelchair or walking aids. Even for persons using walking aids it is recommended already within table 1 that only lift car type 3 meets their requirement to turn around within the lift before exit the car.

Especially in public buildings, railway stations etc. they propose to use only lift type 3 (1400 mm x 2000 mm) to meet all requirements for an inclusive society according the design for all approach.

They promote a clearer explanation within the table about the usage of the different lift types.

They support also in the other points the proposals of the consumer groups, EDF and EBU generally but are looking for consensus with the lift companies.

2. / 3. LIFTS MANUFACTURERS - GLOBAL INDUSTRIES (O)

UK, Germany and France have recently announced plans aimed at combating the current economic and financial crises with massive investment in public works, including public housing and public places such as theatres, offices and railway station.

The global players of the lift industry expect that lift type 2 and 3 will be the most wanted car types for this investment strategy. Lift manufactures of global industries see a big chance to improve their business. Especially the new initiative of some Member States is an interesting chance to improve their business.

They want to promote lifts not only in public buildings but also lift type 2 in residential houses to improve life quality during the demographic change. They see a lot of market chances developing now.

Position and main arguments:

Company 1 and 2: The global players of the lift industry expect that lift type 2 and 3 will be the most wanted car size for this investment strategy started by UK, Germany and France. They understood the problem of persons especially in powered wheelchairs who cannot use lift type 1 which is too small.

Concerning the height and size of control devices different positions exist:

Company 1: they support the present requirement due to many already produced control panels. They not agree to the proposed changes.

Company 2: they are not acting and arguing against the proposed changes for control devices. They are producing on demand and therefore have no problems with existing control panels. To produce horizontal panels instead of vertical ones - if less control buttons are needed - is no problem for them.

They are aware about the problems with many control buttons in higher buildings. In this case telephone panels can also be used.

4. / 5. LIFTS MANUFACTURERS - SMALL INDUSTRIES (O / F)

In some countries (Italy and Spain) the most common lift put in place should not be too burdensome and expensive, especially for SMEs. Therefore during the last years the lift car type 1 was widely used.

Lift manufacturers of smaller companies have more interest to keep the situation pretty much as it is because they do not wish to see any change in the rules that will make their business more difficult.

Position and main arguments:

Especially the smaller lift companies situated in Italy and Spain have proven to be very powerful in their blocking of the standard and will continue to do so. The national legislation in these countries is more focused on the small lift type 1 as the minimum size.

Italian and Spanish lift manufacturers are highly interested in continuing producing and selling the small lift type 1 (1000 mm x 1250 mm) which is their main business field.

They fear if type 1 is not longer part of EN 81-70 they will loose a lot of market chances and business. Due to the economic crises they fear that the market will collapse in Italy and Spain where in the southern parts of their countries the residential houses will not longer promote to build lifts in their premises. Keeping lift type 1 within the standard they see more chances to sell their lift cars also in small residential houses and to improve life quality for an ageing society.

Small lift company Y from Italy: very strong and powerful representative arguing against excluding of lift type 1 from this standard. Italian legislation is also in line with this minimum lift requirement and therefore nothing should be changed. They vote strongly against the additional horizontal panel and the larger control buttons due to higher costs.

Small lift company Z from Spain: the company representative is also arguing against any change within the standard due to decreasing of business chances but supports the proposal for the larger control buttons for blind users. In Spain there is a big

lobby for blind persons very active and influences the public authorities and legislation. The accessibility building standard in Spain has already included lift type 2 as a minimum requirement.

6. LIFTS INDUSTRY ASSOCIATION (F)

The lifts industry association, expressed support towards the recent initiatives of some Member States, aimed at combating the current economic and financial crises with massive investment in public works, including public housing and public places such as theatres and railways stations.

The main interest for the lift industry association is to support their members and to improve their market chances; of course they are financed by all members but have more focus on the global acting companies.

Position and main arguments:

They have a similar position than the representatives of the global acting lift industries. The association has also in mind the big overseas markets as China where the lift business is increasing. They are usually also focused on EN standards.

Support for lift type 2 and 3 but considering also some market chances for lift type 1 in the developing countries due to the lower costs.

The demographic change is also an issue in their strategy to improve life quality for an ageing society.

The description of the different lift cars in table 1 should be improved to make it very clear for which user groups the indicated lift is best suitable. This description is now incomplete (as in lift type 1) and/or misleading.

Architects and planners should have clear guidance in this matter to choose the right lift car size for their projects.

7. WHEELCHAIRS MANUFACTURERS (F)

The majority of wheelchairs manufactures are small medium enterprises, who produce assistive aids for a local market.

Position and main arguments:

They generally have a very hard line in favour of increasing accessibility requirements in standards. The wheelchairs manufactures welcomed the revision of EN 81-70 as it could eliminate one of the main obstacles (too small lifts) to secure an important market share for their latest products, the “bulky” electric powered wheelchairs.

They will support to delete lift type 1 from the table and ask for more clear explanation how the different lifts can be used. They promote lift type 3 for their latest products and for walking aids.

Especially for powered wheelchairs larger lift cars with at least 900 mm door width are necessary.

The height of the control devices should be reduced to 850 mm – 1000 mm as proposed by EDF and consumer groups. Wheelchair manufacturers are focused to meet all needs of wheelchair users to the greatest extend possible.

Size and design of control buttons: horizontal control panels are preferred by the wheelchair manufacturers due to the ergonomic needs of persons using powered wheelchairs with reduced hand function.

8. / 9. CONSUMER REPRESENTATIVES (O / F)

If only one consumer representative takes part in the role-play he/she should consider all arguments mentioned here and for the elderly consumer representative (see role 10 next page) including all comments concerning all different types of disabilities and special needs of elderly persons.

If two persons are available for the consumer representatives there may be one to play the role of a blind person or with vision impairment and arguing all needs for this user groups. The other one should take the arguments for mobility impaired users on board.

Consumer organisations think that lift type 1 in table 1 of EN 81-70 is not in line with CEN/CLC Guide 6, European concept of accessibility (see Annex) and with most of the national standards of the member states for an accessible built environment where the minimum size for a lift car is 1100 mm x 1400 mm.

Position and main arguments:

Raise awareness for binding UN Convention and different EU Directives and legislation where the design for all approach is included.

Agenda Item 7.1 Car size:

The small lift type 1 with the car size 1000 mm x 1250 mm can not be used from all persons in a powered wheelchair. Many of them need assistance by an accompanying person which is also not possible as the photos before demonstrated. Independent living which is also required within this standard is restricted or not even possible.

Persons with walking aids cannot move around in this small lift car – they would even prefer lift car type 3 where they can turn around when they exit the car. Add the importance of preventative measures during the demographic change. Most people want to live also in old age in their homes. Lifts are the most important aids to overcome steps.

All these points contradict also the scope of EN 81-70 and the requirements within. In Annex B, which is normative, all

categories of disabilities concerned are taken into account but not fully applied within the standard.

New point to be raised:

A new point should also be raised under agenda item 7.1 which is not on the list until now. The door size of the lift car has now the minimum measure of 800 mm. This measure should be enlarged to 900 mm (which is already recommended in the standard but not obligatory) as stated in most national standards and legislation. 800 mm door width is not longer state of the art.

Agenda item 7.2 Height of control devices:

Additional the height of the control devices within the car should be restricted from the range of 900 mm to 1100 mm / 1200 mm to a lower range. A range between 850 mm to 1000 mm or maximum 1100 mm supports most people with mobility impairments – especially people sitting in a powered wheelchair with additional hand functions.

People using a powered wheelchair and often having reduced hand function would support to enlarge the size of the control buttons due to their own needs.

Agenda item 7.3 Size and design of control buttons:

This size should be enlarged for blind users. Vision impaired and blind people need larger control buttons with projecting design from the surrounded panel area. Only in ANNEX G "Other Devices" extra large (XL) control devices – 50 mm x 50 mm - are required for the horizontal control panel but this is only an informative part of the standard. The concerned blind people want to have in all accessible lifts larger control buttons which should be projecting from the surrounding panel. It is not necessary to enlarge it to 50 mm but about 25 mm diameter as required in the main part of the standard is too small. Several tests results show that 40 mm diameter (or square) would be a recommended measure of control buttons.

Compare with CEN/CLC Guide 6 table 7 for buildings and check if some other requirements are missing within the standard EN 81-70.

10. ELDERLY CONSUMER REPRESENTATIVES (F)

If one elderly consumer representative takes part in the role-play he/she should take all arguments concerning persons with walking aids, crutches etc. on board.

Stress the importance of preventative measures during the demographic change. Most people want to live also in old age in their homes. Lifts are the most important aids to overcome steps.

Especially the increasing needs of an ageing society should be brought in the discussion. If lifts are executed this investment should be sustainable and considering all future needs of the population.

It makes no sense to build in lift car type 1 when in few years later much more persons with wheelchairs and persons with walking aids are on the way. Especially the last user group cannot leave the lift car backwards – they need to turn around in the lift car and promote therefore strongly lift car type 3.

Special focus should be given to the contrasting design of control buttons to support elderly persons with vision impairment.

For persons with hearing impairment an induction loop system is necessary to hear the indication of floor announcement.

If no extra role for elderly consumer representative is available these arguments should be taken on board also by the consumer representative.

Interactive Standardization Meeting/ Planning for Accessibility

The aim of this meeting is to discuss the needs of revision of EN 71-1 *"Safety of toys - Part 1: Mechanical and Physical Properties"* after 5 years of publication and point out the positions of the different parties concerned in view of a necessary revision.

Trainees will be asked to "consider" the needs of all users at the meeting of CEN TC 52 before the launch of the public enquiry about revision.

Within the meeting the trainees will use the information gained during the training in a real-life meeting setting.

The time for this topic is divided in time for:

- Preparation and familiarisation with documents
- The Meeting itself
- Evaluation of the Meeting in relation to addressing the needs of all users

Goal: understanding the real situation in a CEN/TC meeting and discovering the skills and strategies which are needed; understanding how all opinions are valid and should be considered
Trainees are asked to make use of their 'negotiating skills" and standardization knowledge acquired during the training

Annexes:

- Presentation with the main key issues
- Description of the standardization meeting
- Extract from Directive 2009/48/EC 'Safety of Toys', ANNEX V 'Warnings'
- EN 71.1:2005+A9:2009 Safety of Toys – Part 1: Mechanical and physical properties (Clause 6 & 7)
- FACTSHEET Annex V Warnings

Standardization Meeting/ Planning for Accessibility

Revision of EN 71-1: Safety of Toys - Part 1: Mechanical and physical properties

Background
prEN 71-1 «
Safety of Toys - Part 1: Mechanical and physical properties
is already published.

- The aim of the meeting is to discuss the needs of revision of EN 71-1 after 5 years of publication and point out the positions of the different parties concerned in view of a necessary revision
- Trainees will be asked to consider the opinions of stakeholders /representatives at the meeting of CEN TC 52
- Trainees are asked to make use of their 'negotiating skills" and standardization knowledge in relation to CEN Guide 6 acquired during the training

Two topics on the agenda during the CEN/TC 52 meeting

- Item 4: Future revision of EN 71-1 Clause 6 Packaging

  Consideration of CEN Guide 6 Table 2 & Table

- Item 4 : Future revision of EN 71-1 Clause 7: Warning and instructions for use

  Consideration of CEN Guide 6 Table 1 and Table 5

The meeting is conducted by the CEN/TC convenor (role A) and supported by the CEN/TC secretary (role B - facultative). These roles should be played by trainers of STAND4All who are familiar with standardization meetings and proceedings if none of the Committee members have experience in this area

The CEN/TC convenor should always have in mind his/her neutral position. His/her main goal is to find a solution by consensus in all contradicting issues and proposals

The CEN/TC secretary is an officer of a national standards organisation and responsible for the target dates of revisions of the standards and all organisational details.

Task 1

Review the relevant parts of EN 71 Part 1 Clause 6 Packaging

Task 2

Review the relevant parts of EN71 Part 1 Clause 7 Information and instructions for use

CONSUMER REPRESENTATIVES

Consumer representatives should consider all opinions in relation all different types of disabilities and special needs of elderly persons. The needs of blind persons / vision impairment /mobility impaired users , older persons should be considered.

Position and main arguments:

Participants will have the opportunity to hear arguments from all committee members including technical considerations, economic & moral considerations, and viability of including particular requirements in a Standard.

Participants will have the opportunity to become familiar with existing legislation, European Directives and development of standards.

