

## ***Report on the Workshop: Strategic Standardization Issues Concerning eAccessibility & eInclusion (ICCHP), Linz, 2016***

### **1 Opening and welcome:**

Mr. Galinski opened the Workshop and explained the main aim of the workshop, namely to discuss the importance of enhancing the quality of eAccessibility&eInclusion related standards through improved access to information on standards.

### **2 Overview of the IN LIFE project**

Mr. Cudd introduced the main aspects of the IN LIFE (INdependent Living support Functions for the Elderly) project by describing the following items:

- Overview of aims
- Project
- Operational Overview
- Some of the challenges addressed
- Status
- What is due to happen

### **3 Strategic Standardization Issues Concerning eAccessibility & eInclusion Introduction**

Mr. Galinski provided the background for the workshop and referred to the Convention of the Right of Persons with Disabilities (CRPD) which has become through the EU Directive a law to be implemented in all EU member states by 2016. However, some countries are not yet really prepared for its implementation – often because the full implications have not yet been realized. He mentioned that UNESCO as one of the main stakeholders of the CRPD, also considers societal and economic factors thus extending eAccessibility&eInclusion to people that are disadvantaged in general.

The recent WSIS Forum (2-6 May 2016) of the World Summit of the Information Society assessed among others the impact and success of the CRPD in different countries, regions and application fields. It was found that in spite of mandatory legislation there are still barriers – sometimes neglected or even enforced by legislation. There are cases where new barriers for PwD (persons with disabilities) are created. The EU still is on the way to further harmonize national legislations – there are already several directives in place for this purpose.

However, it was also pointed out that legislation alone cannot solve all the problems with respect to eAccessibility&eInclusion. In the field of standardization there is a proliferation of standards which makes it hard for industry and service providers to be able to respond to government policies. It needs a clearly specified set of standards that describes objectively what ICT accessibility and eAccessibility&eInclusion are. Such a clearly specified set of standards would also facilitate testing methods, development of pertinent personal skills and competences, certification schemes of all sorts, etc.

Mr. Galinski referred to a number of EU standardization mandates that have had an impact, especially in public procurement, such as:

#### Mandates:

- M/273 (1998) Mandate to the European Standards Bodies for Standardization in the field of information and communications technologies (ICT) for disabled and elderly people
- M/283 (1999) 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)
- M/376 (2005) Standardisation Mandate to CEN, CENELEC and ETSI in Support of European Accessibility Requirements for Public Procurement of Products and Services in the ICT Domain  
→ EN 301 549:2014 Accessibility requirements for public procurement of ICT products and services in Europe

- M/473 (2010) Standardisation mandate to CEN, CENELEC and ETSI to include “Design for All” in relevant standardisation initiatives

#### Directives:

- [76/207/EEC](#) (1976) on the implementation of the principle of equal treatment for men and women as regards access to employment, vocational training and promotion, and working conditions  
+ Proposal for a Directive of the European Parliament and of the Council amending Council Directive 76/207/EEC on the implementation of the principle of equal treatment for men and women as regards access to employment, vocational training and promotion, and working conditions (2000/C 337 E/33)
- 2014/23/EU on the award of concession contracts [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2014.094.01.0001.01.ENG](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.094.01.0001.01.ENG)
- 2014/24/EU on public procurement and repealing Directive 2004/18/EC <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0024>:
- 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32014L0025> (*Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 18 April 2016. They shall forthwith communicate to the Commission the text of those measures.*)

Mr. Abou-Zahra pointed to a planned new “Directive on the accessibility of public sector bodies' websites”: <http://www.eud.eu/news/accessibility-public-sector-bodies-websites/> and <http://www.edf.org.uk/blog/european-agreement-on-web-accessibility-directive/>; See also the press release: [http://europa.eu/rapid/press-release\\_IP-16-1654\\_en.htm](http://europa.eu/rapid/press-release_IP-16-1654_en.htm)

Participants were well aware of the fact that ‘technical standards’ (i.e. technical regulations) are in principle secondary to law (i.e. legal regulations), however, when referred to in a law, they acquire the authority of a law. Mr. Galinski then referred to IN LIFE deliverable 9.3 “Dissemination and standardisation plan”, where in part 3 “IN LIFE Standardisation Plan” the role of standards/standardization in relation to law is explained. In addition, different types of standards and standards documents were explained, whose subjects cover a range from pure technical to all kinds of other subjects, such as methodology, management, data, etc. In any case, a basic knowledge of standards and standardization frameworks is absolutely necessary for experts of and certain levels of people involved in eAccessibility&eInclusion.

