ISO/TC 37
ISO/TC 37 - Terminology and other language and content resources
Email of secretary: zhouchq@cnis.gov.cn
Secretariat: SAC

Recommendation on software and content development principles

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Background:

Resolution 2010-10- endorsing software development principles

TC37 endorses the *Recommendation on Software and Content Development Principles (2010)* which was prepared by InfoTerm on the basis of document N0221 from the MoU/MG (Memorandum of Understanding/Management Group). TC37 shall submit this document to:
·   related TCs in ISO, and IEC other standards developing organizations
·   MoU/MG for consideration in its coordination activities
·   international organizations (inter-governmental organizations and non-governmental organizations) for consideration in their policies, strategies and activities relating to information and communication technologies
·   governments for consideration particularly in eProcurement.

Résolution2010-10- Appui des principes au niveau du développement de logiciels

L'ISO/TC 37 appuie la *Recommandation sur les principes relatifs au développement de contenu et de logiciels (2010),* qui a été préparée par InfoTerm sur la base du document N022 du MoU/MG (Groupe de gestion du mémorandum d'entente). L'ISO/TC 37 doit soumettre ce document auprès de :

·   CTs concernés dans l'ISO, l'IEC et autres organisations de normalisation
·   MoU/MG en vue d'étudier ce document en fonction de ses activités de coordination
·   organisations internationales (organisations inter-gouvernementales et organisations non-gouvernementales) en vue d'étudier ce document par rapport à leurs politiques, stratégies et activités relatives aux technologies de l'information et de la communication
·   gouvernements en vue d'étudier ce document par rapport à leur gestion électronique des approvisionnements

Committee URL: http://isotc.iso.org/livelink/livelink/open/tc37

Recommendation on software and content development principles
2010

Purpose

This recommendation addresses decision makers in public as well as private frameworks, software developers, the content industry and developers of pertinent standards. Its purpose is to make aware that multilinguality, multimodality, eInclusion and eAccessibility need to be considered from the outset in software and content development, 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.

Background

In software development, globalization[1], localization[2] and internationalization[3] have a particular meaning and application. In software localization they have been recognized as interdependent and of high importance from a strategic level down to the level of data modelling and content interoperability.

In 2005 the Management Group of the ITU-ISO-IEC-UN/ECE Memorandum of Understanding on eBusiness standardization adopted a statement (MoU/MG N0221), which defines as basic requirements for the development of fundamental methodology standards concerning semantic interoperability the fitness for
- multilinguality (covering also cultural diversity),
- multimodality and multimedia,
- eInclusion and eAccessibility,
- multi-channel presentations,

which have to be considered at the earliest stage of
- the software design process, and
- data modelling (including the definition of metadata),

and hereafter throughout all the iterative development cycles.

The above requirements are a prerequisite for global content integration and aggregation as well as content interoperability. Content interoperability is the capability of content to be combined with or embedded in other (types of) content items and to be extensively re-used as well as re-purposed for other kinds of eApplications. In order to achieve this capability, software must support these requirements from the outset. The same applies to the methods and tools of content management – including web content management.

Recommendation

Software should be developed and data models for content prepared in compliance with the above-mentioned requirements to facilitate the adaptation to different languages and cultures (localization) or new applications (re-purposing), the personalization for different individual preferences or needs, including those of persons with disabilities. These requirements should also be referenced in all pertinent standards.

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[1] **Globalization**) *refers to all of the business decisions and activities required to make an organization truly international in scope and outlook. G11N is the transformation of business, processes and products to support customers around the world, in whatever language, country, or culture they require.*

[2] **Localization** *is the process of modifying products or services to account for differences in distinct markets. Therefore, L10N is an integral part of G11N, and without it, other globalization efforts are likely to be ineffective. The interdependence of G11N and L10N has also been coined **glocalization**.*

[3] **Internationalization** *is the process of enabling a product at a technical level for localization. An internationalized product does not require remedial engineering or redesign at the time of localization. Instead, it has been designed and built from the outset to be easily adapted for a specific application after the engineering phase.*