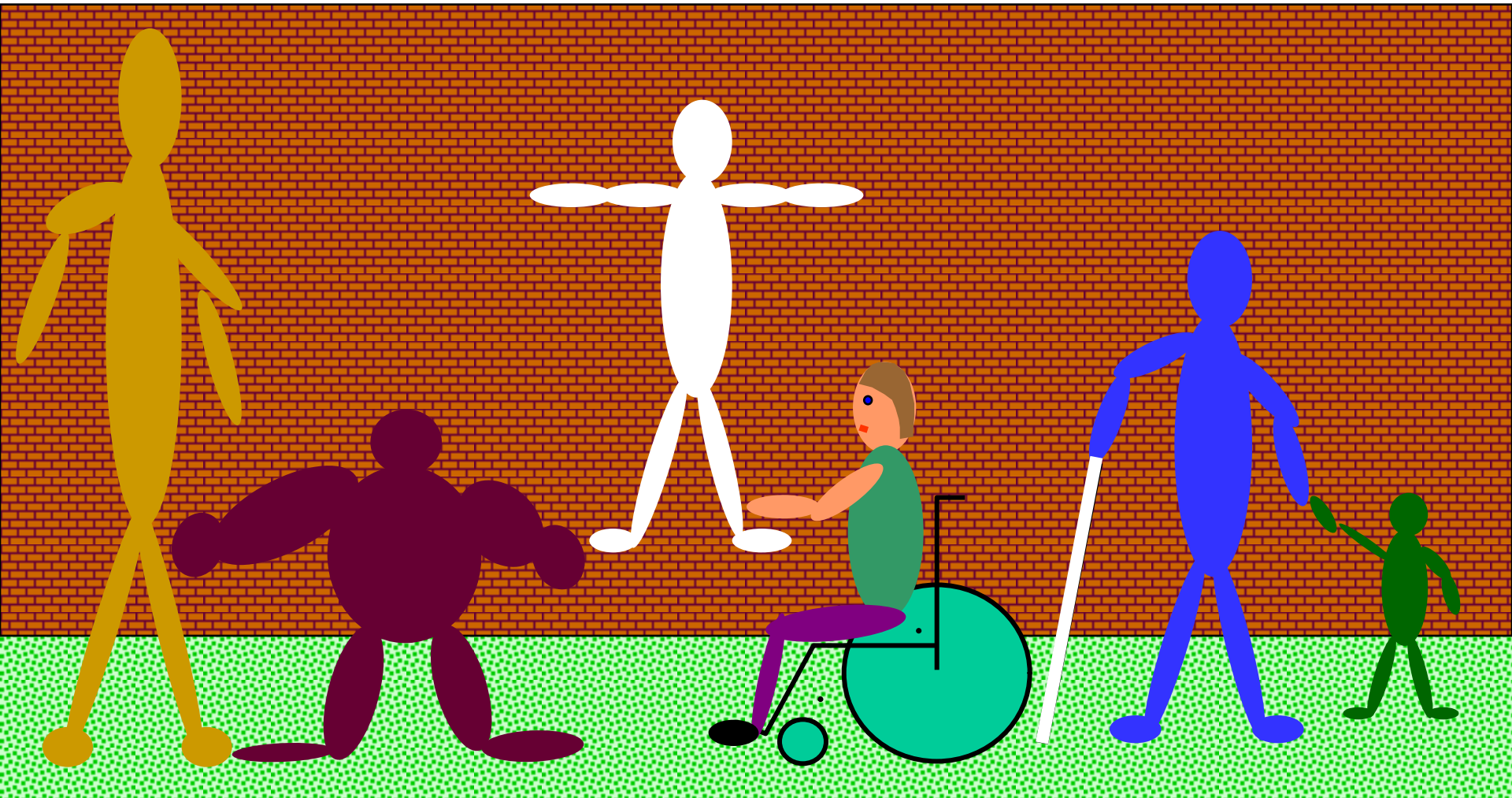


Universal Design – International Perspectives – Germany

