



Accessibility with Acrobat 7



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Italian Accessibility Law

Law n. 4, January 9, 2004

- “Provisions to support the access to information technologies for the disabled”
- Unanimously approved by the Italian Parliament
- It is considered among the world’s *best practices* by the OECD in its report on *e-government*

Technical references

- The Law is made of 12 articles
- Definition of *Evaluation*
 - A process aimed at verifying the correspondence of services to the requisites of accessibility

Two kinds of Verification:

- Technical/Objective
- Subjective

Technical verification of Accessibility

It defines 22 requisites to submit to a technical verification. When applying, references to the WCAG 1.0 control points and to the Section 508 chap. 1194.22 standards have been indicated.

Such references should not be interpreted as totally applicable. On the contrary, they should be seen as similarities or analogies in order to maintain a correspondence for those who have already worked with the pre-existing standards, and also to allow the use of evaluation software tools already available on the market.

What should be intended by Accessibility?

the capability of computer systems, in accordance with the attained technological knowledge and its limits, to supply services and to provide information which can be availed of, without discrimination, also by those who need supporting technologies or special configurations because of some disability



Article 2

Accessibility: our 3 must

1. Accessibility means distributing information in the most universal way possible.
2. An accessible content is not only a content for disabled people
3. The quality of an accessible content does not depend on the selected software or hardware, but by the use of a good METHOD.

Who the disables are

The WHO classification of disabled people

- **International Classification of Impairments, Disabilities and Handicaps (ICIDH-1, 1980)**
- **International Classification of Functioning, Disability and Health (ICF [*ICIDH-2*], 2001)**

International Classification of Impairments. Disabilities and Handicaps (ICIDH-1, 1980)

- **Impairment**

Any loss or subnormality affecting a psychological, physical, anatomical structure or functionality

- **Disability**

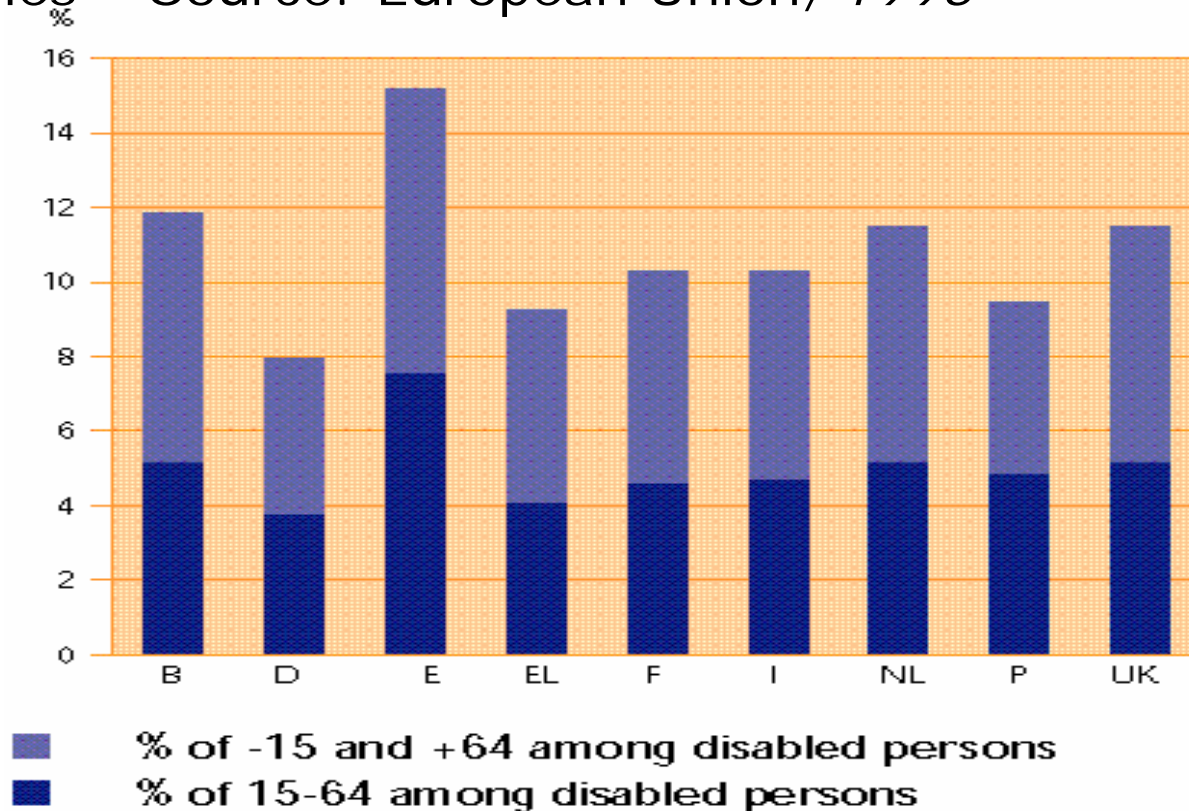
Limitation or loss (as a consequence of impairment) in the capability to perform an activity in the way considered as normal

