Sharing environmental information through terminological and multimedia resources: accessibility in increasing public awareness towards sustainable growth

Clara I. López, Juan A. Prieto, Maribel Tercedor

Universidad de Granada (Spain)

Ecosistema

http://manila.ugr.es/visual/

Framework

- Policies to increase citizens' commitment towards the environment, and to disseminate environmental data and terminology.

- i2010 strategy: EU policy framework for the information society and media.

- Internet and accessibility.

Objectives

- To propose guidelines for the presentation and dissemination of environmental information in institutional websites.

- To apply these guidelines to the description of the Departments for the Environment of Germany, Spain and the United Kingdom.

Accessibility and the W3C

- Accessibility: ensuring available web content for users with different cognitive and physical abilities, and different socio-cultural and technological backgrounds.

- Terminological resources: making specialized web contents accessible through definitions and multilingual glossaries.

- W3C Web Content Accesibility Guidelines: checkpoints and recommendations.

- Accessibility is not a whim but a legal requirement in most European countries.

Testing accessibility

- Users with different abilities, social, cultural and technological backgrounds should be involved in the design of institutional websites in order to evaluate accessibility.

- Tools:
  – TAW (online)
  – Fujitsu Web Accessibility Inspector (off-line)

- Accessibility deficiencies and breaches to Web Content Accessibility Guidelines conformance levels.

User-oriented guidelines for accessibility

- Checklist with 5 sections and 65 closed questions aimed at Internet users regardless of computer literacy.
- **Section 1:** how a webpage is reached and how first impressions influence the decision to remain in the page.

  The web was easily found with a search engine

- **Section 2:** navigation and operability.

  The web shows properly on different web browsers (Text-only, Mozilla, Internet Explorer, etc.

User-oriented guidelines for accessibility

- **Section 3** perception of the web page through different sensory channels.

  It is possible (and easy) to change the size of the text.

- **Section 4:** how the content on the web page is understood.

  The web can only be understood by experts.

- **Section 5:** the interaction between users and the web, and compatibility of formats and assistive technologies.

  There is a clear section of News and updates.

3. Perceivability of the web page	
a. The web provides text alternatives for any non-text content so that it can be changed into other forms people need such as large print, Braille, speech, etc.	
b. The web provides an alternative text for any non-text content (image, image map, etc.) by using the ALT attribute.	
c. The web provides alternatives for any non-text content by using the LONGDESC attribute. This attribute specifies a link to a long description of an image (painting, chart, graph, etc.). This description should supplement the short description (maximum of 80 characters) provided using the ALT attribute.	
d. The ALT and/or LONGDESC attributes are used appropriately in order to describe visual content. When visual elements are merely decorative, these attributes are empty and can be ignored by assistive technology.	
e. The web provides alternatives for time-based media, in particular, subtitles for videos and animations.	
f. The web provides alternatives for time-based media, in particular, audio files for videos and animations.	
g. The web provides alternatives for time-based media, in particular, audio description for videos and animations.	
h. The web provides a sign language version.	
i. It is possible to change the size of the text.	
j. It is possible to change the colour of the website so that foreground and background colour combinations provide sufficient contrast for people with colour deficits or people viewing the page on a black and white screen.	
k. It is possible to freeze moving or sound content, or to avoid movement in pages.	
l. It is possible to turn off spawned windows or to prevent pop-ups or other windows to appear.	
m. You can hear the web page read aloud because the web implements programs such as Read Speak, Browse Aloud, Dixerit or Loquendo.	
n. The frames of the web are clearly delimited, and allow a natural reading process (firstly, you read the top of the page, then the left, and finally the centre).	
o. The different pages have a similar design and provide a sense of coherence and unity.	
p. The web makes it easier for users to see and hear content by separating foreground and background.	
q. The web does not include sensory features that are known to cause seizures.	

4. Understandability of the webpage

4.1 Content

a. The quantity and depth of information is appropriate for the site's intended user.	
b. Quality of information: there is not duplicity of information.	
c. The web can only be understood by experts.	
d. The web contains resources for children.	
e. The web contains audio files.	
f. The web contains videos/animations.	
g. The content of the web page is coherent.	
h. The web provides users enough time to read and use content.	
i. The web is not crammed with logos.	