Documents used during the Meeting

1. Directive 2009/48/EC Safety of Toys
2. Directive 2009/48/EC Safety of Toys Annex V Warnings
3. EN 71.1:2005+A9:2009 Safety of Toys – Part 1: Mechanical and physical properties
4. FACTSHEET Annex V Warnings
5. CEN Guide 6
6. Product: Remote Controlled Car (used to assist the Technical Committee with its work)

Simulation of a standardization Meeting (a TC Meeting)

In order to provide accessible products (and services), it is necessary to take account requirements of the elderly and disabled into account in standards development. The different kinds of inconveniences that are experienced in daily lives are key in this topic, wherein we an actual standards development setting simulate.

In the first part we'll take a closer look at the different kind of inconveniences by the use of a toy.

In the second part of the topic ("Technical Meetings") we'll take into account this inconveniences by reviewing an existing standard, in a real-life setting of a TC Meeting.

Goal of this topic

- Understanding the real situation in a CEN/TC meeting;
- Discovering the skills and strategies which are needed;
- Using Guide 6 in developing and revising standards

We choose a product, for example a remote-controller. We take a look at an existing standard and we ask the trainees to comment on it, with the help/use of Guide 6. We also make clear which factors should be considered (only 1 or 2). The trainees introduce themselves - so, they don't play a role but "play themselves". Therefore, the different backgrounds of stakeholders will be introduced and dealt with. Of course, the two groups of 10 are mixed with 'users' and ' committee members'. The exercise makes it possible to introduce the matter of 'compromising'.

This exercise is practical and more linked to Guide 6 than the role play is.

Product specific requirements

Directive 2009/48/EC Safety of Toys

- Directive 2009/48/EC Safety of Toys Annex V Warnings
- EN 71.1:2005+A9:2009 Safety of Toys – Part 1: Mechanical and physical properties (Clause 6 & 7)
- FACTSHEET Annex V Warnings

The aim of the meeting is to discuss the needs of revision of EN 71-1 after 5 years of publication and point out the positions of the different parties concerned in view of a necessary revision

Trainees will be asked to consider the opinions of stakeholders /representatives at the meeting of CEN TC 52 'Toys'. This is a big European Committee, with a lot of active participation from throughout Europe.

Trainees are asked to make use of their 'negotiating skills" and standardization knowledge in relation to CEN Guide 6 acquired during the training. Further relevant material is provided in the manuals and should be used.

Accessibility Requirements

- Policy
- Directives
- Legislation
- Mandates
- Standards
- Guidance Documents

Toy safety is the practice of ensuring that toys, especially those made for children, are safe, usually through the application of set safety standards. In many countries, commercial toys must be able to pass safety tests in order to be sold.

In Europe, the following applies:

European standards, namely the EN 71- serie (about 11 parts)

EN 62115:2005 Safety of electric toys
Different Council Directives, for example: Council Directive (2009/48/EC)on the Safety of Toys

The relevant accessibility requirements need to be adopted in the following publications: Policy, Directives , Legislation , Mandates, Standards

Guidance Documents

Technical Meeting

- Have a Simulated Technical Committee Meeting
- 2 groups (Mix of Users/Experts)
- Breakout Rooms (2 Rooms)
- 2-4 Facilitators/Trainers per group
- 1 Chairperson per Group

Participants will have the opportunity to hear arguments from all committee members including technical considerations, economic & moral considerations, and viability of including particular requirements in a Standard. Committee members will have the opportunity to hear arguments from the users side.

Participants will have the opportunity to become familiar with existing legislation, European Directives and development of standards.

This setting of standards development is a real-life experience for users.

Technical Meeting

Step 1

A. Critique the Product (Remote Controlled Car)

B. Develop a list of problems/issues

In the room, a toy is available (in this case we use a Remote Controlled Car). This toy needs to be investigated and evaluated by trainees on accessible impacts.

There can be various problems, for example:

-The user can't customize the settings

-The toy is not suitable both for right- and left-handed use

-The toy is applicable to adaptive technologies that people may use

-The toy is unnecessary complex

-The toy does not provide warnings

Technical Meeting

Step 2: Packaging/Information

- Consult CEN Guide 6 Tables 1 and 2
- Review the listed factors in Tables 1 and 2
- Identify what factors are critical to make the information and packaging of the product accessible

- For packaging to be accessible it must be designed to be easy for the consumer to open, have legible labelling and not compromise safety or quality.

For a consumer to get full satisfaction from the product the packaging needs to be functional and useable—this includes the ability to open and close.

Key questions to be considered in the review process

• Has the consumer's ability to access the product within the packaging been adequately considered in the design process? For example, does it look like that a consumer specialist has analyzed the actions required to interact with the product.

• Have you considered whether the level of information on the packaging ensures the consumer is aware of its contents and how to open the package?

• Can changes be made to improve the ability of the consumer to use the product without compromising the safety, security or quality?

• Could an alternative design be used efficiently to minimize the requirement for tools such as a knife or scissors?

Feedback from Group (s)

Technical Meeting

Step 3: Proofing Technical Standard

- EN71-1: Safety of Toys – Part 1 Mechanical and Physical Properties
- Product Example

The trainer will divide the trainees into two groups. Per group and we point people being the chair/secretariat (thus, the topic will be facilitated as in real-life). We take a look at the toy-standard, taking into account the discussion we had in the first part.

Guide 6: Clause 7

Table 1 - Clauses on Information

- Table 2 - Clauses on packaging
- Table 3 - Clauses on materials
- Table 4 - Clauses on installation
- Table 5 - Clauses on the user interface
- Table 6 - Clauses on maintenance, storage and disposal
- Table 7 - Clauses relating to the built environment

In Guide 6 , several Tables are important when considering accessibility requirements.

In this session we'll prioritise the Tables, together with trainees. The trainees need to have the Guide 6 in front of them.

Technical Meeting

Step 3: Proofing Technical Standard

Focus of the Meeting:

- Clause 7 of EN 71-1
- Clause 7.1: Warnings and instructions for use- General

See for further explanation document 'Extract from EN 71 Safety of Toys Part 1 Clause 6 & Clause 7'

Technical Meeting

Step 3: Proofing Technical Standard

- Referring to CEN Guide 6 Table 1 identify accessibility gaps in EN 71 – 1 clause 7.1

Guide 6, Table 1 “Clause on Information” provides detailed guidances how to include clear information for consumers in a standard.

See EN 71-1, Clause 7.1 **Warnings and instructions for use**

Technical Meeting

Step 4: Proofing Technical Standard

Focus of the Meeting:

- Now with Guide 6 , Table 1 revise the content of Clause 7.1 of EN 71-1

Trainees need to report what is stated in the standard with regard to the provision of appropriate information by the manufacturer. Trainees also need to report how this can be improved by the use of Guide 6, Table 1.

Technical Meeting

Step 4: Proofing Technical Standard

Focus of the Meeting:

- Prepare proposed text for the revision of Clause 7.1

Trainees report their improved texts.

Here we add examples wherein the needs of partially sighted and blind people are being heard:

• Information provided by manufacturer should only be in relative font sizes

•Packaging should contain braille text. The braille dot height does not need to be as high as 0.45mm for readability. On cartons the target height should be 0.2mm, with no more than five per cent of measurements below 0.12mm and no more than one per cent under 0.1mm.

FEEDBACK FROM GROUPS

- What did you learn – Users & Committee members ?

A crucial component of this feedback from trainees about their progress is to make clear how they can enable their effective development as accessibility experts in standardization.

DIRECTIVES

DIRECTIVE 2009/48/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2009 on the safety of toys

Extract of ANNEX V

ANNEX V **WARNINGS** (as referred to in Article 11)

PART A

GENERAL WARNINGS

The user limitations referred to in Article 11(1) shall include at least the minimum or maximum age of the user and, where appropriate, the abilities of the user, the maximum or minimum weight of the user and the need to ensure that the toy is used only under adult supervision.

PART B

SPECIFIC WARNINGS AND INDICATIONS OF PRECAUTIONS TO BE TAKEN WHEN USING CERTAIN CATEGORIES OF TOYS

1. Toys not intended for use by children under 36 months

Toys which might be dangerous for children under 36 months of age shall bear a warning such as 'Not suitable for children under 36 months' or 'Not suitable for children under three years' or a warning in the form of the following graphic:

These warnings shall be accompanied by a brief indication, which may appear in the instructions for use, of the specific hazard calling for this precaution.

This point shall not apply to toys which, on account of their function, dimensions, characteristics or properties, or on other cogent grounds, are manifestly unsuitable for children under 36 months.

2. Activity toys

Activity toys shall bear the following warning:

'Only for domestic use'.

Activity toys attached to a crossbeam as well as other activity toys, where appropriate, shall be accompanied by instructions drawing attention to the need to carry out checks and maintenance of the main parts (suspensions, fixings, anchorages, etc.) at intervals, and pointing out that, if these checks are not carried out, the toy may cause a fall or overturn.

Instructions must also be given as to the correct assembly of the toy, indicating those parts which can present a danger if incorrectly assembled.

Specific information regarding a suitable surface on which to place the toy shall be given.

3. Functional toys

Functional toys shall bear the following warning:

‘To be used under the direct supervision of an adult’.
In addition, these toys shall be accompanied by directions giving working instructions as well as the precautions to be taken by the user, with the warning that failure to take these precautions will expose the user to the hazards – to be specified – normally associated with the appliance or product of which the toy is a scale model or imitation. It shall also be indicated that the toy must be kept out of the reach of children under a certain age, which shall be specified by the manufacturer.

4. Chemical toys
Without prejudice to the application of the provisions laid down in applicable Community legislation on the classification, packaging and labelling of certain substances or mixtures, the instructions for use of toys containing inherently dangerous substances or mixtures shall bear a warning of the dangerous nature of these substances or mixtures and an indication of the precautions to be taken by the user in order to avoid hazards associated with them, which shall be specified concisely according to the type of toy. The first aid to be given in the event of serious accidents resulting from the use of this type of toy shall also be mentioned. It shall also be stated that the toy must be kept out of reach of children under a certain age, which shall be specified by the manufacturer.
In addition to the instructions provided for in the first subparagraph, chemical toys shall bear the following warning on their packaging:
‘Not suitable for children under (*) years. For use under adult supervision’.
In particular, the following are regarded as chemical toys: chemistry sets, plastic embedding sets, miniature workshops for ceramics, enamelling or photography and similar toys which lead to a chemical reaction or similar substance alteration during use.

5. Skates, roller skates, online skates, skateboards, scooters and toy bicycles for children
Where these toys are offered for sale as toys, they shall bear the following warning:
‘Protective equipment should be worn. Not to be used in traffic’.
Moreover, the instructions for use shall contain a reminder that the toy must be used with caution, since it requires great skill, so as to avoid falls or collisions causing injury to the user or third parties. Some indication shall also be given as to recommended protective equipment (helmets, gloves, knee-pads, elbow-pads, etc.).

6. Aquatic toys
Aquatic toys shall bear the following warning:
‘Only to be used in water in which the child is within its depth and under adult supervision’.

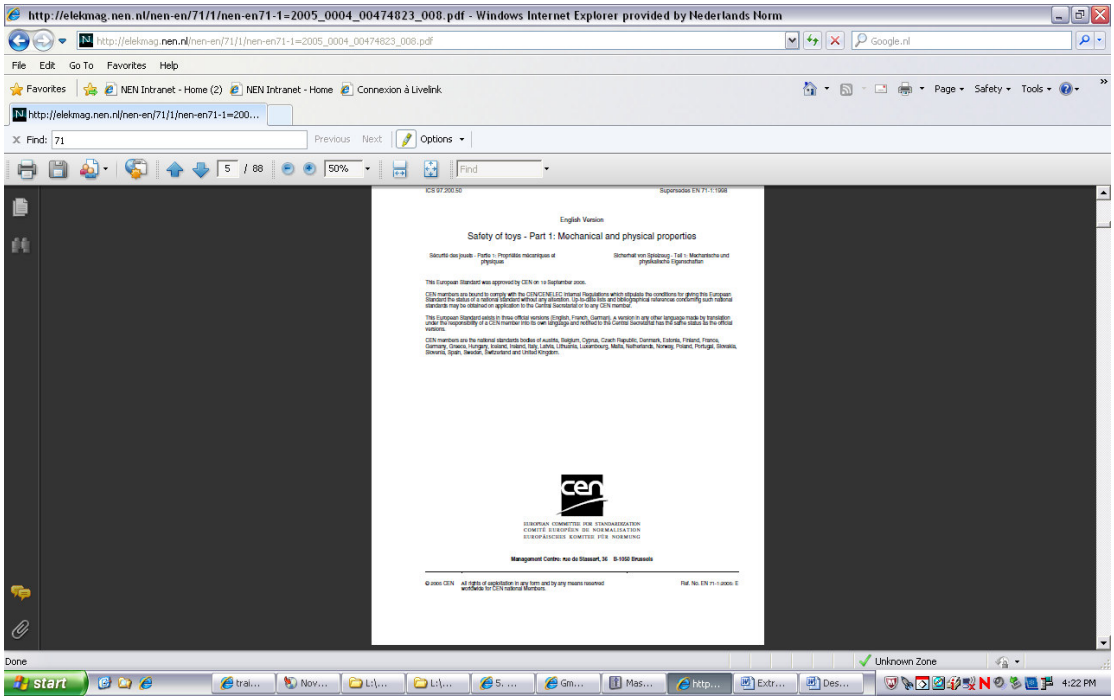
7. Toys in food
Toys contained in food or co-mingled with food shall bear the following warning:
‘Toy inside. Adult supervision recommended’.