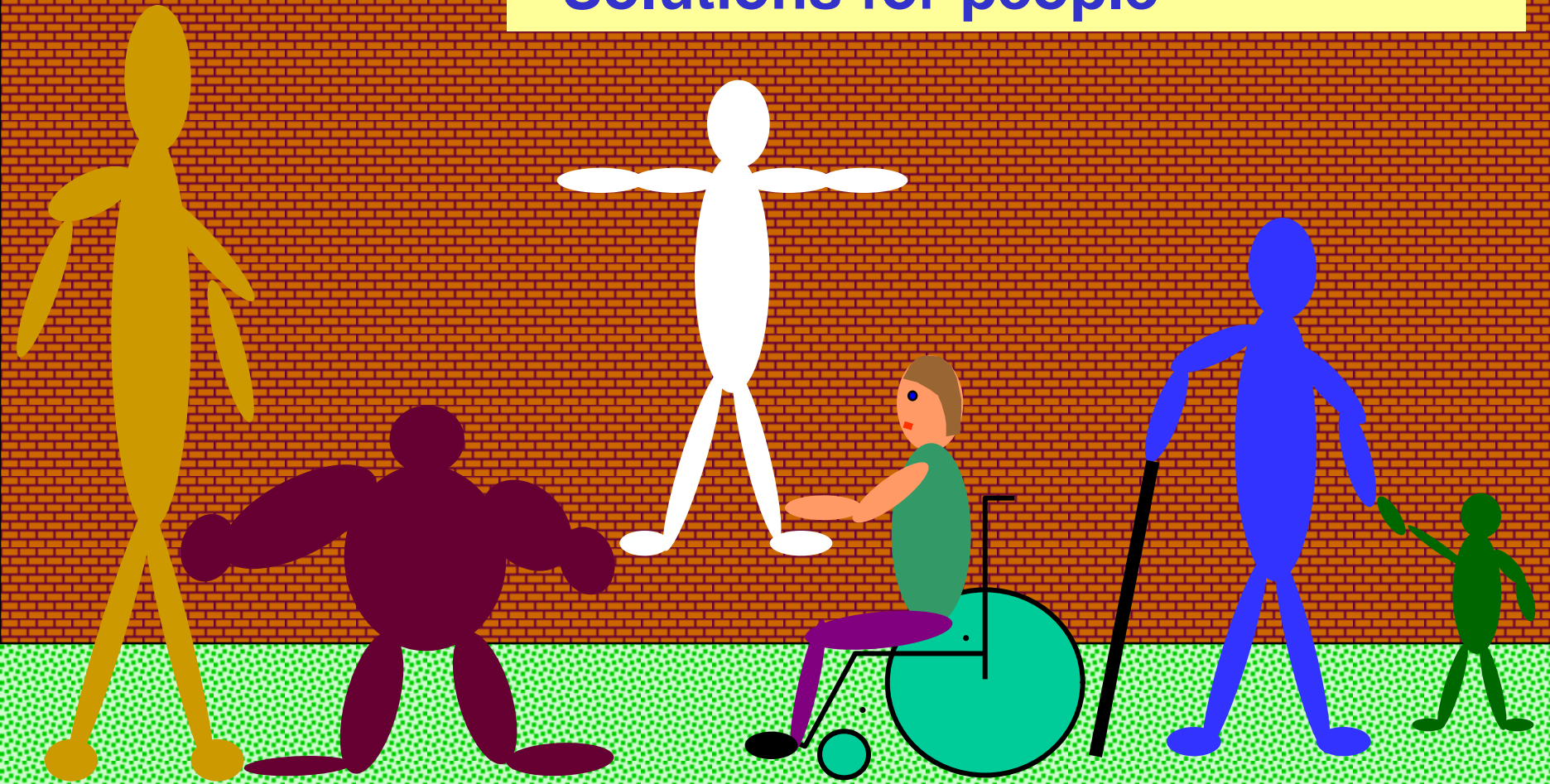
Achieving full participation through
Universal Design
Dublin, October 1st, 2009
Christian Bühler