4. Understandability of the webpage

4.2 Linguistic Aspects (grammar, style and multilingual aspects)

j. The page displays good writing style presenting information in a plain and simple language, appropriate for the site's content. Administrative jargon is avoided.	
k. The web does not contain spelling mistakes.	
l. The web includes multilingual contents.	
m. Appropriate and fluent translations whenever they appear.	
n. The text has a clear and logical structure. Paragraphs are well constructed: one paragraph equals one idea.	
o. There is a glossary that explains difficult words and phrases.	
p. In the glossary, the language of the definitions is simple and easy to understand by non-experts.	

marm.es

Bienvenidos | Benvinguts | Ongi etorri | Benvidos | Welcome | Bienvenue

Bundesministerium
für Umwelt, Naturschutz
und Reaktorsicherheit

Home | Kontakt | English | Kinderseite | [   ] ok

ICT for Sustainable Growth: Environment | Europa - Information Society - Mozilla Firefox

Archivo   Editar   Ver   Historial   Marcadores   Herramientas   Ayuda

http://ec.europa.eu/information_society/activities/sustainable_growth/index_en.htm

Google

El uso de las TIC para el crecimiento sos...   El uso de las TIC para el crecimiento sos...   El uso de las TIC para el crecimiento sos...   ICT for Sustainable Growth: Envir...

Important legal notice

Europe's Information Society
Thematic Portal

en

European Commission > Information Society

Go to main content

Home | News | Calendar | Library | RSS | XML | Search | Contact | Help

Policies   **Activities**   Culture & Society   Economy & Work   Education & Training   Quality of Life   IS Industry   Regions / World   Research & Innovation

ICT for sustainable growth

Environment

Risk and disaster

Energy Efficiency

EU funding

News

Links

Contact

ACTIVITIES :: Sustainable Growth

ICT for Sustainable Growth

Improving our quality of life should not damage the environment for future generations. Achieving sustainable growth requires better management of all natural resources, from minerals and plant-life to air and water. Using Information and Communication Technologies (ICT) – which are key to economic growth in today's society – can also help us manage finite natural resources and energy consumption much more efficiently, so improving environmental protection without holding back economic development.

News

- **Impacts of Information and Communicatio Energy Efficiency**, 21 October 2008
- **IST-Africa 2009 Conference - Call for Papers** (21/08/08)
- **ELECTRA Joint initiative launched** (30/06/08)

More news...

Funding

- **Opening of the third Call for Proposals for the ICT PSP** (Deadline: 02/06/2009)

More funding opportunities...

In the Library

El uso de las TIC para el crecimiento sostenible: Medio ambiente | Europa - Sociedad de la Información - Mozilla Firefox

Archivo   Editar   Ver   Historial   Marcadores   Herramientas   Ayuda

C   X   file:///D:/VERSION FINAL TRADUCIDA/PAGS WEB TRADUCIDAS/1/index_en.htm   G ▾ Google

El uso de las TIC para el crecimie... ⊠   ICT for Sustainable Growth: Environment... ⊠

Sociedad de la Información en Europa
Portal Temático

Aviso jurídico importante

es

Comisión Europea > Sociedad de la Información

Ir al contenido principal

Políticas   **Actividades**   Cultura y Sociedad   Economía y Trabajo   Educación y Formación   Calidad de Vida   Industria   Regiones / Mundo   Investigación e Innovación

El uso de las TIC para el crecimiento sostenible:

Medio ambiente

Riesgos y desastres

Eficiencia energética

Financiación de la UE

Noticias

Enlaces

Contacto

ACTIVIDADES :: Crecimiento Sostenible

El uso de las TIC para el crecimiento sostenible:

La mejora de nuestra calidad de vida no debería perjudicar el medio ambiente de las generaciones futuras. Para lograr el crecimiento sostenible es necesario mejorar el control de todos los recursos naturales, desde los minerales y las plantas hasta el aire y agua. Las Tecnologías de la Información y la Comunicación (TIC) son la clave para conseguir el crecimiento económico en la sociedad actual y pueden ayudarnos a administrar los recursos naturales no renovables y el consumo de energía de forma mucho más eficaz. De esta manera, se puede mejorar la protección del medio ambiente sin frenar el desarrollo económico.

Noticias

- **Impacto de las TIC en la Eficiencia energética (en)**, 21 de octubre de 2008
- **Conferencia de África-IST 2009 - Citación de ponencias (en)** (21/08/08)
- **Iniciativa ELECTRA (en)** (30/06/08)

Más noticias...

En la Biblioteca

- **"Información tecnológica para mejorar el medio ambiente"(en)**, 1 de abril de 2008

Más publicaciones...

Some do's in institutional websites

Some don'ts in institutional websites

- Scarce accessible alternatives for people with disabilities (no text alternatives, no subtitles or audio files for videos and animations, no audiodescription, no sign language version).

- Graphics and text size too small.

- Confusing navigation mechanisms.

- Complicated language or terminology.

- Changing windows without informing the user.

- The target of links is not specified.

- Lack of didactic aids for non-experts such as glossaries, conceptual trees, multimedia materials, etc.

Conclusions

- Institutional websites should include accessible information that can be understood not just by experts, but also by the general public.

- Accessible resources should guarantee the integration of a heterogeneous audience into the information society by providing equal opportunities to those with disabilities, poor reading abilities or less developed cognitive competence on the subject field.