

STS on

“Ethics, standards and comprehensive interoperability are fundamental for eAccessibility and eInclusion”

Sharing state-of-the-art best practices in documented form enables improvement in quality of interventions and care. When a new digital AT is designed following these best practices including sharing its information and data with other digital AT its reach and benefit for end users is maximized. Such use of AT of course is located within widely varying contexts from individual private use to delivered care.

Ethics, standards and interoperability are closely intertwined when it comes to the use of assistive technologies – especially in the communication with or between persons with disabilities (PwD), as well as with or between the ICT devices and tools they are using.

Human life and behavior is to an extent regulated by norms and standards which are framed based on ethical principles. Thus, legal or moral norms referring to eAccessibility and eInclusion are largely founded on the UN Convention on the Rights of Persons with Disabilities (CRPD). They are an extension to the Universal Declaration of Human Rights (UDHR) whose ethic basis cannot be denied. The signatory states of the CRPD are committed to introduce the CRPD principles and rules into their national legislations.

Complementary to law (i.e. legal norms) technical standards – most of which today are in fact methodology standards – describe in a normative way the state-of-the-art of development or best practices in all kinds of industrial and social environments. There are formal or de jure standards developed by official standardization bodies and informal or de facto standards developed by other standards developing organizations (SDO), such as industry consortia, scientific or technical societies.

Standardization policies that take into account the needs of PwD in standardizing activities are influenced by ethics. Besides, ethics have an impact on management standards, such as diversity management or corporate social responsibility (CSR).

Technical interoperability and organizational interoperability are strongly based on standards – especially when health, safety and security is at stake. Content interoperability under an eAccessibility and eInclusion perspective can be seen as an extension of semantic interoperability. It

refers among others to all kinds of micro-content, which should be multilingual and multimodal from the outset. Different modalities may refer to inter-human communication via virtually all human senses available – whether visual, audio, haptic or other which increasingly can be supported by ICT.

In many circumstances, content used in the communication with or between PwD, as well as with or between the ICT devices and tools they are using must be totally reliable from a semantic point of view. This includes the total reliability after conversion into a different modality. This total reliability can only be achieved through pertinent standards. In fact there are numerous standards on certain standardized content entities, as well as on the methods to process and use this content. Such standards are developed among others in eHealth, eBusiness, eLearning and increasingly also for eAccessibility and eInclusion purposes – for instance in the field of augmentative and alternative communication (AAC).

The special thematic session intends to highlight elements within the complex interconnection and interdependence involved within the scope of its title. A session introduction will include a report on a pre-conference related event. Contributions are sought for the thematic session, on for example political, legal and societal issues, dimensions of interoperability, standards and standards-based certification, illustrations of the challenges and exemplars of thorough application of standards. The session will close with a short discussion.