8. Imitations of protective masks and helmets
Imitations of protective masks and helmets shall bear the following warning:
‘This toy does not provide protection’.

9. Toys intended to be strung across a cradle, cot or perambulator by means of strings, cords, elastics or straps
Toys intended to be strung across a cradle, cot or perambulator by means of strings, cords, elastics or straps shall carry the following warning on the packaging, which shall also be permanently marked on the toy:
‘To prevent possible injury by entanglement, remove this toy when the child starts trying to get up on its hands and knees in a crawling position’. EN L 170/36 Official Journal of the European Union 30.6.2009
(*) Age to be specified by the manufacturer.

10. Packaging for fragrances in olfactory board games, cosmetic kits and gustative games
Packaging for fragrances in olfactory board games, cosmetic kits and gustative games that contain the fragrances set out in points 41 to 55 of the list set out in the first paragraph of point 11 of Part III of Annex II and of the fragrances set out in points 1 to 11 of the list set out in third paragraph of that point shall contain the following warning:
‘Contains fragrances that may cause allergies’.

Extract from EN 71 Safety of Toys Part 1 Clause 6 & Clause 7



NEN-EN 71-1 - Safety of toys - Part 1: Mechanical and physical properties

6 Packaging

The requirement in 6 a) does not apply to:

- shrunk-on film *packaging*, which is normally destroyed when the *packaging* is opened by the user;

- bags made of perforated sheets which conform to the requirements in 4.3 b).

The *packaging* of toys shall conform to the following requirements:

a) Bags made of flexible plastics with an opening perimeter greater than 380 mm used for external or internal *packaging*, shall have an average sheet thickness of 0,038 mm or more when tested according to 8.25.1 (plastic sheeting, thickness).

b) Bags made of flexible plastics with an opening perimeter greater than 380 mm shall not have a drawstring or *cord* as a means of closing.

7 Warnings and instructions for use (see A.33)

7.1 General

NOTE Users of this European Standard are reminded of the legal requirements in each country.

For the European Union, note that

- toys must be accompanied by appropriate clearly legible warnings in order to reduce inherent risks in their use as described in the essential safety requirements in European Council Directive 88/378/EEC of 3 May 1988 concerning the safety of toys (published in the Official Journal of the EC No. L 187 of 16 July 1988).

- the manufacturer or his authorised representative or the importer into the community shall in a visible, easily legible and indelible form affix his name and/or trade name and/or mark and address on the toy or on its *packaging* together with the CE-marking as declaration of presumption of conformity with the essential safety requirements of the above directive.

The legal requirements for the CE-marking are given in European Council Directive 93/68/EEC of 22 July 1993.

For details, refer to the directives or corresponding national legislation.

-In the following clauses, the location of the warnings is indicated (on the toy itself, on the *packaging*, in the instructions for use, on an accompanying leaflet).

Small toys that are sold without *packaging* shall have appropriate warnings affixed to them. In all cases the warning shall be clearly legible at the point of sale.

When a requirement states that a toy shall carry a warning this means that the warning shall appear on the toy itself.

7.2 Toys not intended for children under 36 months (see A.34)

-The provisions in 7.2 do not apply to toys which, on account of their function, dimensions, characteristics,properties or other cogent grounds, are clearly unsuitable for children under 36 months. Toys which are not intended for but might be dangerous for children under 36 months shall be accompanied by a warning, for example:

"Warning! Not suitable for children under 36 months" or "Warning! Not suitable for children under three years

together with a brief indication of the specific hazard calling for this restriction.

When more than one hazard is present, at least one of the principal hazards shall be indicated.

Examples of specific hazards are:

“Warning! Not suitable for children under 36 months. Choking hazard”

“Warning! Not suitable for children under 36 months. Suffocation hazard”

“Warning! Not suitable for children under 36 months. Strangulation hazard”

The manufacturer should provide appropriate information about the hazard(s) through the examples mentioned above or through other sentences that achieve the same result.

The age warning shall be clearly legible at the point of sale of the product and shall appear either on the toy itself or on its *packaging*.

The indication of the specific hazard may appear in a leaflet or in the instructions for use.

The phrase: "Warning! Not suitable for children under 36 months" or "Warning! Not suitable for children under three years" may be substituted by the symbol as specified in Figure 14.

Figure 14 – Age-warning symbol

The details of the design shall be as follows:

- the circle and the stroke shall be red;
- the background shall be white;
- the age range and the outline of the face shall be black;
- the symbol shall have a diameter of at least 10 mm and the proportions between its different elements shall be such as those prescribed in Figure 14;
- the age range for which the toy is not suitable shall be expressed in years, i.e. 0-3.

The symbol shall be used to indicate only “0 to 3” years and not for any other age-grade warning to avoid misinterpretation of the symbol.

7.3 Latex balloons (see 4.12 and A.16)
The *packaging* of latex balloons shall carry the following warning:

"Warning! Children under eight years can choke or suffocate on uninflated or broken balloons. Adult supervision required. Keep uninflated balloons from children. Discard broken balloons at once."

The *packaging* of natural rubber latex balloons shall indicate "Made of natural rubber latex".

- f there is no *packaging*, the information shall be on the balloons and/or on a leaflet accompanying the balloons.

7.4 Aquatic toys (see 4.18 and A.23)
Aquatic toys and their *packaging* shall carry the following warning:

"Warning! Only to be used in water in which the child is within its depth and under
supervision."

- The warning on the toy shall be visible, indelible and in a colour which contrasts with the body of the toy.
The height of letters shall be 3 mm or more and the marking on inflatable toys shall be 100 mm or less from one of the air inflation inlets.

No advertising copy or graphics shall state or imply that the child will be safe with such a toy if left unsupervised.

7.5 Functional toys (see A.35)
Functional toys or their *packaging* shall carry the following warning:

"Warning! To be used under the direct supervision of an adult."

In addition, these toys shall be accompanied by directions giving working instructions and precautions to be taken by the user, with the warning that failure to take these precautions would expose the user to the hazards - to be specified - normally associated with the appliance or product of which the toy is a scale model or an imitation. It shall also be indicated that the toy shall be kept out of the reach of very young children.

7.6 Hazardous sharp functional edges and points (see 4.7 and 4.8)
For toys that incorporate hazardous sharp *functional edges* (see 8.11, sharpness of edges) or hazardous sharp *functional points* (see 8.12, sharpness of points), attention shall be drawn to the potential hazards of such points and *edges* on the *packaging* and in the instructions for use accompanying the toy, -if appropriate.

7.7 Projectiles (see 4.17.3 c) and 4.17.4 c))

7.7.1 -Toys with projectiles which are able to discharge an object other than that provided with the toy
Toys with *projectiles* which are able to discharge an object other than that provided with the toy shall be accompanied by instructions for use which draw attention to the hazards of using missiles other than those supplied or recommended by the manufacturer.

7.7.2 Toys capable of discharging a projectile with a kinetic energy greater than 0,08 J
Toys capable of discharging a *projectile* with a kinetic energy greater than 0,08 J shall carry the following warning on the toy and/or its *packaging* and in the instructions for use:

"Warning! Do not aim at eyes or face."

7.8 Imitation protective masks and helmets (see 4.14.2 and A.19)
Toys that are imitations of protective masks and helmets (for example motorcycle helmets, industrial safety helmets and fireman's helmets) and their *packaging -deleted text*. shall carry the following warning:

"Warning! This is a toy. Does not provide protection."

7.9 Toy kites (see 4.13)
Toy kites and other flying toys with *cords* exceeding 2 m linking the toy to the child shall carry the following warning:

"Warning! Do not use near overhead power lines or during thunderstorms."

7.10 Roller skates, inline skates and toy skateboards (see 4.15.1.2)
- Roller skates, inline skates and skateboards for children, offered for sale as toys, and their *packaging* shall carry the following warning:

"Warning! Protective equipment should be worn. 20 kg max."

Moreover, the instructions for use or the *packaging* or the toy shall contain a reminder that the toy shall be used with caution since it requires great skill, so as to avoid falls or collisions causing injury to the user and third parties. Some indication shall also be given as to recommended protective equipment (helmets, hand/wrist protection, knee-pads, elbow-pads etc.).

7.11 Toys intended to be strung across a cradle, cot, or perambulator (see 5.4 e))
Toys intended to be strung across a cradle, cot, or perambulator by means of strings, *cords*, elastics or straps shall carry the following warning:

"Warning! To prevent possible injury by entanglement, remove this toy when the child begins to push up on hands and knees."

7.12 Liquid-filled teethers (see 5.5)
- Liquid-filled *teethers* or their *packaging* shall carry the following instruction:

"Cool only in a refrigerator. Do not place in the freezer compartment."

7.13 Percussion caps specifically designed for use in toys (see 4.19)
The *packaging* of percussion caps shall carry the following warning:

"Warning! Do not fire indoors or near eyes and ears. Do not carry caps loose in a pocket."

7.14 /Acoustics (see 4.19 and 4.20 f))
Toys which produce high impulse sound levels, or their *packaging* shall carry the following warning:

"Warning! Do not use close to the ear! Misuse may cause damage to hearing."

For toys using percussion caps add !adjacent to the text above":

"Do not fire indoors! !Use only percussion caps recommended by the manufacturer.

7.15 Toy bicycles (see 4.15.2.2)
- *Toy bicycles* and their *packaging* shall carry the following warning:

"Warning! A protective helmet should be worn when cycling!"

In addition, the instructions for use shall contain a reminder that the bicycle is not suitable for use on public highways. Moreover, parents or carers should ensure that children are properly instructed in the use of *toy bicycles*, particularly in the safe use of the braking systems.

7.16 'Toys intended to bear the mass of a child (see 4.10.1, 4.15.1.2, 4.15.3 and 4.15.4)
- Toys that due to their construction, strength, design or other factors are not suitable for children of 36 months and over shall carry the following warning on the toy and its *packaging*:

”Warning! Not to be used by children over 36 months.”

together with a brief indication of the specific reason for this restriction (e.g. insufficient strength).

The age warning shall be clearly legible at the point of sale of the product.

7.17 Toys comprising monofilament fibres (see 5.9)
- Toys comprising monofilament fibres of straightened length greater than 50 mm attached to a fabric base, or their *packaging*, shall carry the following warning:

”Warning! Not suitable for children under 10 months due to long hair.”.

)*deleted text**

7.18 Toy scooters (see 4.15.5.2)
- *Toy scooters* intended for children with a body mass of 20 kg or less and their *packaging* shall carry the following warning:

“Warning! Protective equipment should be worn. 20 kg max.”

Toy scooters intended for children with a body mass of 50 kg or less and their *packaging* shall carry the following warning:

“Warning! Protective equipment should be worn. 50 kg max.".

The instructions for use shall contain a reminder that the toy shall be used with caution, since it requires great skill, so as to avoid falls or collisions causing injury to the user and third parties. They shall also, as appropriate, include information such as:

- the warnings indicated above;
- how to safely fold or unfold foldable scooters;
- the necessity to pay attention that all locking devices are engaged;
- the dangers of using it in public highways;
- a recommendation to use protective equipment such as helmet, gloves, knee-pads and elbow-pads.

7.19 -Rocking horses and similar toys (see 4.15.3 and A.21)
Rocking horses and similar toys, where the intended sitting surface is 600 mm or more above the ground, shall carry the following warning:

”Warning! Risk of falling. Do not leave children under 36 months sitting or playing unattended.”

The warning shall be clearly legible at the point of sale of the product..

A.30 Liquid-filled toys (see 5.5 and A.42)
These requirements are intended to address the hazards associated with punctured *teethers* and similar products where the child might come into contact with liquids that are contaminated or become contaminated due to a puncture.

The requirements do not apply to electrolyte in batteries nor to paints, finger paints or similar items in containers.

The warning required in 7.12 is intended to make parents aware of the hazard associated with a *teether* which is so cold that it could harm the child.

