



IN LIFE: **IN**dependent **L**iving
support **F**unctions for the **E**lderly

Beteiligung an Normungsaktivitäten im Bereich IKT-Barrierefreiheit Resultate des EU-Projekts IN LIFE

A9.3: **Standardisation** and **interoperability**
D9.8 (Part 3): **Standardisation plan**

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Infoterm

Barrierefreiheit der IKT / durch IKT

- Voraussetzung für die Beteiligung an der Normung
- Barrierefreiheit der IKT selbst
- Barrierefreiheit durch die IKT
- Grundwissen über Normung
- Information über Normen / Normungsaktivitäten
- Teilnahme durch Nominierung / Delegation
- EU-Projekt N LIFE
 - Untersuchung der Normen/Normung betr. IKT
 - Konkrete Normungsaktivitäten
 - Strategische Aktivitäten

Voraussetzungen für aktive Beteiligung

Info
term

- Grundkenntnisse über Normung
- Zugang zu Informationen über Normen und Normungsaktivitäten
- Nominierung bzw. Delegation

Grundkenntnisse über Normung

- **Recht/Gesetz = Regelung gesellschaftlich erwünschten Verhaltens**
- **Normen = Regeln zum Stand der Technik**
- **Normen verbindlich an 2. Stelle nach Gesetzen**
- **Normen-Gesamtkorpus > Gesamtheit d. Gesetze**
- **Offizielle/formale N. ↔ Industrie-/Konsortial-N.**
 - Internationale Ebene
 - Regionale Ebene
 - Nationale Ebene
- **3 Hauptbereiche: Elektrotechnik (IEC), Technik allgemein (ISO) und Telekommunikation (ITU)**
- **Verschiedene Normenarten**

Information über Normen/Normung

- **X100 Normungsorganisationen mit ihren DBs**
 - Offizielle/formale Normung
 - Industrie-/Konsortialnormung
- **Zunahme von technischen Komitees (TC)**
- **Zunahme an Info über Normen: 10~20% / Jahr**
- **Verschiedene Normenarten**
 - Veränderung im Verhältnis der Normenarten
 - Produkte, Prozesse, Methoden, Daten/Content ...
- **Interoperabilität → international → Englisch**
- *International Classification of Standards*
 - **ICS nicht ausreichend für Suche**
- **Indexierung nicht einheitlich**
- **Informationsbarriere zu Normen/Normung**

Barrierefreiheit der IKT

- **Usability: DfA, UD, etc.**
 - **Personalisierbarkeit**
- **Web Content Accessibility (WCAG2.0)**
- **Interoperabilität**
- **Recommendation 2010: SW & Content**
 - Mehrsprachigkeit (sprachunabhängige Ansätze)
 - Multimodalität (Amodalität)
 - Multi-Channel Output (single-source & responsive design)
 - Barrierefreiheit
- **Im Bereich der Sprachtechnologien:**
 - Internationalization (I18N)
 - Localization (L10N)
- **Assistive Technologie?**

Barrierefreiheit durch IKT

- **Assistive Technologie: eigene TCs? – ja, aber...**
 - ISO/IEC-JTC 1/SC 35 User interfaces, SC 36 IT for learning, education and training
 - IEC/TA 18 AAL Active assisted living, acc. and interfaces
 - CEN-CENELEC JWG 5 DfA, CEN/TC 224/WG 6 UF, CE-CLC-ETSI/JWG eAccess.
 - ETSI/TC Human Factors (HF), e.g. Design for All
- **Koordinationsgruppen: ISO SAG A, CEN/BT/WG 213 SAGA, EDF, ...**
- **Nationale Ebene in Österreich: ASI K001, ÖVE**
- **Web Content Accessibility (WCAG2.0)**
- **Zertifizierung** (möglichst normenbasiert):
 - Qualität: Produkte, Prozesse, Systeme, Ausbildung und ~material
 - Persönliche Kompetenzen und Fähigkeiten