- **Handicap**

A condition of disadvantage which is the consequence of impairment or of a disability.

How many disabled people in the EU

Percentage upon total population in several European countries – Source: European Union, 1995



Disabilities and supports

Poor vision

Characters redimensionable

High contrast pages

Daltonism (color blindness)

High contrast pages and suitable colors

Total blindness

vocal browsers, screen-readers, Braille keyboard

Deafness

normal browsers (text to be supplied in addition to audio-visual content)

Arms disability

guaranteed surfing without mouse

Technological disability

only text content to be supplied (no graphics).

Choosing the most suitable technologies

Computer can be used with special devices.

Supporting technologies can be both input and output devices

Supporting technologies for blind people

How to interact with the computer ?

- **Vocal synthesizer**
- **Display or braille bar**
- **Scanner + OCR**
- **Screen reader**
- **Braille printer**

Acrobat 7 and Adobe Reader 7

- ***Adobe products make it easy for authors to create and distribute accessible content.***
- ***Acrobat 7.0 and the Adobe Reader 7.0 software enable people with disabilities to access, read, and use PDF documents and forms more easily.***

<http://access.adobe.com>

Type of Acrobat 7 document

1. **PDF not structured**
2. **Structured PDF**
3. **Tagged PDF**

Type of PDF document

1. PDF not structured :

- *These types of documents are not well-interpreted by different devices (PDA, mobile).*
- *During the exporting phase you could loose some kind of formatting styles (tables, lists)*

Type of PDF document

2. Structured PDF :

- ***Interpreted by screen readers and devices***
- ***During the exporting phase you could loose some kind of formatting styles (tables, lists)***

Type of PDF document

3. PDF Tagged :

- ***Accessible PDF documents use tags to indicate the structural elements of a document.***
- ***With Acrobat 7 you can proper tag your PDF documents with titles, headings, texts, tables and so on***

PDF Tagged

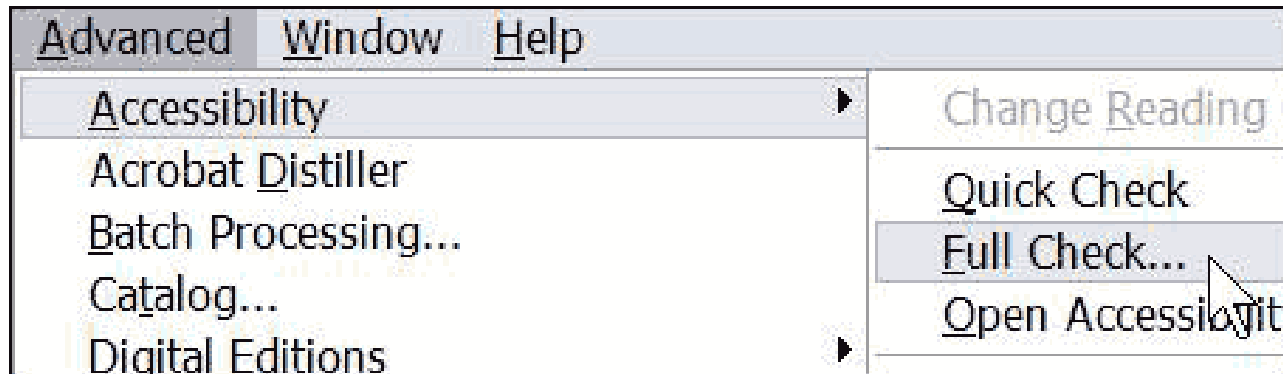
Find out wheter a PDF document is tagged :

- *Open the Adobe PDF document in Acrobat 7*
- *Under File >> Document Properties*
- *On Description tab look for the Tagged PDF entry*

Test the accessibility of a document

Use these 2 methods in Acrobat 7 :