The organizational system of official (de jure) standardization covers international standardization bodies (e.g. ISO, IEC, ITU, etc.), regional standardization bodies (e.g. the European standards organizations, ESOs, CEN, CENELC and ETSI) and many national member bodies of the above. Beyond that there are hundreds of other standards developing organizations (SDO) – mostly industry consortia – that develop industry (or de facto) standards. The fact that the increasing number of industry standards may lead – and indeed often leads – to interoperability issues in the development of assistive technologies as well as in related activities, such as the development of pertinent content, methodologies, training etc. On the other hand, it is a positive that renowned organizations like W3C and others collaborate with international standards organizations to arrive at harmonized international standards (e.g. the WCAG 2.0 standard of W3C becoming international standard ISO/IEC 40500).

The following standards were mentioned in this connection:

*(from the standards development point of view:)*

- ISO/IEC Guide 71:2014 Guidelines for standards developers to address the needs of older persons and persons with disabilities [www.iso.org/guide71](http://www.iso.org/guide71)  
*(focusing on eProcurement from a EU perspective)*
- EN 301 549:2014 Accessibility requirements for public procurement of ICT products and services in Europe
- ETSI TR 102 612 V1.1.1 (2009-03) Human Factors (HF); European accessibility requirements for public procurement of products and services in the ICT domain  
*(focusing on ICT products and services:)*

- EG 202 116:2009-03 ETSI Guide. Human Factors (HF); Guidelines for ICT products and services; "Design for All"  
(focusing on software accessibility:)
- ISO 9241-171:2008 Ergonomics of human-system interaction – Part 171: Guidance on software accessibility  
(from the content point of view:)
- ISO/IEC 40500:2012 Information technology – W3C Web Content Accessibility Guidelines (WCAG) 2.0 (also freely available under <http://www.w3.org/TR/WCAG20/>)

In Europe (and most probably also in other parts of the world)

- the new CEN/TC 440 "Electronic Public Procurement",
- EN 301 549 'Accessibility requirements suitable for public procurement of ICT products and services,
- CEN-CENELEC JWG 5 „Design for All“ established to implement EU-Mandate M/473 Deliverable 4.1 „Accessibility following a Design for All approach in products, goods and services – Extending the range of users“

are focused on the technical aspects of eAccessibility&eInclusion. IN LIFE investigations came to the conclusion that most standardizing efforts neglect 'human communication' with respect to H-H communication, H-M communication and M-M communication. Human communication comprises linguistic and non-linguistic means of communication. It definitely comprises "semantics" – not just data. Under this perspective there is a totally underestimated need for standardization with respect to eAccessibility and eInclusion.

One participant raised the aspect of open standards in connection with open source software, and mentioned that in reality there is an overflow of information on standards on the one hand, and the need to develop new standards fast, on the other hand. This led to the discussion of recommendations passed in past workshops and possibly be formulated at this workshop.

At the ICCHP 2010 the Recommendation on software and content development principles 2010 stated (extract):

*"decision makers in public as well as private frameworks, software developers, the content industry and developers of pertinent standards /should be/ aware that multilinguality, multimodality, eInclusion and eAccessibility need to be considered from the outset in software and content development. These considerations are required in order to avoid the need for additional or remedial engineering or redesign at the time of adaptation, which tend to be very costly and often prove to be impossible".* (full document see Annex 3)

It was adopted by several committees in ISO – incl. the Management Group (MoU/MG) of the UN/ECE-ITU-ISO-IEC Memorandum of Understanding concerning eCommerce/ eBusiness standards – and served as input to the Workshop on "Accessibility" of the ITU, ISO and IEC World Standards Cooperation (WSC) in Geneva, 3-5 November 2010

WSC 2010 Workshop "Accessibility" of the ITU, ISO and IEC World Standards Cooperation (WSC) in Geneva, 3-5 November 2010 came up with 6 high-priority recommendations: (See annex 4)

- 1 Strategic Advisory Group "Accessibility" (SAGA)
- 2 Common accessibility policy between the WSC-organizations
- 3 National members of the WSC-organizations promote the implementation of accessibility standards
- 4 WSC-organizations strengthen their relationship with the UN CRPD
- 5 Revision of ISO/IEC Guide 71
- 6 Identify accessibility-related content in New Work Item Proposals

What happened with these 6 High-priority recommendations:

### **1 Strategic Advisory Group "Accessibility" (SAGA)**

- Internal proposal for follow up was developed, but decision postponed
- Proposal “SAGA” presented September 2011 by JTC 1/SWG-A  
[http://www.jtc1access.org/documents/swga\\_482\\_Presentation\\_Nov2011\\_JTC1\\_Plenary.pdf](http://www.jtc1access.org/documents/swga_482_Presentation_Nov2011_JTC1_Plenary.pdf), but JTC 1/SWG-A dissolved
- Implementation of other SAGAs:
  - **CEN/BT/WG 213 Strategic Advisory Group Accessibility (SAGA)** to be responsible for the execution of EU Mandate M473 (Design for All)
  - New Zealand