→ **CWAE von WKÖ (über Incite) unterstützt**

Nominierung & Delegation

→ Über nationale technische Komitees

in Österreich: ASI K001, ÖVE-ÖEK

→ Delegation in internationale und europäische Gremien

→ Problem: zu viele Bereiche = IKT in vielen TCs, da

- praktisch alle Bereiche des Lebens und
- viele verschiedene Beeinträchtigungen betroffen

1. Untersuchung: Normen und Normung

- Report (D9.8) – schwieriger Zugang zu Informationen
→ DB mit Informationen über Normen betr. IKT Barrierefreiheit
- Identifikation von Lücken:
 - zwischenmenschliche Kommunikation
 - Mangelnde Kenntnis

2. Konkrete Normungsaktivitäten:

- Datenbank → Portal mit Funktionen der sozialen Medien
- Vorschlag einer Strategie zur Beteiligung von Beeinträchtigten
- Einbringen von Barrierefreiheitsaspekten in laufende oder beginnende Normungsaktivitäten
- Verstärken der Bewusstseinsbildung über Vereine, Verbände und Koordinationsgremien
- Verstärkung von Zertifizierungsaktivitäten

3. Recommendation 2016 concerning standards on eAccessibility and eInclusion

- Verbesserung des Zugangs zu Informationen
- Selbstorganisation der Beeinträchtigten bzw. ihrer Vertreter
- Erleichterung der Teilnahme an Normungsaktivitäten
- Identifikation von Lücken: zwischenmenschliche Kommunikation

→ **AAATE.net:**

aaate-endorsed-the-recommendation-2016-concerning-standards-on-eaccessibility-and-einclusion/

Latest **GOOD NEWS!**

On 6 July 2017 the European Parliament accepted with overwhelming majority a legislation bringing the the EU's laws into line with its international commitments under the Marrakesh Treaty, signed by the EU in 2014. The new rules will make more books available in formats like Braille and audiobooks adapted for blind and visually impaired people by providing:

- copyright exceptions: blind people and their organisations will no longer need to ask permission from the holder of copyright to provide books and other print material in accessible format
- improved cross-border circulation: blind people will have access to more special format books from EU and non-EU countries that have signed the Marrakesh Treaty
- optional compensation: member states will have the option of setting up limited compensation schemes for publishers when their books are adapted into accessible format copies

The draft law still needs to be formally approved by the EU Council of Ministers. Member states will have twelve months from the date of entry into force of the new legislation to apply the new rules.

➔ This legislation could be a model for facilitating **access to standards in accessible formats.**