User diversity

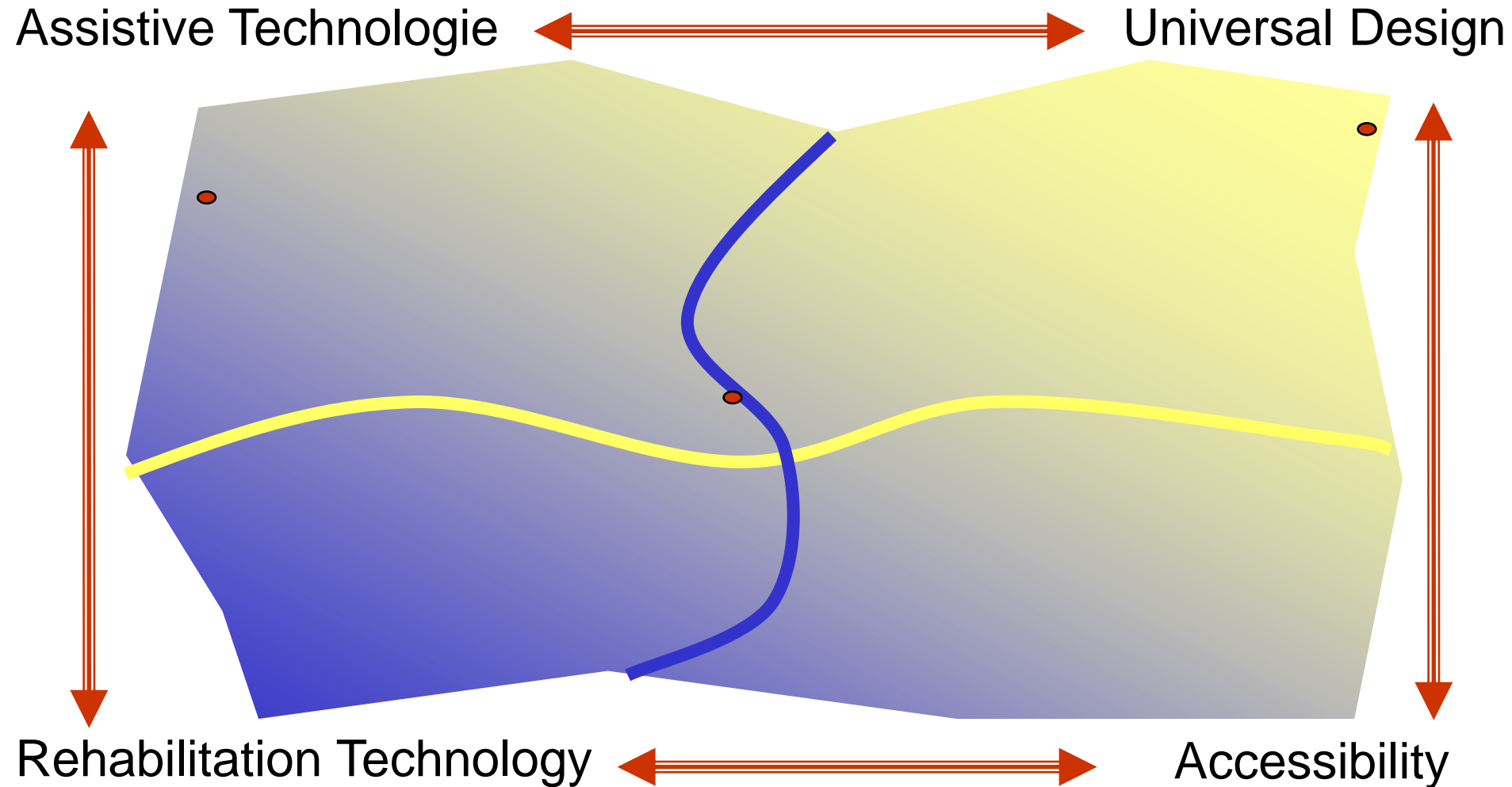


User diversity

- Better products for more users
- Services for all citizens
- Solutions for people



Continuum of Solutions



Universal Design (UD) – Definition of UN-Convention (2006)

“Universal design” means the design of

- products, environments, programmes and services
- to be usable by all people, to the greatest extent possible,
- without the need for adaptation or specialized design.

“Universal design” shall not exclude assistive devices for particular groups of persons with disabilities where this is needed“.