A.31 Shape and size of certain toys (see 5.8 and A.43)
These requirements are intended to address potential impaction hazards associated with toys intended for children who are too young to sit up unaided.

Toys should be tested according to 8.16 (geometric shape of certain toys) "as supplied". In other words, they should be tested for this requirement before other relevant tests are conducted.

In determining which toys are intended for such children, the following factors are relevant: the manufacturer's stated intent (such as on a label) if it is reasonable, the advertising, the promotion, the marketing and whether the toys are generally considered as suitable for the age group in question.

It is recognised that children normally sit up unaided between five and ten months of age.

A.32 Toys comprising monofilament fibres (see 5.9)
Monofilament fibres attached to fabric base is not the usual method of production, but a toy made in this way was involved in the death of a child of 5 months. The requirement does not apply to monofilament hair which is normally rooted in a dolls head or to pile fabric used in the manufacture of teddy bears and animals etc., for which there are no accident data.

A.33 Warnings and instructions for use (see 7.1)
Warnings, precautions and instructions for use should as a rule be given in the national language(s) of the country where the toy is sold.
Small toys that are sold without *packaging* (for example from a display box or from a vending machine) should have appropriate warnings etc. affixed to them. It is not sufficient to have the warning only on the display box.

General information on how to elaborate and present information for the consumer is given in ISO/IEC Guide 37 - *Instructions for use of products of consumer interest*.

A.34 Warning for toys not intended for children under 36 months (see 7.2)

- The use of the warning should not be misleading or incorrect. Toys intended for children under 36 months should comply with the requirements of Clause 5 (small parts, small balls, sharp edges, sharp points etc.)
The warning does not release the manufacturer or his authorized representative from his obligation to meet these requirements. Information on deciding which toys are intended for children under 36 months and which toys are not, for example, can be found in CR 14379.

The use of the warning should not be confused with a recommendation for use. A recommendation for use
could, for example, be a positive age recommendation by the manufacturer indicating the intended age of use.

Factsheet

The 2009 Toy Safety Directive

Provisions on Warnings

October 2009

This document is one of a series of factsheets, aimed at providing a general overview of the changes introduced by the new Toy Safety Directive (2009 TSD) as adopted in 2009. The objective of the TIE/EC factsheets is to provide guidance to toy manufacturers across the EU regarding the implementation of the 2009 TSD. A particular focus is put on the obligation of manufacturers.

The 2009 TSD will strengthen the rules as laid down in the 1988 TSD. As a result, this new legislation will require adaptations in the manufacturing chain, as well as new procedures along the supply chain.

The 2009 TSD was published in the *Official Journal of the European Union* on 30 June 2009 and entered into force on 20 July 2009. The general provisions of the 2009 TSD will be applicable to toys placed on the market as of 20 July 2011, while the chemical provisions will be applicable to toys placed on the market as of 20 July 2013 (additional 2-year transition period for chemical properties). In practice, this means that the toys compliant with the 1988 TSD will be allowed to be placed on the market until 19 July 2011 or 19 July 2013 in the case of certain chemical provisions.

Warnings

General rules

General warnings which specify user limitations should be provided with the toy where appropriate for safe use. In addition, Part B of Annex V of the 2009 TSD provides that specific warnings for certain categories of toys should be provided.

In addition to the mandatory requirements set out in the 2009 TSD, the harmonized standards also specify warnings that should accompany certain categories of toys.

Within its territory, a Member State may stipulate that the warnings shall be written in a language or languages easily understood by consumers, as determined by the Member State.

Location of the warnings

The manufacturer shall mark the warnings in a clearly visible, easily legible and understandable and accurate manner.

Warnings must be marked on the toy, an affixed label or the packaging. If appropriate, warnings should also be included in the instructions.

It is important to note that in cases where the toy is sold without packaging, the warning needs to be affixed on the toy itself. Affixing warnings on a counter display box is not sufficient to meet the requirements of the 2009 TSD.

Warnings which determine the purchase decision, such as minimum and maximum user age indications and the specific warnings described in Part B of Annex V of the 2009 TSD, must appear on the consumer packaging or be otherwise clearly visible to the consumer before the purchase, even in cases where the purchase is made online.

Specific warnings
User limitations must contain at least the minimum or maximum age of the user. If appropriate, they shall also contain the abilities or characteristics required by a user to be able to use the toy safely (e.g. ability to sit unaided, maximum and minimum weight of the user, need to use the toy under supervision).
Economic operators may choose between a warning phrase or pictogram (or both):
Warning - Not suitable for children under 36 months
In any case, the wording and/or the pictogram must be preceded by the word "Warning" or "warnings" as appropriate.
The specific warning *"Not suitable for children under 3 years"* and pictogram described in Part B of Annex V of the 2009 TSD in relation to children under 3 years cannot be used for toys intended for children under 3 years.
More generally, specific warnings provided for certain categories of toys must not conflict with the intended use of the toy, as determined by virtue of its function, dimension and characteristics.
If necessary, the European Commission may propose wording for the specific warnings of certain categories of toys.

Sources of information
The final text of the 2009 TSD is available here and as a backgrounder the text of the 1988 TSD is available here.
The two documents can also be found at the following URLs:
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ%3AL%3A2009%3A170%3A0001%3A0037%3AEN%3APDF
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1988L0378:20090112:EN:PDF.

Important notice
This factsheet reflects our understanding of the 2009 TSD text published in the *Official Journal of the European Union* on 30 June 2009 and is intended merely to highlight in a general manner certain provisions of that text. TIE does not make any warranties about the completeness of the information herein and assumes no responsibility for any use of or reliance on this factsheet.
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STAND4ALL

Topic 'Further Implementation'

Short introduction to 'Further Implementation'

The final topic of the STAND4ALL training is entitled “Further Implementation” and repeats the importance of implementing accessibility requirements in standards development. It also deals with the question what do the trainees do with the information they received during the training? In the training several topics were being addressed to make clear why user input in standardization is important and how this can be achieved. Practical exercises and a role play supported this in a practical way. Questions to be answered during this 'Further Implementation' session include “What have you learnt?”, “What is your view of CEN / CENELEC Guide 6” and “What are your personal objectives following the STAND4ALL training?”

As both participation in standardization as applying accessibility requirements in standardization require specific skills and knowledge, it essential that at the end of the course it is confirmed that users and committee members have these skills and knowledge and that trainees know how to bring these skills and knowledge into practice.

In the training several topics are being addressed to make clear why user input in standardization is important and how this can be achieved. With exercises and a role-play we supported this in a practical way. Throughout the course, participation of users and of accessibility experts in standardization is one of the central figures. The importance of applying 'Design for All' principles and CEN/CENELEC Guide 6 in standardization is addressed to both the user trainees as the committee member trainees throughout all topics. Now, in this last Topic "Further Implementation" possibilities for concrete action are presented.

The final effect of the STAND4ALL course may depend on how the trainees will bring the lessons learned in practice.

The skills and knowledge presented during the course will be repeated during this final Topic. Together with concrete follow-up

suggestions, it will help trainees to find out how they can chart their course in near future.

Concrete questions for trainees are:
- What will you do with the information gained in this training when you go back home?
- What are the possibilities to use the training in daily work?

To answer these questions, as well as to help trainees further, different opportunities to work in standardization are addressed. Also, the role the trainees – as accessibility experts in standardization- will be discussed.

The 'Further Implementation' session is performed at the end of the STAND4ALL course This means it is a combined session for both groups of trainees (users and committee members) at the end of their one/two day(s) of training. The module is designed to be completed in one and a half hours. In about 60 minutes the trainees discuss their potential role in standardization and how a user perspective could be improved.

The topic will consist of the following parts:
1. possibilities of follow-up projects
2. personal future activities

Goals of this topic are:
- Trainees understand the benefits of user involvement in standardization
- Trainees know about possibilities for further action and make a personal implementation plan

Annexes:
- STAND4ALL document 'Further Implementation'
- Presentation
- List of relevant CEN TC’s
- ETSI contact overview

Sustainability & further implementation

In the training several topics are being addressed to make clear why user input in standardization is important and how this can be achieved. With exercises and a role-play we supported this in a practical way. The question is; what do you do with the information gained in this training when you go back home? What are the possibilities to use the training in daily work?

In this topic we will address different opportunities to work in standardization and discuss the role the trainees would like to play.

For further reading about the subject of active participation, the following documents and websites can be used:

- CEN Brochure on The World of European Standards ftp://ftp.cen.eu/CEN/AboutUs/Publications/Compass.pdf
- CEN Brochure on making standards via ftp://ftp.cencenelec.eu/PUB/MakingEuropeanStandards.pdf
- CEN Brochure of Standards at Play via ftp://ftp.cen.eu/PUB/Standards@play.pdf
- ISO Brochure 'Your voice matters'(ISO) via http://www.iso.org/iso/copolcoyourvoicematters.pdf
- www.anec.org and www.edf-feph.org
- www.stand4all.eu
- E-Learning module STAND4ALL via www.stand4all.eu

Background information

Standards play a role in everyday life and so they play a role in people's quality of life. Therefore the views and experiences of those affected by a standard should be taken into consideration. Both the secretary and committee member have the responsibility to make sure these views and experiences are taken into consideration.

Why should representatives of users/consumers be present in standardization?

- Consumers are affected by standards and are the 'end users' of many.
- Increased public credibility for standards
- Faster, cheaper and better standards
- Consumers bring a common sense and "plain English" approach, have specific knowledge and skills
- Involving consumers (the end user) from the start can speed up the process and avoid costly mistakes
- Understand user's different situations and (im)possibilities and so increase satisfaction for all users

We conclude: Users involvement means input with a professional and personal view. The 'Further Implementation session' aims to transfer this conclusion into concrete steps.

***Further Implementation session**: 'A mutual increased understanding of the needs and viewpoints of both stakeholder groups'*

For many of the trainees the STAND4ALL training is their first opportunity to meet trainees in the other stakeholder group. The interactive nature of the training should promote discussion amongst both groups. Due to the nature of delivering training to persons with disabilities (use of signers for deaf people, or alternative formats for the visually impaired), the committee member groups are able to witness first hand both the everyday issues faced by users and the potential barriers to standardization.

Delivery of training to committee members

Feedback comments received by committee members' trainees* further illustrate the point:

The importance of including individuals with disabilities in standardization and not just their representatives
The pro active involvement [of people with disabilities] is fundamental to a functional standard being effective
I know now that funding is a problem [for people with disabilities to be involved in standardization]

*collected from trainees of the STAND4ALL training session 2009-2010

The training should deliver a significant focus on Guide 6, especially for the interactive exercises. The committee members trainees are likely better informed in using the guide following the training.

Additionally, in this session 'Further Implementation' you should provide feedback from trainees on using the Guide: Is the guide itself the most effective tool to promote inclusion of accessibility and disability issues in standardization?

Key areas that could be considered for improvement of the guide include:
- Improving the accessibility, especially for those with visual impairments. This is of particular concern because a guide promoting accessible products and services, should itself be accessible.
- How committee members had heard of the Guide before this training?
- Were there any errors in the tables of the Guide discovered during the exercises?

Delivery of training to people with disabilities

A proportion of the trainees in the user stakeholder group can be themselves disabled (or had accessibility requirements). Another part of the trainees in this user stakeholder group are persons with no disability but who are representatives of disabled people.

Evaluation from the STAND4ALL Training session 2009-2010

There was evidence of an increased understanding of the needs and viewpoints of both stakeholder groups, as putting the groups together allowed for informal discussion about issues as well as the interaction that took place as part of the role play sessions. In particular, some of the practical issues about working with disabled people in standards committees were made very apparent; many TC participants had never worked with a Sign Language Interpreter and had to learn how to conduct themselves formally in session and informally to ensure that they included deaf people effectively in the training. Another issue was informal discussions about access to training premises, hotels and transport.
Many TC participants saw 'first hand' what sort of barriers disabled people face in day to day living and some used examples of these during discussions in the training.