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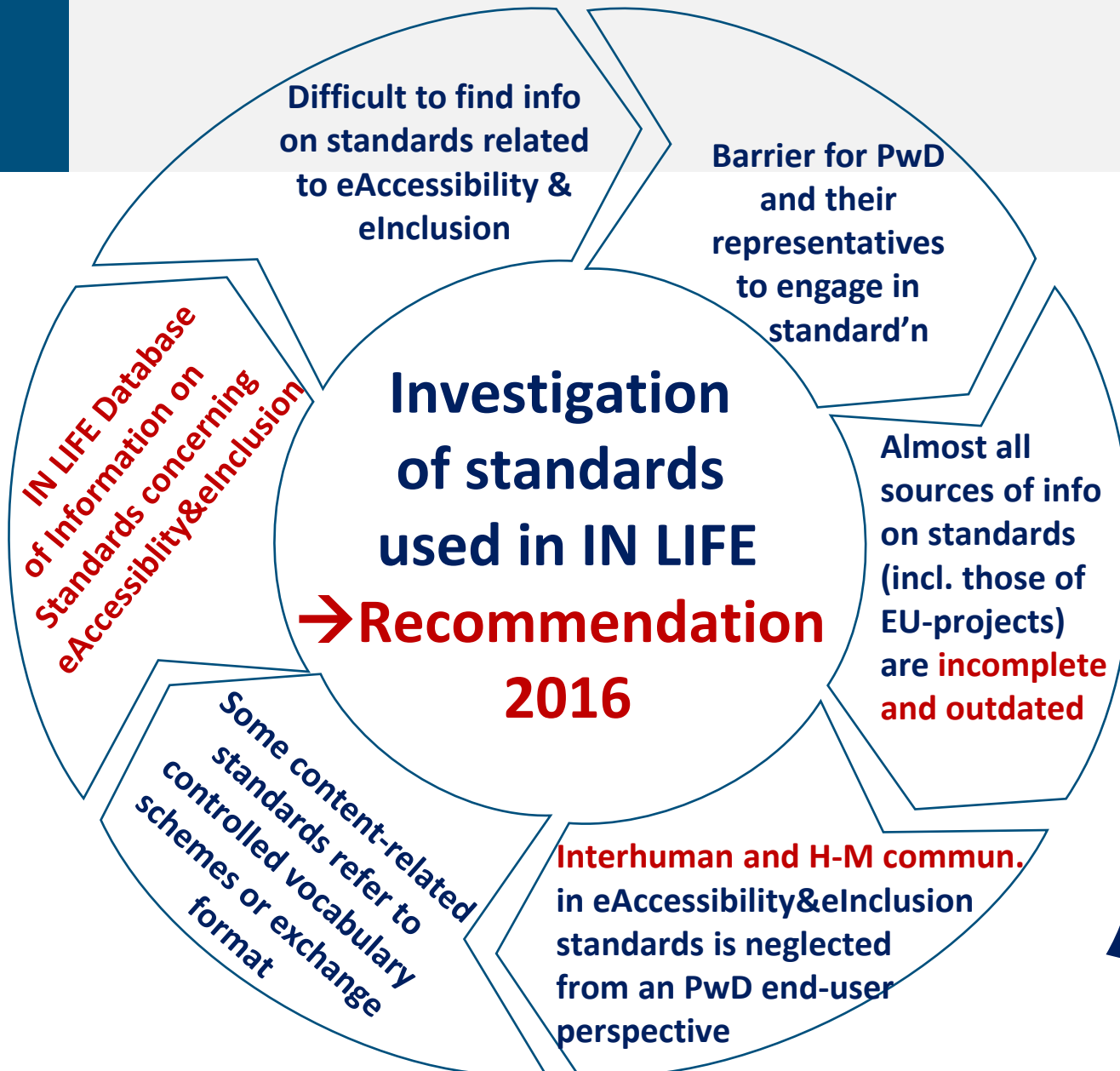
EU policy

→ COM(2016)358 final, p.4-5: “Standards matter, because:

- they promote innovation
- they increase quality and safety
- they enable jobs and growth
- they support global value chains
- the European standardisation process overcomes costly fragmentation in the single market“

→ COM(2016)358 final, p.6-8: “Speed of standard dev’t needs to be squared with inclusiveness and quality of std.” **BUT**

- Gap between research/innovation and standardization
- Standards on eAcc.&eInc., AAL, AHA, AAC etc. are most important ‘building blocks’ for IOp among systems and system components
- Lack of eAccessibility&eInclusion experts
- Certification underdeveloped due to gaps in standardization
- Methodology and data standards on **human & H-M communic’n**



- There is no clear-cut borderline between standards focused on eAccessibility&eInclusion on the one side and general ICT standards, eHealth standards (many also being kind of ICT standards) and design standards on the other side.
- There are clusters of standards or multipart standards where only one document or a part of a document is focusing on accessibility aspects.