Universal Design (DfA) principal strategies (EU)

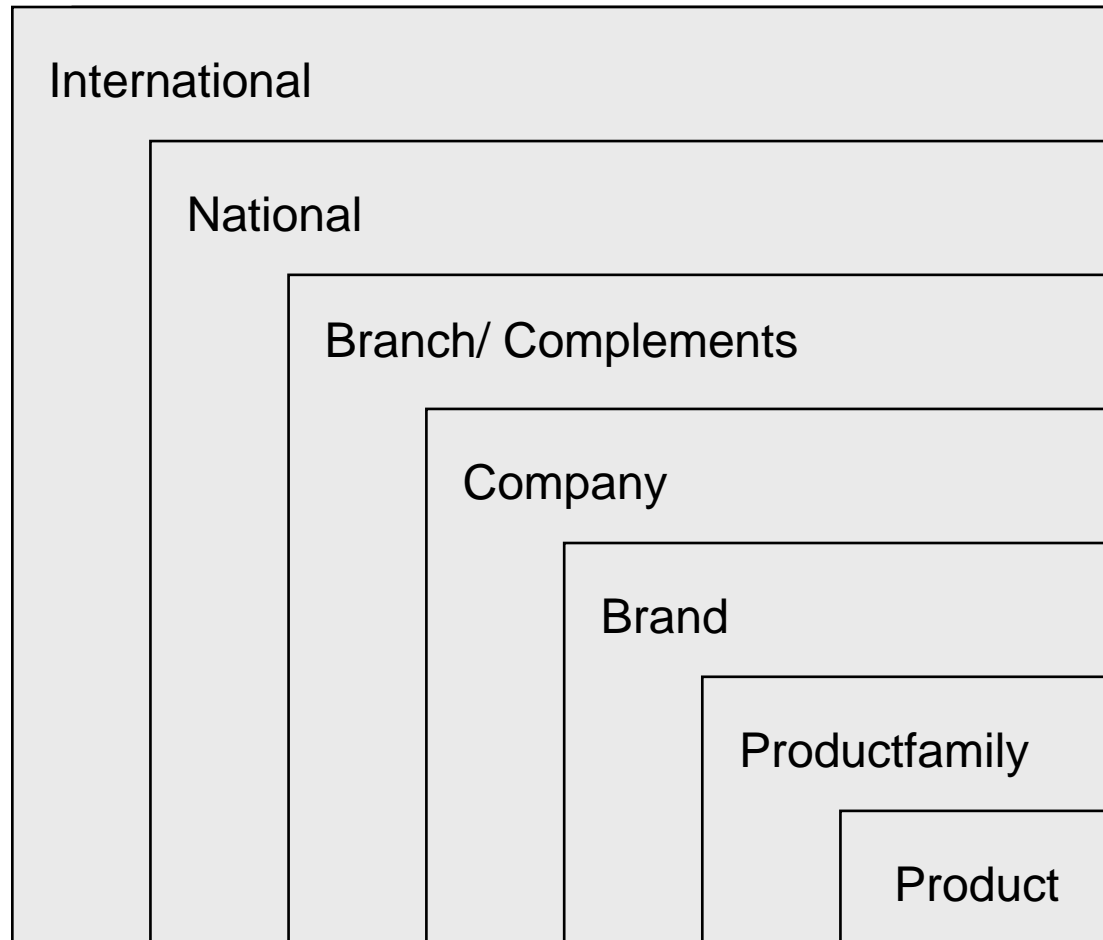
- Design of (IST) products, services and applications which are demonstrably suitable for most of the potential users without any modifications.
- Design of products which are easily adaptable to different users (e.g. by incorporating adaptable or customisable user interfaces).
- Design of products which have standardised interfaces, capable of being accessed by specialised user interaction devices.

Universal Design (DfA) Situation: Myths or Truth

- + Concept available since 80ties
- + Politicians like the idea
- + Support from the disability field
- + Ambient Intelligence as new opportunity
- Market penetration still low
- Different understandings/ Misconceptions
- Conflicting design requirements
- Conflicting design cultures
- Conflicting industry procedures
- Missing information
- Lack of education

-

Levels of Universal Design (DfA) Management



Fujitsu: Special Issue on Universal Design

Preface

Chiaki Ito
Corporate Executive Vice
President



A special article covering universal design (UD) was printed in the May 2003 issue of the FUJITSU Magazine circulated throughout Japan. Around that time,, people started paying attention to universal design and environmental issues **from the viewpoint of corporate management.**

Management issues

- Company policy statement
- Change of perspectives
- Implementation plan
- Universal Design Units
- Recruitment strategy
- Further education programme
- Design guidelines
- Change of procedures

