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SEMINAR PAPER

in the field

Media Information Science

Topic:

Web-Accessibility.

**Theory and practice of web design without barriers for disabled people
for the British American Tobacco Corporate web-site**

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List of abbreviations

w. y.	without year
w. a.	without author
tab.	table
fig.	figure
resp.	respectively
e. g.	example given
W3C	World Wide Web Consortium
BATU	British American Tobacco
CMS	content management system
WCAG	Web Content Accessibility Guidelines
BITV	Barrierefreie Informationstechnik-Verordnung (German disability regulation)
UK	United Kingdom
WAI	Web Accessibility Initiative
WCAG	Web Content Accessibility Guidelines
CSR	Corporate Social Responsibility
CSS	Cascading Style Sheets
HTML	Hypertext Markup Language

1. Introduction

1.1. General problem

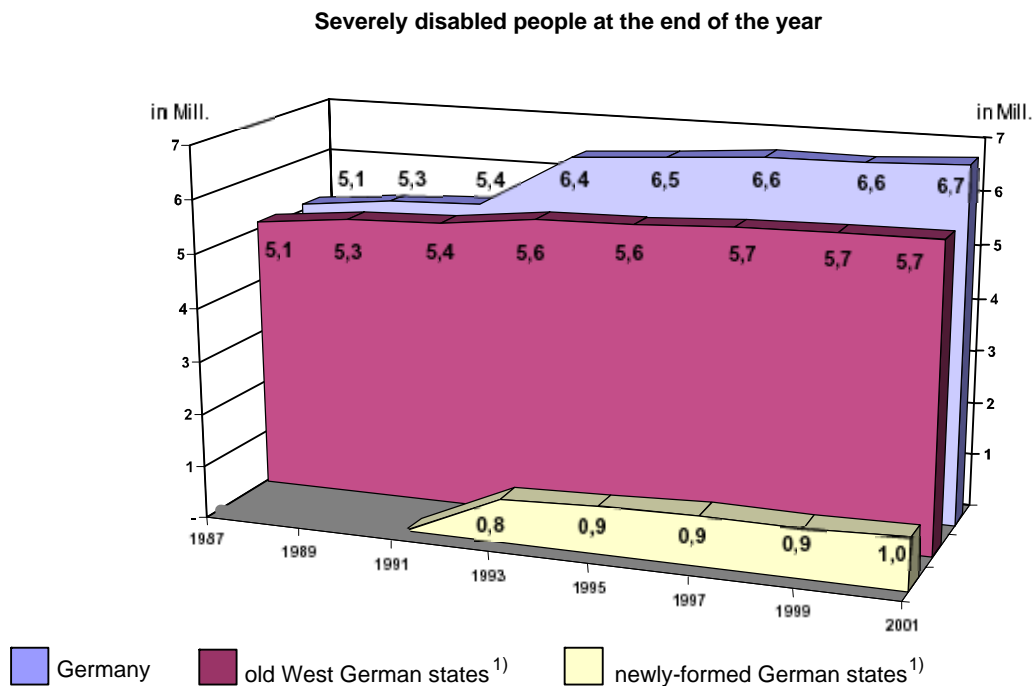
An accessible Web for the W3C World Wide Web¹ consortium means unprecedented access to information for people with disabilities. At least 10% of the population in most countries has disabilities. In Europe today, approximately 34-37 million people have some kind of disability. These visual, auditory, physical, speech, cognitive, and neurological disabilities can all affect access to the Web. The average age of population in many countries is increasing. Aging sometimes results in combinations of Accessibility issues. Few organizations can afford to deliberately miss this market sector. A number of governments require Accessibility of specific kinds of Web sites.

Most handicaps can be regarded as impairments on a scale. Many more individuals encounter problems to some degree without being officially classified as “disabled”. They might be helped with the same tools as the disabled person. Elderly people are one group with reduced capabilities in reading, hearing and mobility. Many of them also belong to the still large group of potential users unfamiliar with the Internet, which also might be helped by more flexible routines on the websites.

As an example for the amount of people with disabilities, a German statistic report published by the Federal Statistical Office Germany shows that in 2001 6.7 million severely disabled people were officially registered in Germany². Of course there are a lot more, who aren't officially registered in the statistics or who can't be classified as “severely disabled”, so that there might be much more people who have severe problems with accessing web-content. Over the last years in Germany the amount of disabled people nearly stayed the same as it can be seen in the following diagram, what emphasizes how important constant efforts to support these people are.

¹ Source: Overview of the Web Accessibility Initiative, W3C: Internet <http://www.w3.org/Talks/WAI-Intro/slide1-0.html>, Published 2000-11-11, Visited 2003-09-12

² Source: Schwerbehinderte Menschen 2001, Federal Statistical Office Germany: Internet <http://www.destatis.de/basis/d/solei/soleiinfo.htm>, Published 2003-01-02, Visited 2003-09-15



¹⁾ 1993 West-Berlin was counted as part of old West German states and East-Berlin as part of the newly-formed German states. From 1995 on Berlin was added to the old West German states.

Fig. 1: Time series of disabled people in Germany 1987 until 2001

1.2. General method of resolution

The overall goal is to create Web content that is perceivable, operable and understandable by the broadest possible range of users and compatible with their wide range of assistive technologies, now and in the future. The basic principles are very well expressed in the W3C Web Content Accessibility Guidelines.

The content has to be *perceivable*. Therefore it has to be ensured that all content can be presented in form(s) that can be perceived by any user - except those aspects of the content that cannot be expressed in words. This tends to issues like providing text equivalent for graphical elements.

The information access of course has to be *operable*, so that the interface elements in the content are operable by any user.

The content itself has to be *understandable* and as easy as possible to understand the content and controls.

The web technologies used to present the content have to be *robust*, to maximize the ability of the content to work with current and future Accessibility technologies and user agents.

“Accessible web content benefits a variety of people, not just people with disabilities. In the physical world, ramps are used by bicycles, people pushing strollers, and people in wheelchairs. Similarly, accessible web content is beneficial to a variety of people with and without disabilities. For example, people who are temporarily operating under constrained conditions like operating in a noisy environment where they can not hear well at all, or driving their car where their eyes are busy would benefit from an accessible site. Likewise, a search engine can find a famous quote in a movie if the movie is captioned.”³

In the first two chapters of this seminar paper general information about Accessibility is given, mainly referring to existing and world-wide acknowledged Accessibility standards such as the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG). These guidelines are checkpoints produced by the W3C consortium and has become a standard in Europe and adapted by all EU member states.

The analysis performed in chapter 3. “Accessibility in practice” shows the situation of the British American Tobacco's Corporate web-sites with very extensive content and assesses the Accessibility efforts in practice. It is also about to which extent a visitor to the British American Tobacco's (BAT) web-sites special accessible text-only version, with some kind of disability, can communicate. For this evaluation several tests with assistive software for disabled people are performed and the output of several tests and talks to disabled people is included.

³ Source: Web Content Accessibility Guidelines 2.0, W3C: Internet <http://www.w3.org/TR/WCAG20/#overview-design-principles>, Published 2003-06-24, Visited 2003-09-12