Another key issue that engendered much discussion was the issue of how to use the knowledge and life experiences of disabled people to inform standards development. It was clear that some disabled people are 'experts by experience' but only in the issues faced by people with same impairments as them, rather than having 'pan disability' knowledge.
Participants of both types realised that simply 'having a disabled person on the committee' is not going to deliver the right results. That person needs to have the right knowledge and expertise, they need to be clear about what they can comment on and what they can't, and how well they actually represent 'disabled people' who are very diverse community. Disabled people may also need practical training, support and 'mentoring' to enable them to develop the skills they need to effectively participate in committees, this is not something that is the responsibility of disabled people to do, participants recognised that NSBs need to do more to support the involvement of disabled people.
Another issue was that participants commented informally that the examples used in the role play (the topic for which was 'lifts') had an obvious relevance to disabled people, but that there was a danger that other issues which would affect disabled people, but which were not seen as being 'obviously relevant' to disabled people might mean that disability issues were overlooked or not considered in some standards. An example of this was given by the presenter, who runs BSI's Disabled Experts Reference Group. She noted that her group had been asked for its views on a draft standard about biometric capture and that those who had produced the document had missed most of the issues that would create barriers for disabled people in reality, e.g. such as the accessibility of the actual capture process.
A further issue was the question of how well NSB's currently involve disabled people in the standards development process. Several NSBs have a specific team or division promoting consumer interests in standardization. A range of models exist, with the chosen model differing according to resource availability in the NSBs. Other NSBs have no specific activity in this field.
Due to the differing sizes of NSBs and national contexts within the EU a single model for user participation for all NSBs would not be appropriate.

In this 'Further Implementation' session we'll focus on two objectives, namely:

- objectives for users
- objectives for committee members

The objective for users

What ?
Promote, transfer and spread your knowledge on accessibility to standardization experts

How?
Via participation of users in standardization, either at European or national level

Explanation:
(Representatives of) users who want to share their particular knowledge and experience about the products and services they use or that matter to them can participate in standardization. By participating in standardization, both at European and at national level, users have an opportunity to influence the standardization process by providing information about their attitudes, experiences and their (technical) knowledge.
A (representative of) user participates in meetings of national or international Technical Committees where standards are developed.

Although no particular background is required, users should have an interest in, and specific (technical) knowledge of, the subject area.
Indeed, user participation in standardization should be increased, but taking into account some requirements as 'being disabled' does not automatically mean someone is an 'expert in disability'. The level of experience and abilities of a user need to be considered by both the NSBs and the group of user stakeholders; user participation requires competent, professional, broader knowledge on a range of different disabilities. The background and the level of knowledge of users on standardization is considered to be very important in relation to future participation in standardization and the effectiveness of it. Having no or little knowledge on 'The world of standardization' and its processes is considered to be a barrier. Personal skills of users are of great importance for the activeness during the session and follow-up.

Someone who is neither an expert in the specific field nor has sufficient expertise in standardization will be ignored in the standardization process unless the person can make advantageous use of arguments. At the same time, as long as the input from users is based on clear arguments, technical committees and their members will be open for it and take it into consideration. Having both experience and knowledge is forceful. During the 'Further Implementation topic' user-trainees should be able to make clear that they have knowledge on how to ensure consumer issues are considered in the standardization process and what skills are necessary in doing so

The user organizations of people with disabilities need to identify priority areas and potential areas of interest, as CEN publishes about 500 standards a year and (on top of that, CENELEC, ETSI, ISO and IEC also are publishing every year). In CEN there are about 400 Technical Committees, covering thousands of working groups. This leads to a difficulty to find an appropriate technical committee for users to participate in. Suitable ongoing activities can be targeted by liaising with CEN and the NSBs in this respect and to support their members in the preparation and participation.
Of help is the List of Ongoing Activities (added in this manual), the stand4all website (www.stand4all.eu), the e-Learning module (also via the stand4all website) and the

brochure provided by CEN ('Standards at Play), that illustrates that standards are always working in everyday life.

In general, the standards being developed that address issues of concern to users, may include some of the following : health, safety, ergonomics, quality, comfort, environmental protection, ease-of-use and compatibility.

Participation of users in standardization, either at European or national level: how does it work?

1. Contact your national user umbrella organization

The umbrella's often cooperate with national standards bodies, or with larger consumer group. Examples such as the Maltese situation where the NSB has an agreement with a disability umbrella organization for membership and input and other countries, a government department supports umbrella organizations financially to take (partly) part in standardization, can be used as a model.

2. Contact your National Standardization Body (NSB)

This body is the representative national standards body of your country. Contact details are available on CEN Website, via 'Members':
http://www.cen.eu/cen/Members/Pages/default.aspx
However, it depends on how the NSB in a country is structured and how it channels consumer views into its work. In some countries, national standards bodies seek the views of consumers by involving one or more national consumer associations both in policy-making and in standards development work.

Several NSBs have a specific team or division promoting consumer interests in standardization. A range of models exist, with the chosen model differing according to resource availability in the NSBs. Other NSBs have no specific activity in this field.

Due to the differing sizes of NSBs and national contexts within the EU a single model for user participation for all NSBs would not be appropriate.

For concrete user participation, it could be useful to make use of existing models.
The different models (identified by the STAND4ALL study) can be listed as follows (with examples):

1. A Disabled Experts Reference Group, including representatives of disabled people, within a Consumer Network supported by a Consumer Unit (model BSI, AENOR).
2. A national mirror group for general accessibility issues, including representatives of disabled and elderly people (model NEN, NSAI, SIS, DIN)
3. Attendance of representatives of people with disabilities on the Board of Standards of a NSB (model Malta)
4. Attendance of representatives of people with disabilities in various national mirror committees (model ON)
5. Establishment of an action plan on Design for All, including priority of areas (model SN)

Contact the European consumer and user organizations

At European level, both ANEC and EDF are active in standardization. The ANEC Design for All Working Group includes experts from both the consumer movement and the disability/elderly organizations and is represented in various Technical Committees, for example CEN TC 293 'Assistive products for persons with disabilities', CEN TC 261 WG 2

'Accessible Packaging' and CENELEC TC 61 WG 4 'Safety of household appliances for vulnerable people'. EDF is involved in standards development with regard to accessibility; examples are M/420, M/376, CEN TC 256 WG 44 TSI PRM and CEN WS 51. ANEC and the European Disability Forum (EDF) signed a Memorandum of Understanding (MoU). Building on the long-standing collaboration between the ANEC Design for All WG and EDF, the EDF Executive Committee and the ANEC Steering Committee have agreed to join forces in order to achieve a high level of safety and accessibility for consumers of all ages and abilities. More information can be found via: www.anec.org and www.edf-feph.org

The objective for committee members

What ?

- **Promote, transfer and spread your knowledge on accessibility to standardization other standardization experts**
- **Promote, transfer and spread your knowledge on standardization to 'new' stakeholders**

How?

By taking into account the needs of elderly and disabled people – using CEN/CLC Guide 6 on a regular basis

The committee members should 'spread' the word in their standardization work. They should convince their "standardization colleagues" while developing or reviewing a standard. This could be based on an exception mechanism, where committee member provides a clear statement of whether that document would have implications for older and disabled people, with evidence supporting decisions not to include accessibility requirements.

Committee members are asked to make effective use of CEN/CENELEC Guide 6, whose use by TCs is already mandated by CEN.

Also committee members should contact their NSB
As said before, it depends on how the NSB in a country is structured and how it channels consumer views into its work. It is of high importance that committee members know how their NSB is organized and how the NSB deals with this matter; some NSBs take the responsibility for co-ordinating the participation of user representatives and committee members in subjects such as child safety or ergonomics. The committee member can support users in those projects to transfer their requirements into standardization processes.

The NSBs can also provide guidance for a nomination of the expert to the (mirror committee of) CEN/CENELEC BT WG on Guide 6 Implementation mechanism.

Examples of follow-up by committee members is given in box below

What you have done yourself with regard to accessibility issues or CEN/CLC Guide 6 in standardization after your course?

- I am currently helping to draft a new British Standard on Inclusive Service Provision, which deals specifically with the accessibility of services by consumers who may be in vulnerable circumstances, so I will try to ensure that the relevant parts of Guide 6 and other learning from the training are reflected in the draft standard.
- For me this was a great opportunity to network and meet some people for the first time. I will likely join the BSI disabled experts user reference group as a result of the course.
- The message I transmitted to my colleagues [in Germany] who are, TC Chairmen, TC Secretaries, committee members, was that active participation of disabled persons within TC working groups needs to be considered with due attention, as well as introduction of any specific requirements that may be of interest to any disabled

persons.
- ISO/TC 159 WG2 and ISO/TC 159/SC1/WG1 together with NSB are working on an amended definition about "accessibility" which is quite important for the understanding and addressing of ergonomics issues to accessibility.
- We will propose to work out a paper/overview addressing the different concepts and different understandings of "Design for All" and/or equivalent expressions.
- I have prepared an extract for our international department that they are willing to use for training courses of TC/SC/WG Chairmen, Secretaries and Convenors held on a regularly basis.

Committee members can contribute to 'accessibility in standardization' by making the use of the E-Learning module, developed by STAND4ALL . Information exchange on that platform is essential, both between the two groups of stakeholders as for within one group of stakeholders. In the E-Learning environment there are different types of activities: the discussion forum, a wiki and the quizzes.

The discussion forum is a good method to answer a question and to discuss the views of different users. A typical task in a forum would be to answer the question given and to reply to at least three other discussion threads. As discussions can take place over an extended period of time wherein the trainees are asked to return to the forum and to check what has been discussed. In a forum you can also exchange information on practical solutions.
Wiki is used to collect, sort, and arrange information in a structured way. The trainer usually provides a subject, topic or theme and creates a basic structure. The content is provided by the trainees who may use a forum to discuss how to proceed with the assignment.
Quizzes can be used to assess whether pre-defined learning goals were achieved. In the STAND4ALL E-Learning module there are different types of quizzes including closed texts, multiple choice answers, or free text. Trainees can monitor their performance in the course. A messaging system allows individuals to get in touch with each other.

Parts of the training on accessibility and disability issues could be made obligatory for ESOs and NSBs.
The STAND4ALL training framework could be rolled out on national and European level; ideas on this are currently under investigation.

Further Implementation

Agenda

- Part 1:

Repetition of training and trainee objectives

- Part 2:

Presentation on follow-up projects

Interactive session on personal future activities

2

This last topic is divided into two parts.

The first part is to make sure trainees:

- understand STAND4ALL objectives

-understand the benefits of user involvement in standardization

As both these issues are handled in the training, this should thus be a repetition to the trainees. There should not be any 'new' information here.

The second part is on the continuation of user involvement in standardization. Therefore, concrete follow-up projects will be explained and refered to. The trainer should link theses 'follow-up projects' to 'future steps taken by trainees' . Therefore, PART 2 of this presentation needs to be handled interactively. In this second part, it is important to start the discussion with trainees to be sure that trainees set personal follow up actions

With this slide it can be made clear what the first part of the presentation is about.

Please make sure that this presentation does not contain very much 'new information', it is moreless a discussion on what has been learnt in the training and how this can become 'alive'.

Please explain all bullets:

Trainees understand STAND4ALL objectives

Trainees understand the benefits of user involvement in standardization

Trainees set personal follow up actions

PART 1
STAND4ALL objectives

Trainees understand the benefits of user involvement in standardization

4

In the STAND4ALL trainings, we:

-explained to participants that involvement is not about being 'nice'. We also saw that disabled and older people can give a professional and personal view on how issues affect them.

(this is explained more in detail in slide 5)

In order to make sure that trainees understand the benefits of user involvement in standardization, we have clarified in the training

-what the drivers are for involving disabled and older people in standards development

(this is explained in slide 6)

Trainees understand the benefits of user involvement in standardization

Users: input with a professional and personal view

5

In the training, we have explained that users are one of the stakeholders that should be present in standardization.

Why should they be present?

-Consumers are affected by standards and are the 'end users' of many.

-Increased public credibility for standards

-Faster, cheaper and better standards

-Consumers bring a common sense and "plain English" approach, have specific knowledge and skills

-Involving consumers (the end user) from the start can speed up the process and avoid costly mistakes

-Understand user's different situations and (im)possibilities and so increase satisfaction for all users

Trainees understand the benefits of user involvement in standardization

The drivers for involvement

- Policy and legislative drivers
- Demographic changes and changes in society
- The business case
- The political and moral case

6

The drivers for involving disabled and older people in standards development are the following four:

Policy and legislative drivers

1.Demographic changes and changes in society

2.The business case

3.The political and moral case

Please repeat shortly what these four drivers mean and ask trainees if they remember and understand.

1. Policy and legislative drivers

The UN Convention on the Human Rights of Disabled People

EU and Member State legislation on non-discrimination and rights of disabled people

2. Demographic changes and changes in society

People are living much longer than they used to

Many more older people live independently at home

Older people's aspirations for inclusion are growing – 'grey power'

More disabled babies are being born and surviving into adulthood

Many more disabled people living independently not institutions

More disabled people are able to improve their life chances through education, employment and social participation so they demand access to services

3.The business case

More disabled people are setting up their own businesses to provide

PART 1
STAND4ALL objectives

For users:

Promote, transfer and spread your knowledge on accessibility to standardization experts

> Participation of users in standardization

7

We have exlained why user involvement in standardization is important and also what drivers are.