- **Quick Check**
- **Full Check**



NOTE : you can also check the level of accessibility of a pdf document with Adobe Reader 7 but it is recommended to use Acrobat 7

Test the accessibility of a document

Read your PDF document (simulate a screen reader) :

View > Read Out Loud

Test the accessibility of a document

***Save the document in a text format
(Accessible) :***

Save as >> Text

***Acrobat 7 will create a text file with the same
reading order of the Read Out Loud option***

***Nota : you can also use an online tool released by
[Adobe](#)***

Make your document accessible

Use the Accessibility SetUp Assistant :

Advanced > Accessibility > SetUp Assistant

Use the PDF Optimizer :

Advanced > PDF Optimizer

Make your document accessible

Reading the order of a document :

***From menu Order > TouchUp Reading
Order***

***NOTE : Use the View > Reflow option to check the
alignement of the lements***

Make your document accessible

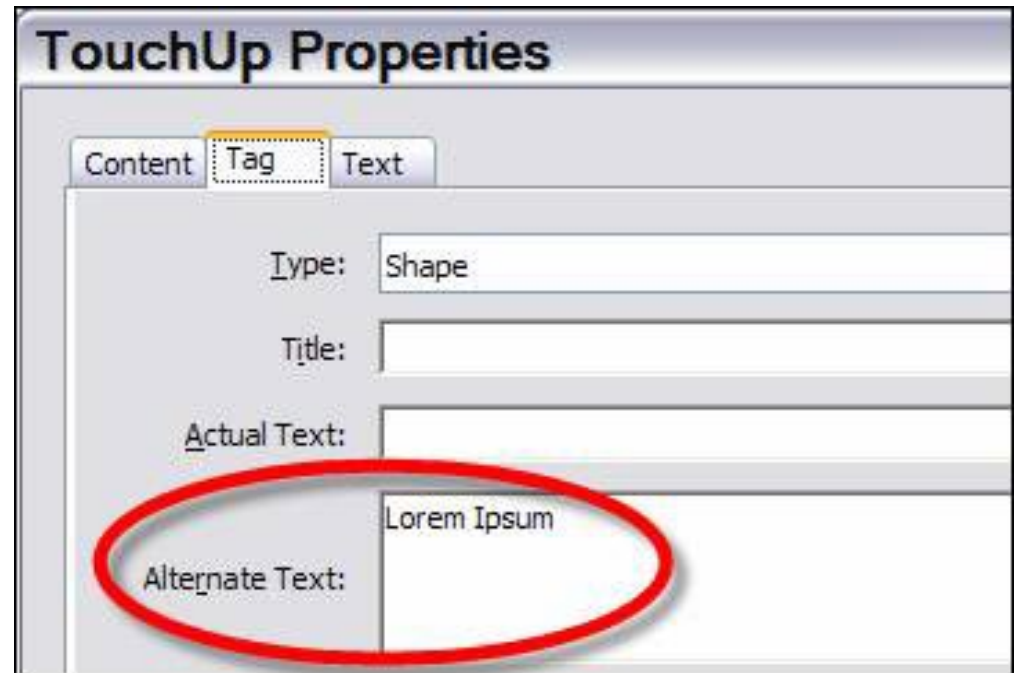
Define a Language for your document

***Under File > Document Properties >
Advanced tab > Reading Options > Language***

NOTE : This information is important for the screen reader. You can change language for every single tag lements of your document on Properties > Options

Make your document accessible

Add alternative text for elements



Make your document accessible

Colour and Contrast

- **Don't rely on color alone**

If color alone is used to convey information, people who cannot differentiate between certain colors and users with devices that have non-color or non-visual displays will not receive the information. When foreground and background colors are too close to the same hue, they may not provide sufficient contrast when viewed using monochrome displays or by people with different types of color deficits.

[WCAG 1.0, Guideline 2](#)

Make your document accessible

Color and Contrast

You have to maintain all your text readable when color is disabled.

To make a check print your document in b/n

Make your document accessible

Color and Contrast

Check the readability of your document with the “High-contrast color combinations” option

Edit > Preferences > Accessibility

Make your document accessible

Color and Contrast

Use the following formula to calculate the right foreground and background color :

$$((\text{Red value} \times 299) + (\text{Green Value} \times 587) + (\text{Blue value} \times 114)) / 1000$$

You have to obtain a value from that function bigger than 125.

(<http://www.w3.org/TR/AERT#color-contrast>)



Questions and Answers



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