## **2 Common accessibility policy between the WSC-organizations**

- Common policy has been developed in the form of IEC/ISO/ITU Policy on Standardization and accessibility 2014 [http://www.iso.org/iso/iec\\_iso\\_itu\\_joint\\_policy\\_statement.pdf](http://www.iso.org/iso/iec_iso_itu_joint_policy_statement.pdf)
- Policy statement: Standards contribute to accessibility:
  - 1 Apply the principles of Accessible or Universal Design
  - 2 Engage older persons and persons with disabilities in standards development
  - 3 Train standards developers on the importance of accessibility
  - 4 Improve accessibility of standardization secretariat support

## **3 National members of the WSC-organizations promote the implementation of accessibility standards**

- First communication distributed to all ISO members (circular by ISO Secretary General 2011-04-19)
- Further action postponed until publication of revised edition of ISO/IEC Guide 71

## **4 WSC-organizations strengthen their relationship with the UN CRPD**

- WSC decided that ITU as UN agency and permanent member of the Inter-Agency Support Group of the UN-CRPD should take the lead on the implementation of Recommendation 4

## **5 Revision of ISO/IEC Guide 71:2001**

- Revision by ISO, IEC and ITU of ISO/IEC Guide 71:2001 Guidelines for standards developers to address the needs of older persons and persons with disabilities
- Taking into account ISO/TR 22411, ISO 21542, IEC/TR 62678 etc.
- New ISO/IEC GUIDE 71:2014 Guidelines for addressing accessibility in standards freely available [http://isotc.iso.org/livelink/livelink/fetch/2000/2122/4230450/8389141/ISO\\_IEC\\_Guide\\_71\\_2014%28E%29\\_Guide\\_for\\_addressing\\_accessibility\\_in\\_standards.pdf?nodeid=8387461&vernum=-2](http://isotc.iso.org/livelink/livelink/fetch/2000/2122/4230450/8389141/ISO_IEC_Guide_71_2014%28E%29_Guide_for_addressing_accessibility_in_standards.pdf?nodeid=8387461&vernum=-2)
- Adopted by all WSC-organizations

## **6 Identify accessibility-related content in New Work Item Proposals**

- Proposal within ISO
  - For all NWIP indicate whether accessibility is addressed or impacted
  - Help-desk for accessibility issues (similar to IT help-desk)
  - Foresee a slot for “accessibility” in the ICS (International classification of standards)
- (generic) Implementation in regular procedures from start to end of a standardizing activity
- Possibility to search for items indexed by “accessibility”

The aim of this ICCHP Workshop also is to review the progress made on the six "high priority" recommendations formulated at the WSC workshop in 2010 in light of developments in the meantime, in order

- to see what has been achieved in the field of standardization
- to identify new aspects and needs to be addressed in standardization

Acknowledging the progress achieved since 2010, the workshop could come up with a statement addressing decision makers in standardization as well as in public institutions.

#### 4 Web accessibility expert certification

Mr. Hoeckner provided the panorama about web accessibility and expert certification: the process, users, preconditions, training courses and useful links, covered this topic. (see annex 5)

Some of the participants intervened in relation to the aspects required to make a website accessible, some of the issues addressed can be summarized as follows

- Some guidelines for web accessibility exist but they do not guarantee accessibility
- It is suggested that the best is to start a web page from the scratch so that it can be then tested whether they follow the W3C recommendations
- Use templates to make the content accessible, then it can be tested.

Selling accessibility is a more common practice in America. More public entities buy 'accessible' because of the law and requirements, in Europe, we need to catch up. A more legal content can be made accessible by the requirements or law. In Austria, the law has been in force for more than ten years but nothing has changed, at least not at the pace which would be required.

The discussion at this point centered in the way accessibility experts are certified, e.g. on:

- Models: experts for testing accessible websites which have passed the W3C Certification.
- experts for evaluating the websites.
- Cost of the service
- Requirements to be certified as expert
- Period of reexamination /reevaluation of experts to renew certification (two years)
- Training/certification courses
- The refreshment of certification

It was considered that not all experts can be asked for projects, as web accessibility is part of their regular daily work. Website developers could start by making the elements that make the different parts accessible. One of the participants stated that you have to educate yourself and in a period of two years the acquired competences should be demonstrated.

Given the fact that each country is doing different efforts to reach similar objectives, it would make sense if efforts were joined toward common goals – e.g. in the framework of ECQA, the European Certification and Qualification Association, which is operating already at a world-wide scale.