Now, we ask both the users and the committee members to take this into account and to start working on this actively.

They should start 'spread the word' about this in their own organisation.

We ask users to

- ***promote, transfer and spread their knowledge on accessibility to standardization experts***

Please ask the audience if they have any ideas how to do this.

Examples of how this can be done will be given in PART 2 of the presentation.

PART 1
STAND4ALL objectives

For committee members in standardization:

Promote, transfer and spread your knowledge on accessibility to other standardization experts

Promote, transfer and spread your knowledge on standardization to 'new' stakeholders

8

We ask committee members to

- Promote, transfer and spread their knowledge on accessibility to other standardization experts

- Promote, transfer and spread their knowledge on standardization to 'new' stakeholders

Please ask the audience if they have any ideas how to do this.

Examples of how this can be done will be given in PART 2 of the presentation.

PART 2

- Presentation on follow-up projects
- Interactive session on personal future activities

9

PART 2 is on the continuation of user involvement in standardization. Therefore, concrete follow-up projects will be explained and refered to.

After clarification of these 'follow-up projects' the trainer should ask trainees about their personal future activities.

Please make sure the trainees have an idea of what can be done in next future by them. Treat the session as open as possible, so that trainees are not 'scared' to committ.

Follow up activities

Existing relevant TCs and how to get involved

Existing relevant projects and how to get involved

STAND4ALL Network

10

With this slide, we want to show which ways are there to be taken as follow-up activities.

We want to stimulate the users to actually go into standardization, so please give them guidance. Perhaps in interaction with the committee members.

Existing relevant TCs and how to get involved; a list is added in the manual

This list can be discussed.

•The TCs have National Mirror Committees, please guide the trainees to these mirror commitees (contact via their NSB)

•In which TCs are the committee members in the room participating?

Existing relevant projects and how to get involved (both at national level and at European level).

Propose different options, but also try to find out if trainees themselves have additions to this.

•ANEC

•CEN/CLC/BT/WG ' Guide 6 – Implementation mechanism'

Here are some examples of representation of older persons or persons with disabilities within various NSBs (please look after the background of trainees to see which ones are applicable)

NSBs as contact points for the participants and interested stakeholders. Many standards bodies now have a team or division looking after consumer interests, or even more specifically, disability issues.

-In the British NSB, BSI, the Consumer & Public Interest Network includes a Disabled Experts Reference Group (DERG). They provide comment on issues arising in standardization.

-In the Spanish NSB, AENOR, national/regional authorities and sector federations participate in governing bodies and technical committees. Several persons with disabilities attend Spanish national technical committees, e.g.

-In the Austrian NSB, ON, the Consumer Council, and Non-Governmental Organisations, NGOs, participate in the technical committees.

- In the Irish NSB, NSAI coordinates the AASCC (access for all standards consultative committee)

-In the Dutch NSB, NEN, there is a national projectteam ' Accessibility for All', in order to promote the use of CEN/CENELEC guide 6

Stand4All Network (explanation via next slide)

STAND4ALL Network

Public website
http://stand4all.eu

Trainees information exchange system
Communication/virtual meetings:
E-Learning

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The objective is to maintain a sustainable network.

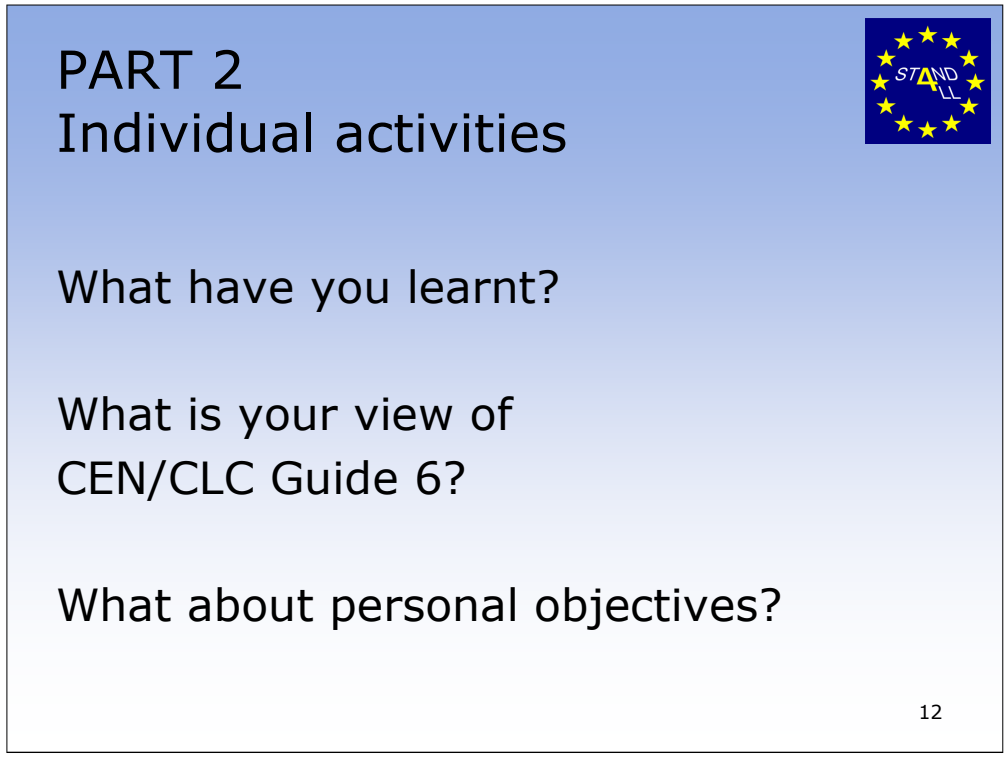
STAND4ALL Network of trainees :

A possibility of maintaining communications with trainees to remind and encourage them to continue to address accessibility issues in their own standards work.

Could be via the website: http://stand4all.eu

or

a trainees information system/ virtual meetings : the E-Learning Module that is set-up by the STAND4ALL consortium



Break into groups to discuss future objectives. E.g groups of 4, then each group explains to the audience

What have you learnt?

From - yesterday and - today ?

Answers can vary from "meeting other stakeholders", "lobbying", "further knowledge on standardization", "further knowledge on accessibility in standardization", "concrete use of Guide 6" etc.

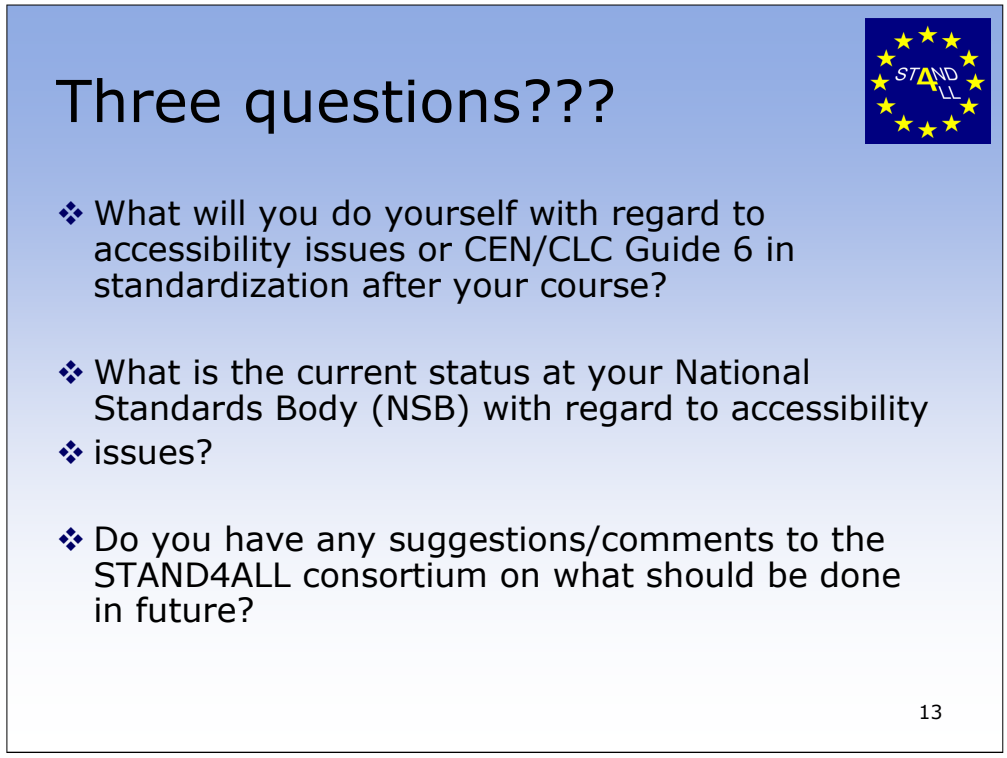
What is your view of CEN/CLC Guide 6?

Please ask if trainees feel that they understand the Guide now and if they are able to use the Guide.

Please ask if trainees are going to use the Guide now. Why yes or why no, please find out difficulties / barriers.

What about personal objectives?

Please ask trainees to re-think about what their learning objectives were at the beginning of the session and if the training fulfilled.



Please make this session as interactive as possible.

Please ask these three questions, to start a discussion. These questions will also (additionally) send by email to all trainees, so that they can take the time to answer them more concretely after the course > **as " Homework after the training course"**

Nevertheless, start to discuss these three questions during this topic as an opening for any answers given by trainees.

What will you do yourself with regard to accessibility issues or CEN/CLC Guide 6 in standardization

after your course?

Please ask trainees about concrete steps to be taken after the course. This varies of course because of the different backgrounds of the trainees (both for users and committee members).

Please investigate:

•Will committee members try to ensure that the relevant parts of Guide 6 and other learnings from the training are reflected in a draft standard?

•Will committee members use Guide 6 as a checklist to ensure they have the appropriate content?

WHY YES or WHY NO?

Please investigate:

-Will users ' spread the word' in their organization and seek contact with their NSB?

-Will users increase the use Guide 6 as a checklist to ensure requirements of elderly and disabled are taken into account in standardization?

WHY YES or WHY NO?

What has is the current status at your National Standards Body (NSB) with regard to accessibility issues?

Please investigate if trainees know this status, and if not: please stimulate them to investigate this.

Ask them if they know how to investigate this (do they know the routes/contactpersons)

Do you have any suggestions/comments to the STAND4ALL consortium on what should be done in future?

Investigate if trainees have any. Possibilities are:

1. Identifying NSB's that are not yet engaged in this field and encouraging them to take action

2. Supporting NSB's that have been involved to roll out the training to relevant staff and representatives

in their own bodies and in NSB's that are not yet engaged

3. Targeting chairs and secretaries of TCs/PCs and other key contacts, to ensure that they are aware of

the need for their standards to address accessibility issues

Make it more concrete (use of checklists, revision of Guide 6, the accessibility of the Guide itself, the accessibility of documents provided by NSBs etc)

Conclusion

Accessibility

<>

standardization

No more exclusion !

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This is what we should be the case, finally.

STAND4ALL List of relevant ETSI persons	

ETSI Secretariat

Delegates to the DATSCG group (Design for All and Assistive Technology Standardizations Coordination Group):

Chauvel Yves, <Yves.Chauvel@etsi.org>
Gerd Ochel (Coordination officer), <Gerd.Ochel@ETSI.ORG>

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ICTSB_DATSCG@LIST.ETSI.ORG

ETSI/TC HF(Technical Commmittee Human Factors)
Head:
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stephen.furner@bt.com

Key persons:
Walter Mellors
mellors@etsi.org

Bruno von Niman
bruno@vonniman.com

ETSI STF's

Following are the STF's that have a relation with Design for All/Assistive Technology

STF181 (closed)

Requirements of Assistive Technology Devices in ICT (STF 181)
No homepage available anymore.

Members can possibly be reached by contacting the STF181 secretary:
ted.laverack@etsi.org

STF184 (closed)

Design for All: Guidelines for ICT Products and Services (STF 184)
No homepage available anymore.