Classical Example: Ramps for all

Universal Design in Municipalities

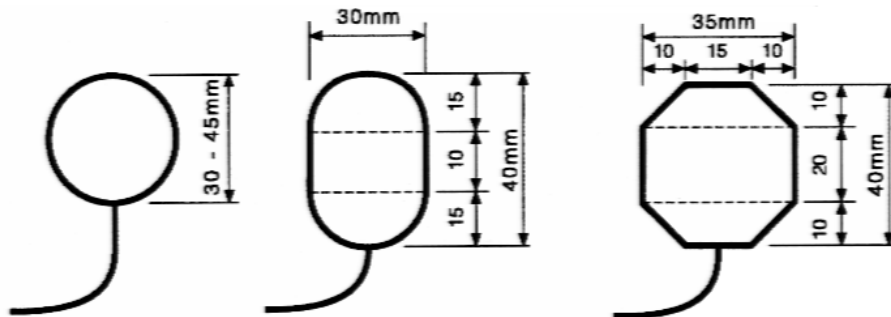
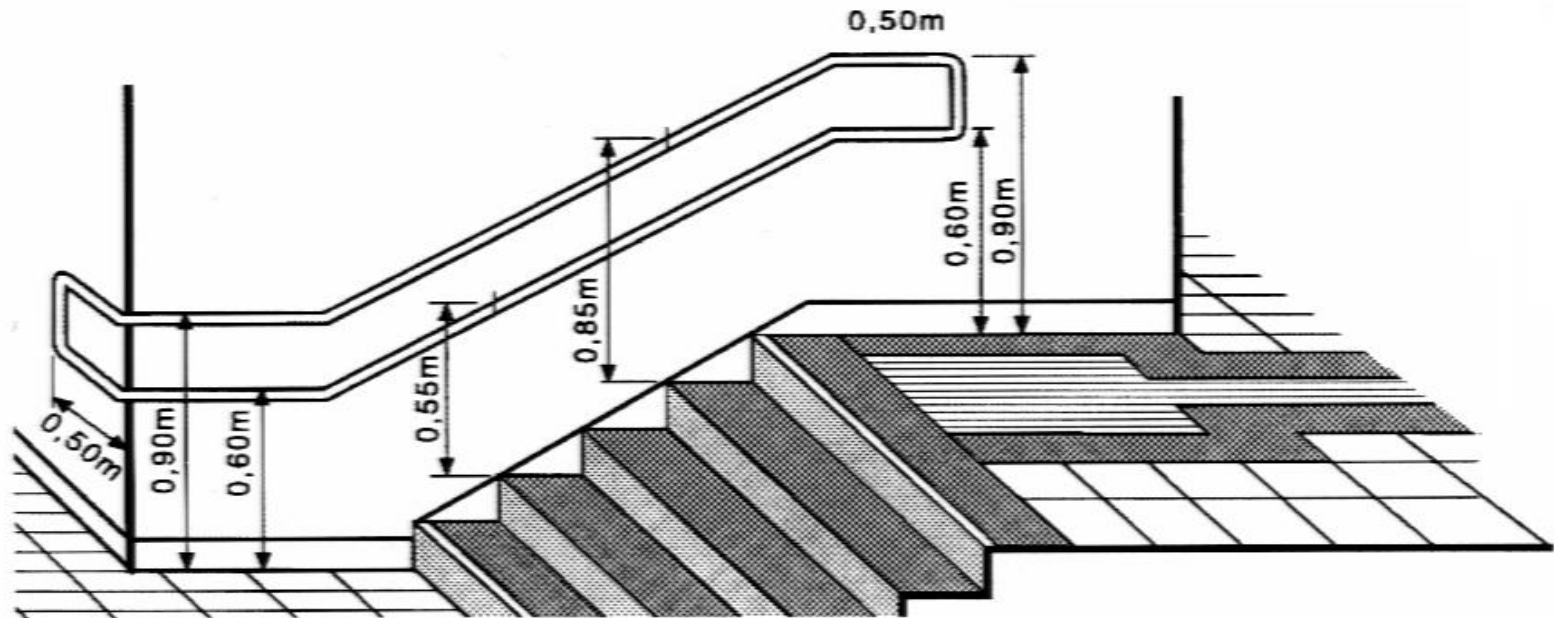


Entrance of the office for youth affairs, Dortmund City



**Orientation Sign,
Dortmund Housing
Association**

Hand Rails (example of technical specifications)