#### 5 IN\_LIFE database of information on standards related to eAccessibility&eInclusion

Ms. Giraldo referred to the out dated standards inventories: (See annex 6)

- ISO/IEC TR 29138-2:2009 Information technology – Accessibility considerations for people with disabilities – Part 2: Standards inventory
- ETSI SR 001 996 V6.1.1 (2013-08) Human Factors (HF); An annotated bibliography of documents dealing with Human Factors and disability

Hereafter, she mentioned a number of investigations done and inventories collected in the framework of several EU projects. Then she presented the IN LIFE Database by describing the methodology to collect, update and develop the database. Up to now, only standards coming from international standardizing bodies (and European standards organizations being recognized as international standardizing bodies) have been considered. National, industrial or other standards developing organizations (SDO) will be included according to the needs and pertinence to the project.

One of the main drawbacks of the existing collections of information on standards lies in the fact that the main sources classified or categorized the standards from different perspectives depending on different goals. For IN LIFE a more appropriate – if possible generic – categorization should be found, while the existing categories can be used as indexing terms to facilitate information retrieval etc. Furthermore, any inventory of this kind is soon outdated, if not regularly updated. Standards have defined life-cycles. In ISO each standard latest after 5 years has to be reviewed for confirmation, withdrawal or revision. This results in changes in the inventory of more than 10% each year, which means that 50% of the information of the inventory is outdated after about 4 years.

The first gaps identified in standardisation in the field covered by IN LIFE were related to the lack of standards concerning inter-human communication. Therefore, a standardisation strategy was formulated (IN LIFE deliverable D9.3) and initiatives for concrete standardisation activities launched.

**Given the tremendous effort to collect data from several sources and updating them on the one hand and the great benefit e.g. for the IN LIFE project drawn from the information on the other hand, it would be useful for many other activities or projects in the field to continue updating the database.**

**Several participants to the ICCHP Track 2 confirmed that in conjunction with any new contract or new project pertinent standards have to be investigated and that this investigation is always difficult and time-consuming.**

In order to make this database public available and maintained in a cooperative way, it is necessary

- to find a proper design as well as solutions to make the database more dynamic and sustainable
- to find a host for the database
- to determine usability, users and benefits

The presentation tackled these and other aspects which triggered the discussion. Most of the participants emphasized an attractive design given the fact that users could easily lose interest in using it. The design should take into consideration:

- Type of users and objectives (Who is using it and what for?)
- Selection of diverse tags for the search function (by number, by key word). How granular should it be?
- Revise the list of stakeholders
- Usability should be foreseen before it is made public
- Contact should be established with potential users asking them for advice about their needs when looking for standards in eAccessibility&eInclusion, as well as with respect to revising the key words and keyword system

The discussion about the description of the standards provided insights about the need to determine who the real users of the database would be.

- Apparently, it is made for specialists
- reduce the scope to certain audiences (for example for teachers, certification examiners)
- Reword the description was out of the question in view of the resulting implications.

#### **Actions to continue:**

- To determine user cases
- To revise the key words and to organize them in a more systematic/manageable/pragmatic way, in other words it could be useful to standardize the key words (ontology?)
- To determine options for searching
- It was proposed to continue the discussion through e-mail
- Contact people knowledgeable in the field

#### **Options**

D. Archambault representing AAATE provided possibilities to continue with the development of the database based on the topics discussed above. The task of design could be assigned to one of his students (it has time constraints due to the students' schedule). The changes/revision/updates and decisions should be ready for the end of the year so that students could be engaged in the design and development.

Sustainability: when using a crowdsourcing, it would be necessary to have a type of filter committee to make the decisions on the suggestions provided by users.

It was also suggested to ask students who would like to participate in a competition and be awarded with any incentive. In any case, it is necessary to count with expertise in different fields: design development, librarian/linguistic etc. Participants suggested to contact user communities: among others Jim Carter (relate the standards/keywords to a mind map), Mike Kluger, JTC 1 Access.

## **6 General discussion**

The final discussion focused on the formulation of a recommendation to standards bodies and other authorities concerning the facilitation of access to information on standards related to eAccessibility&eInclusion. (see Annex 7)

## **7 Wrap-up and closure**

The discussion brought forth many good ideas and suggestions. The new Recommendation (Annex 7) will be circulated for comments and then taken as adopted by the ICCHP, AAATE and other pertinent communities.

Mr. Galinski thanked the participants for their pro-active participation and – wishing all a good summer – closed the workshop

### **NOTE on information after the Workshop:**

- (1) K. Miesenberger mentioned that his institute at JKU could also assist in the programming of the IN LIFE database platform.
- (2) R. Andrich mentioned that The European Assistive Technology Network (EASTIN) would also be interested in participating in the effort to make the IN LIFE database sustainable by means of regularly updating the content.
- (3) K. Miesenberger is going to circulate the Recommendation 2016 to several comprehensive mailing lists so that it can be considered as adopted.