Members can possibly be reached by contacting the STF184 secretary: ted.laverack@etsi.org

STF265 (closed)

User Profile Management (STF 265)
http://portal.etsi.org/STFs/STF_HomePages/STF265/STF265.asp

Members are listed on the homepage and can probably still be reached by sending an email
to the convener: francoise.petersen@apica.com

STF284 (closed)

Human related technical guidelines for real-time person-to-person communication services (STF 284)
http://portal.etsi.org/STFs/STF_HomePages/STF284/STF284.asp

Members are listed on the homepage and can probably still be reached by sending an email to the STF leader, bjorn-olav.hestnes@telenor.com

STF286 (closed)

Access symbols for use with video content and ICT devices (STF 286)
http://portal.etsi.org/STFs/STF_HomePages/STF286/STF286.asp

Members are listed on the homepage and can probably still be reached by sending an email to the STF leader, mellors@etsi.org

STF287 (closed)

User-oriented handling of multicultural issues in multimedia communications (STF287)
http://portal.etsi.org/stfs/STF_HomePages/STF287/STF287.asp

Members are listed on the homepage and can probably still be reached by sending an email to the STF's email address: mailto:multicultural@etsi.org

STF304 (closed)

AT Commands for Assistive Mobile Device Interfaces (STF 304)
http://portal.etsi.org/STFs/STF_HomePages/STF304/STF304.asp

Members are listed on the homepage and can be reached as follows:
Nick Hine <nhine@computing.dundee.ac.uk>,
Francoise Petersen <francoise.petersen@apica.com>,
Erik Zetterström <erik.zetterstrom@omnitor.se>

STF322 (closed in March 2009)

Guidelines for generic user interface elements for 3G mobile terminals, services and applications (STF 322)
http://portal.etsi.org/STFs/STF_HomePages/STF322/STF322.asp

Members are listed on the homepage and can probably still be reached by sending an email to the convener: bruno@vonniman.com

STF324 (closed)

Extending e-Inclusion to Public Internet Access Points (PIAPs) (STF 324)
http://portal.etsi.org/STFs/STF_HomePages/STF324/STF324.asp

Members are listed on the homepage and can probably still be reached by sending an email
to the convener: francoise.petersen@apica.com

STF326 (closed)

Generic spoken command vocabulary for ICT devices and services (STF 326)
http://portal.etsi.org/STFs/STF_HomePages/STF326/STF326.asp

Members are listed on the homepage and can probably still be reached by sending an email
to the responsible person: stephen.furner@bt.com

STF342

Personalization and User Profile Management Standardization (STF342)

http://portal.etsi.org/STFs/STF_HomePages/STF342/STF342.asp

Name	Role	Tel + email
Petersen Francoise	STF Leader	+33 4 93 65 63 29 francoise.petersen@apica.com
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Sim Dong Hi	Support Officer	+33 4 92 94 42 73 DongHi.Sim@etsi.org
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Cadzow Scott	Expert	+44 1279 447447 scott@cadzow.com
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Kovacikova Tatiana	Expert	+421 41 5134 335 tatiana.kovacikova@kis.fri.uniza.sk

STAND4ALL List of relevant CEN/TCs	

3.1 Construction

CEN/TC 33: Doors, windows, shutters, building hardware and curtain walling
nathalie.girardot@afnor.org

CEN/TC 163: Sanitary appliances
cristiano.fiameni@uni.com

CEN/TC 247: Building automation, controls and building management
mschumacher.sce@bluewin.ch

CEN/TC 278 Road transport and traffic telematics
jelte.dijkstra@nen.nl

CEN/TC 315: Spectator facilities
annemieke.venemans@nen.nl

CEN/TC 339: Slip resistance of pedestrian surfaces – Methods of evaluation
michael.schmitt@din.de

3.2 CONSUMER PRODUCTS

CEN/TC 136: Sports, playground and other recreational equipment
daniela.rickert@din.de

CEN/TC 207: Furniture
fabrizio.tacca@uni.com

3.3 HEALTH AND SAFETY

CEN/TC 70: Manual means of fire fighting equipment
catherine.pineau@afnor.org

CEN/TC 122: Ergonomics
stefan.krebs@din.de

CEN/TC 169: Light and lighting
soheil.moghtader@din.de

3.4 HVAC etc (gas appliances etc)

Appliances burning gaseous fuels
CEN/TC 49: Gas cooking appliances
raffaella.angelini@uni.com

CEN/TC 58: Safety and control devices for gas-burners and gas-burning appliances
mike.leggett@bsigroup.com

CEN/TC 62: Independent gas-fired space heaters
Danny.Peacock@bsi-global.com

CEN/TC 109: Central heating boilers using gaseous fuels
han.leonhard@nen.nl

3.5 ISSS (ICT)

CEN/TC 224: Machine-readable cards, related device interfaces and operations
clement.chevauche@afnor.org

3.6 MECHANICAL ENGINEERING

CEN/TC 10: Lifts, escalators and moving walks
gael.cholletmeirieu@afnor.org

CEN/TC 98: Lifting platforms
armin.weih@vdma.org

CEN/TC 152: Fairground and amusement park machinery and structures – Safety
giovanni.micciche@uni.com

3.7 SERVICES

CEN/TC 329: Tourism services
claudia.laabs@din.de)

CEN/TC 331 Postal services
Tim.Kniep@nen.nl

3.8 TRANSPORT AND PACKAGING

CEN/TC 242: Safety requirements for passenger transportation by rope

CEN/TC 261: Packaging
annick.galpin@afnor.org

STAND4ALL

Evaluation Forms

Evaluation Form - For completion by committee members in standardization

Understanding the requirements of disabled people and how to apply these in the context of standards development - training feedback form

Name:

Organisation:

Current involvement in standards work:

Email address or preferred contact method:

We hope that you have found the training informative and useful, please complete the feedback form to help us evaluate the training and improve it for the future.

Session 1 – Introduction

a. Was it clear from the introduction what the aims of the training were?

Yes

No

Comments:

b. Did you feel able to raise any concerns during this session?

Yes

No

Comments:

c. If you did raise a concern or ask a question, was it dealt with appropriately?

Yes

No

Comments:

Session 2 – Topic 1 background and motivation

a. Did the session help you to understand the need to involve disabled and older people in standards?

Yes

No

Comments:

b. Were there other issues or topics that you think should have been covered in this section?

Yes

No

Comments:

Session 3 – Implementing Guide 6 in the standards development process

a. Do you feel more knowledgeable about how Guide 6 should influence the standards development process?

Yes

No

Comments:

Session 4 – Role-plays and follow up

a. Did you feel that the role-play work helped you to understand that issues?

Yes

No

Comments:

b. Did you have any concerns about the role-play session?

Yes

No

Comments:

c. What do you think would improve this session?

Session 5 – Further implementation

a. Do you feel more confident about implementing Guide 6 in standards development now that you have completed the training?

Yes

No

Comments:

b. What else would you need to help you feel better able to use Guide 6?

c. Did you gain confidence about how to involve disabled people in the standards process?

Comments

Please base your responses to the questions below on the following scoring system:

A = excellent B = good C= satisfactory D = poor E = very poor

Other issues

1. Overall, how would you rate the training?

Please choose A, B, C, D or E

Comments

2. Were the training materials provided useful and appropriate?

Please choose A, B, C, D or E

Comments

3. How would you rate the venue?

Please choose A, B, C, D or E

Comments

4. How would you rate the food and refreshments provided during the training?

Please choose A, B, C, D or E

Comments

Learning actions

1. What have you learnt from the training?

2. How do you think the training could be improved?

3. Would you like to make any other comments?

STAND4ALL evaluation case study

Now that you have completed the STAND4ALL training, we would like to ascertain whether or not you feel you can apply your learning in future standards development processes. So we have devised a short case study to help you to demonstrate your competence at using Guide 6 to deal with disability and accessibility issues when you are working with a committee to develop a new standard or revise an existing standard.

The task

You have been asked to work with a group of experts and disabled people to scope out a standard for a biometric capture system for identity verification for a building security system. The scope of the standard only cover s the actual capture of the biometrics from building users and visitors, it does not cover the specification of the security system that will be used thereafter. So the scope of the standard is as follows:

- What biometrics will be captured?
- How will they be captured?
- How will the process of capture be managed including setting up capture locations, getting people there to record biometrics, the process of capture
- What training will staff need to do the biometric capture?
- How will confidentiality, data protection and privacy issues be dealt with?
- End process verification – ensuring the biometrics captured can be used successfully for verification of identity.

Stage 1

Using Guide 6, firstly set out below which tables you think are relevant to this proposed standard and why you think they are relevant:

Stage 2

Go back over each table and look back to the scope of the standard, what do you think the accessibility and disability issues are for each element?

Stage 3

What solutions could you suggest to solve these issues?

Answers

(this section to be used by STAND4ALL consortium member to establish how good the responses are).

Stage 1

Relevant table	Reason(s)
Table 1 - information	a. Information will need to be provided about how and where the biometric capture will take place including any access issues such as booking accessible parking spaces, BSL interpreters to support Deaf people, appointment systems b. Any information provided to people before or on the day will also need to be fully accessible. E.g. instructions on what the process will be, any queuing procedure etc will all need to be accessible.
Table 3 - Materials	This is not an easy one to think about, but it could be relevant in terms of what the biometric capture system parts are made of, e.g. the way that the physical capture system is constructed.
Table 5 – user interface	Very relevant, for example if the biometric capture is in a booth, is this accessible to wheelchair users, if the system is automated by voice command this will need to be accessible to Deaf people and sight impaired people where the auto instruction will need to be well designed. Also what role will staff

	assisting people take, will they have disability equality training, and will they be able to appropriately assist disabled people?
Table 7 – built environment	This could be a catch all for everything that isn't related to people, the premises used for capture, the way that the capture system works, and the way that the end product is provided to people.

Stage 2

There will be other issues that people may identify either under tables or separately. A summary of the key issues for various groups is as follows:

Visually impaired people:

- Absence of iris caused by genetic problems or possibly same effects from people who have had laser eye surgery
- Blind people can have problems due to their natural difficulty to align their eyes with the camera
- Nystagmus (tremor of the eyes)
- People that have been operated on for cataracts may need to be re-enrolled

Hearing impaired-Deaf people

- Speech may be affected due to loss of hearing resulting in difficulty in using voice recognition systems
- Inability to hear instructions for example from the camera of face and iris recognition systems or from staff assisting people to register

Physically impaired people

- Conditions such as arthritis may affect usability (it may be difficult to position the finger and/or hand correctly)

- Skin conditions such as eczema may cause blistering on the fingertips
- Any kind of surgery that significantly changes the structure of the face, will require an individual to re-enroll
- Cuts, bruises and swelling can have a temporary affect on face or hand images
- Inability to use hand or finger based systems due to loss of limbs and or digits
- Crutches may make it difficult to stand steadily
- Drooping eyelids
- Wheelchair users can face usability barriers due to the usual location of cameras and insufficient height variation possibilities
- Changes in medical condition can be faster than normal ageing affects so need to re-enroll more regularly
- Those with cerebral palsy, multiple sclerosis, muscular dystrophy, motor neurone disease etc, may have little control of their muscle movement and may find it very difficult to hold their head or fingers still long enough for a facial, iris or fingerprint recognition device. Similarly they may be unable to record a digital signature or a consistent digital signature.

People with cognitive impairments

- Dyslexia, language, learning or knowledge retention difficulties may make it difficult to reliably and consistently provide a biometric sample or otherwise navigate through an automated process
- May need additional support and explanation from staff about how to register including information in easy words and pictures.

Older people

- Biometrics usually have higher failure rates with the very old. As people get older, ageing processes tend to degrade biometrics. For instance the ridges of their fingerprints wear down and cataracts are more prevalent.
- In addition to visual impairments, many older people have a combination of impairments (cognitive impairments such as dementia, physical impairments such as arthritis and Parkinson's disease etc). Also multi-tasking becomes less easy. The effect of all these factors is that many older people may have problems in using

a biometric terminal at the same speed as their younger counterparts if at all

Accessibility problems for non-disabled people

Accessibility problems may not be restricted to disabled people. Other groups of people may be affected, for example, people carrying out construction and manual work. People working with cement and chemicals may result in the wearing down of fingerprints.

The wearing of veils due to religious reasons may result in some people being unwilling to use certain biometric technologies such as face and iris recognition systems.

People who have had cosmetic surgery (e.g. botox) may have problems with face recognition systems, in particular at the authentication stage if they have had the procedure after the enrolment stage.

Cold weather may affect people using fingerprint and signature recognition systems especially if the authentication terminals are outside.

If the instructions of how to use an unmanned enrolment or authentication terminal are not clear then this will affect everybody in using all systems.

Stage 3

Some solutions should be about process design and some should be about 'physical accessibility'. If people suggest that they will seek advice before putting forward solutions that's a good thing as long as they make it clear they will seek advice from experts but will also develop solutions with disabled people's involvement.

Background information that may be useful

Relevant standards

ISO/IEC 19795 - Biometric Performance Testing & Reporting
ISO/IEC 19792 - Framework for Security Evaluation of Biometric Systems

Section 5.4.38 Biometric Characteristics of the draft European standard EN 1332-4 Identification Card Systems - Man-Machine Interface - Part 4: Coding of user requirements for people with special needs relates to a multimodal tag.