IN LIFE Info Database on Standards related to eAccessibility&eInclusion

Updating ↔ IN LIFE D9.8

- Among others: Ideal Group, Inc.; ASK-IT; OASIS; AEGIS; Tiresias, AALIANCE²
- ISO/IEC TR 29138-2:2009 (IT — Accessibility considerations for PwD — Part 2: Standards inventory)
- ETSI SR 001 996 V6.1.1:2013-08 (Human Factors (HF); An annotated bibliography)

New collections → now 500 standards

- **ISO “Inventory of accessibility and accessibility-related information technology standards and specifications”, 2013**
- **AALIANCE² Summary of Standards**
- **EIP-AHA collection of information on standards**
- **GPII standards (Developer Space/Standards)**

Draft design for a more advanced standards’ information platform

→ **biggest database** of info on standards related to eAccessibility&eInclusion

No need to re-invent the wheel → **engage in continuous updating and maint.**

Certification aspects: compliance to standards

- Products
- Software/tools: interoperability
- **Communication: microcontent & methods**
- Processes
- Services
- Human resources certification
 - Personnel qualification
 - Competences and skills
- Training certification
 - Training organization
 - Trainers
 - Training material and tools

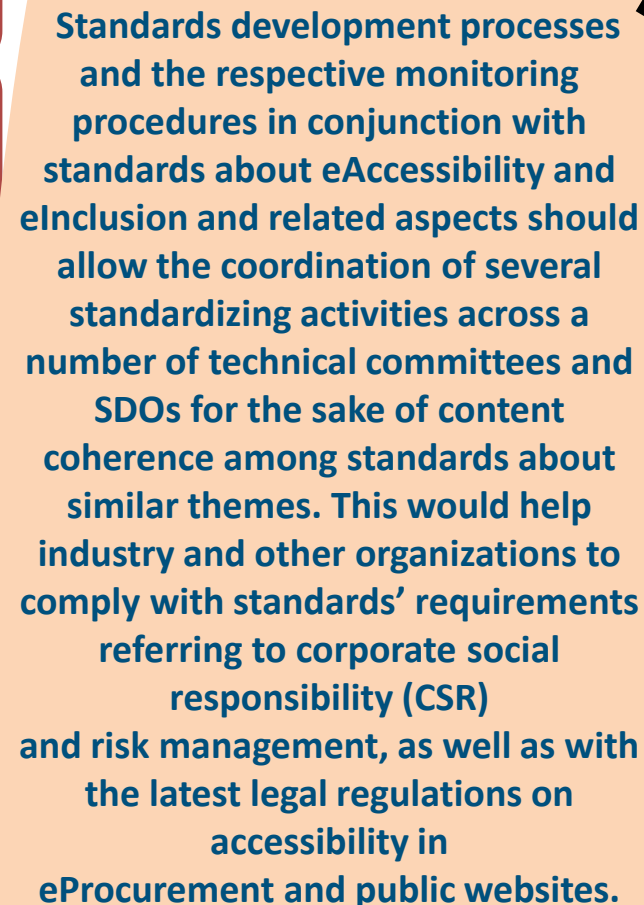
Microcontent & methods in the field of eAccessibility&eInclusion

- Medical classifications (ICD, ICF etc.) not sufficient
- 'communication disorder' is insufficient and unacceptable
- 'communication anomalies'
 - p-o-v of personalisation
 - needs H2M typology/matrix
- 'controlled communication'
 - incl. other modalities, e.g. AAC
 - +methodology
 - +content repositories

➔ **+certification systems**

Recommendation 2016 concerning standards on eAccessibility & eInclusion

- develop a more refined classification and keywording approach to standards
- register the potential relevance for eAccessibility & eInclusion right from the start
- cross-reference standards having a bearing on eAccessibility & eInclusion
- encourage the formulation and use of consistent vocabulary / terminology
- implement search functionalities that ease the use of standards
- facilitate the active involvement of PwD as end-users in standardizing activities among others by providing standards documents in 'accessible' format



Standards development processes and the respective monitoring procedures in conjunction with standards about eAccessibility and eInclusion and related aspects should allow the coordination of several standardizing activities across a number of technical committees and SDOs for the sake of content coherence among standards about similar themes. This would help industry and other organizations to comply with standards' requirements referring to corporate social responsibility (CSR) and risk management, as well as with the latest legal regulations on accessibility in eProcurement and public websites.