Best Practices in Testing & Reporting Biometric Device Performance
www.cesg.gov.uk/site/ast/biometrics/media/BestPractice.pdf

Standards
A draft ISO standard is under development that will highlight the needs of disabled and older people and suggest practical ways of addressing their needs:

1. Systems using a biometric should be designed so that as many potential subjects as is reasonably possible can use the system effectively and with the minimum of discomfort.
2. In the design of such new systems or services, the needs of disabled subjects should be considered from the outset.
3. Before systems are deployed, they should be thoroughly tested with subjects who represent the widest range of abilities (that is, in respect of visual, auditory, physical, cognitive and behavioural ability).
4. For subjects with a disability, adequate training in the use of the system should be offered.
5. Wherever practicable, the subject should have a choice of biometric systems, and should not be discriminated against if their disability prevents them from using a specific biometric.

6. Where no alternative biometric is available and where the disability prevents the use of this biometric, subjects should be permitted to use an alternative method. Wherever practicable, the use of such an alternative should not result in an inferior level of service or functionality to the subject.
7. If the subject can no longer use a verification system reliably, the subject should be provided wherever feasible with the opportunity to repeat the registration process.
8. Staff operating systems using a system with biometrics should be trained in how to process disabled subjects.
9. A system using a biometric should not store details of a subject's disabilities without their informed consent.
10. The rights of privacy of a disabled subject should be the same as those of a non-disabled subject.

What are biometrics?

A biometric is a physical or behavioural feature or attribute that can be measured. It can be used as a means of proving that you are who you claim to be, or as a means of proving without revealing your identity that you have a certain right.

Biometrics which are commonly used to confirm identity include:

- Fingerprint recognition
- Iris recognition
- Face recognition
- Hand geometry recognition
- Vein recognition
- Voice recognition
- Dynamic signature recognition

What is a biometric system?

A biometric system is essentially a pattern recognition system that operates by acquiring biometric data from an individual, extracting a feature set from the acquired data, and comparing this feature set against the template set in the database.

If you would like further background information on biometrics please click on the following link: An introduction to biometrics

Some physiological and medical factors can affect the usability and efficiency of biometrics:

Advantages of biometrics for people with disabilities
The obvious advantage of biometric systems is that the user no longer has to remember PINs (personal identification numbers) and keep this number secret. People with a cognitive impairment will find most biometric systems much easier to use and provide a greater level of security.

People who have limited or no use at all of arms or hands will find using face and iris recognition systems an advantage as they will not have to swipe a card or type in a name or PIN number.

Enrolment Terminals

To register a biometric for public use (e.g. for a passport), the subject will usually have to go to a centre where specialist staff take the biometric and check other relevant documentation. Ideally these staff should be trained to work with people with disabilities. For private use (e.g. replacement for a password on a personal device such as a laptop computer), the subject is expected to follow instructions on the screen or in a printed manual to register the biometric.

The environment of the enrolment centre needs to meet the general accessibility for public access terminals. However specific biometrics will require special consideration (see details in the sections related to the various biometrics).

Authentication Terminals

These may be fully supervised, partially supervised or un-supervised; this is likely to be significant for occasional users and for some people with disabilities. In general, a consistent user interface will benefit all users

and may be of particular importance for some people with disabilities. With un-supervised terminals it would be beneficial for there to be a standardised set of icons, symbols and pictograms for the operation of the terminal.

It is essential that the authentication terminal is comfortable to use. For instance, enrolment of fingerprints will normally be done with the subject sitting down. However the authentication may be done with subject standing. It is important that the height and angle of the fingerprint reader is comfortable for both a tall person and someone in a wheelchair. If it is not viable to make the reader variable height (or on a flexile lead), it might be helpful if it was tiltable to allow a comfortable angle for the wrist. A wrist rest might be beneficial for a subject with hand tremor.

Like all input devices on public terminals, it is important that the device gives both auditory and visual feedback of the current status (e.g. still processing, accepted, rejected). It is also important that error messages are helpful and give guidance on what the subject should do differently.

Ability to update biometric

The biometric information can be stored in a central database or on a smart card. Users are likely to prefer the information to be stored on their card rather than on a remote database. However, it is easier to regularly update the database with revised biometric data as the user's characteristics change.

Using multimodality to enhance the usability of systems

Two (or more) modalities could be combined in parallel to produce a system that would allow more flexible use. For example biometric systems built for both fingerprint and face recognition, could allow the use of only the facial image for verification when users have problems enrolling their fingerprints and vice-versa. Moreover, this procedure could prove extremely useful to those users who have temporarily lost the ability to provide one of their biometric traits (for example, a temporary

eye problem that rules out an iris scan). The same could apply in cases where people refuse to use a specific modality (for religious or health purposes, for instance). A multimodal system therefore allows enhanced flexibility by providing alternatives for the identification process. As such, it also has the potential to be more socially inclusive.

Providing instructions in an accessible format

- If the terminal is unmanned, or an assistant is not always available to help the user, audio instructions should be provided, taking the user step-by-step through the enrolment and authentication process.
- Instructions should be provided, explaining any progress made.

  For example, if a fingerprint scan is successful: "This scan was successful, please remove your finger and place it on the reader again."

- Any further instructions explaining what the user is doing wrong would also be very helpful.

For example, if an iris scan is not successful: "This scan was not successful, please turn your head slightly to the right."

or

if a fingerprint scan is not successful: "This scan was not successful, please hold your finger still on the reader."

- There should be a clear sound to indicate a success and a failure. A success should be signified by a higher more pleasant sound (e.g. chimes ringing), a failure by a lower less pleasant sound (e.g. buzz).
- The user should be told, before the scanning process starts, if it is necessary for more than one scan to be taken for registration.
- When the first scan has been taken there should be an audible acknowledgement (such as a chime sound) followed by a spoken instruction: "The first scan has been successfully recorded. Please place your finger on the fingerprint reader for the second scan." And so on.

- There should be a clear indication when the registration process is complete. For example an audio message "Your iris pattern has been successfully registered."
- If the terminal is awaiting further information, the instruction should say this. If not, it should indicate that the user has reached the end of the process. For example "The registration process is now complete. Thank you."
- If registration fails, there should be a clear indication that the process will restart. For example "The registration has failed because the four images did not match. The process will now restart."

Informing the user that the reader is waiting for him/her to take action

- The reader should be lit when it is awaiting input from the user.
- The reader should only light up when it is ready to enroll a biometric. When the process is complete the light should turn off.
- A spoken message to inform users that the biometric reader is awaiting input would help users who have insufficient vision to see the visual signal.
- A timeout feature on the terminal should not be excessively short, as the user may need an extended period of time to find the reader and to complete the required actions.
- If the user is taking an unusually long period of time to respond to an instruction the instruction should be repeated at least once before the terminal times out.

Catering for users who do not require audio instructions (e.g. those who have good vision, or those who are familiar with the process)

- An option to bypass the audio instructions should be provided. This could simply be that the audio comment is skipped or cuts out if the user provides the correct input.

Reference: Identification of Accessibility Issues for Visually Impaired Users of Biometric Technologies: Fingerprint Readers

Research
In the United States of America, the Biometric Standards, Performance

and Assurance Laboratory of Purdue University, focuses on the data collection of "extreme populations". Two examples are the elderly and those that have illnesses that can affect a biometric either through the illness of the treatment:

- Image quality and the elderly: an initial study examined how fingerprint image quality was affected by age
- Extreme populations: focuses on data collection of "extreme populations". Two examples are the elderly and those that have illnesses that can affect a biometric either through the illness or the treatment

The primary aim of the Social and Environmental Special Interest Group of the European Biometrics Forum is to investigate and report on issues and concerns which might arise from the mass implementation of biometric systems across the European Community, from the end user perspective.
These include issues and concerns relating to:

- Physically disabled and people with learning difficulties

The Biometric Foundation is dedicated to a systematic program of research and education to reduce impediments to wide adoption and use of all biometric technologies. The Foundation will address technical, societal, and legal aspects of biometric technologies and their applications. Accordingly, the Foundation's agenda will include studies of public attitudes toward uses of biometrics; demonstration and evaluation of alternative biometric technologies; inquiry into biometric standards issues; development of formal educational curricula that encourage students to enter the field of biometrics as a professional career choice; and conferences and seminars about the most effective uses of biometrics in key applications.

UK Passport Service (UKPS) Biometrics Enrolment Trial (PDF)
The goal of the UKPS Biometrics Enrolment Trial was to test the processes and record customer experience and attitude during the recording and verification of facial, iris and fingerprint biometrics, rather than test or develop the biometric technology itself. One of the 3 sample groups recruited were a disabled participant sample of 750.

According to the UKPS, the trial results highlighted several issues that require further investigation or work. Among other things, further trials are needed, specifically targeted towards those disabled groups that have experienced enrolment difficulties due to environment design, biometric device design, or to specific group problems - for example, black participants and participants aged over 59 had lower iris enrolment success rates.

Further information

- Ashbourne, J, Ethnicity in Relation to Biometric Identity Verification, March 2004
- Ashbourne, J, The Social Implications of the Wide Scale Implementation of Biometric and Related Technologies, (PDF) , January 2005
- Biometrics: Designing for People (PDF)
- Biometrics: Usability & User Acceptance (PDF)
- European Biometrics Forum
- Fennell, A, Dr. Identification of Accessibility Issues for Visually Impaired Users of Biometric Technologies: Fingerprint Readers
- International Biometric Group
- Maghiros, I, Punie, Y, Delaitre, S, Lignos, E, Rodgríguez, C, Ulbrich, M, Cabrera, M, Clements, B, Beslay, L, Van Bavel, R. Biometrics at the Frontiers: Assessing the Impact on Society (PDF), EUR No: EUR 21585 EN, February 2005
- Proceedings of Conference on Accessible Biometrics, 18th May 2005, London
- Resources Related to Biometrics and People with Disabilities
- UK Passport Service (UKPS) Biometrics Enrolment Trial (PDF)
- Using speech: Designing Biometric Devices

Acknowledgements

The information contained in this section was collected from the following sources:

- Maghiros, I, Punie, Y, Delaitre, S, Lignos, E, Rodgríguez, C, Ulbrich, M, Cabrera, M, Clements, B, Beslay, L, Van Bavel, R. Biometrics at

the Frontiers: Assessing the Impact on Society (PDF), EUR No: EUR 21585 EN, February 2005
- Marek Rejman-Greene, Home Office
- Anil K. Jain, Arun Ross and Salil Prabhakar, An Introduction to Biometric Recognition (PDF) , Appeared in IEEE Transactions on Circuits and Systems for Video Technology, Special Issue on Image- and Video-Based Biometrics, Vol. 14, No. 1, January 2004. (Section 8. Multimodal Biometric Systems)

Evaluation Form – To be used by the person observing the trainers in their training delivery

Observation of training delivery – evaluation form

As you watch the training please answer the questions below.

Date of Observation……

Observer's name ……..

Trainer(s) Name(s) …….

Course Title ……. .

Number of Participants …….

1. Who was the training delivered to?

2. What types of training resources were used?

Method	Tick if used	Was it effective - give reasons for your answer
Training manual on paper		
Flip charts		
PowerPoint presentations		
Other (please specify)		

3. What training methods were used?

Method	Tick if used	Was it effective - give reasons for your answer
Presentations		
Flip chart discussions		
Group exercises		
Role play		
Other (please specify)		

4. Was the room layout appropriate?

5. How were discussions facilitated?

6. Question and answer sessions – how effective were they and why?

7. If there were any ‘difficult situations’ for the Trainer(s) to deal with how did they manage them?

8. Please give an example of effective follow up questions used by either Trainer

9. Did the trainer display effective self-management (such as keeping the sessions to time, dealing with conflict etc)?

10. Did the trainer demonstrate knowledge of client group/ organisation/ sector?

11. Did the trainer demonstrate a working knowledge and commitment to: Social model, equal opportunities, disability equality and inclusion?

12. Did the Trainer explain the nature of the sessions putting them in context clearly?

13. Did the trainer convey key messages clearly?

14. Did the trainer maintain the interest of the participants?

15. Did the trainer effectively include people in discussions? Are there any questions you wish to ask the Trainer(s) or Training Team?

Evaluation Form – To be completed by the person delivering the training

Trainer self-evaluation form

Date of Training…….
Your name …… Role…….

Co-Trainers name ……
Role ……

1. Who was the training delivered to?
   ……..

2. How do you feel the training session went?

3. What are your training needs as a trainer?

4. How do you think the session went for your co-trainer?

(Please use this section to provide your co-trainer with any constructive criticism)

5. Are there any other comments you would like to make?