Overview and Orientation Map for All

Universal Design in public environments



Tactile Map, Citypalais Duisburg

EDeAN – European Design for all eAccessibility Network

EDeAN

European Design for All
e-Accessibility Network



@eInclusion

- Universal Design in ICT
- 160 members in Europe
- National Contacts in most EU member states
- White papers, Conferences, Networking (SIGs), Resource Centre

<http://www.edean.org>

<http://www.dfaei.org>



1st European Forum on Participation and Technology



October 15.+16. 2009
at REHACARE in
Düsseldorf

Topic:

The UN Convention on the Rights of Persons with Disabilities and the use of assistive technology and universal design

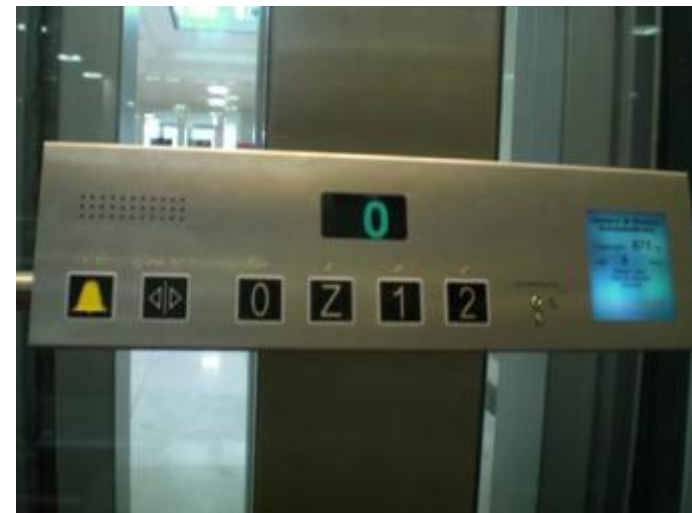
Register at: www.EU-PaTe.eu

Elevators for all

Universal Design in Public Buildings



Elevator in the Conference and Advice Centre „Der kleine Prinz“ in Duisburg



Operation tableau of an elevator, Philharmonie Essen



E-Government – “Einfach teilhaben”

BMAS - einfach teilhaben - Startseite in Alltagssprache - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

Kontrastansicht Kontakt Hilfe Inhalt Impressum RSS



Alltagssprache Leichte Sprache Gebärdensprache

Suchbegriff eingeben...
Erweiterte Suche **Suchen**

Einfach teilhaben: Das Webportal für Menschen mit Behinderungen, ihre Angehörigen, Verwaltungen und Unternehmen



Kindheit und Familie
Vorsorge, Frühförderung, Kinderbetreuung, etc



Schule und Studium
Gemeinsamer Unterricht, Förderschulen, Studentischer Alltag, etc



Ausbildung und Arbeit
In einer Werkstatt arbeiten, Arbeitsplatz sichern, Berufsausbildung, etc



Alter
Arbeiten im Alter, Rente und Ruhestand, Wohnen im Alter,



Gesundheit und Pflege
Krankheit, Rehabilitation, Unfall, Pflege, etc



Mobilität und Freizeit
Mobilität am Wohnort, Barrierefrei reisen, Sport,

Recherche
Arzt- und Klinik-Finder

Suchbegriff eingeben...
Geben Sie hier z.B. die folgenden Angaben ein: Diagnose / Therapie / Plz / Ort / Name
Erweiterte Suche **Suchen**

- Hilfsmittel
- Beispiele aus der Arbeitswelt
- Wichtige Adressen
- Gesetze und Urteile

September 2009 << >>

Mo	Di	Mi	Do	Fr	Sa	So
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

BIENE AWARD (2003 – 2009)

Best websites competition



The screenshot shows a web browser window with the title "Wie wird das Internet barrierefrei? - BIENE sucht kreative und innovative Lösungen - Mozilla Firefox". The browser's menu bar includes "Datei", "Bearbeiten", "Ansicht", "Chronik", "Lesezeichen", "Extras", and "Hilfe". The website header features a cartoon bee logo on the left and the "BIENE" logo on the right, with the tagline "Barrierefreies Internet eröffnet neue Chancen".

The main content area has a yellow background and contains the following text:

Es brummt im Netz: 146 Seiten im BIENE-Feintest

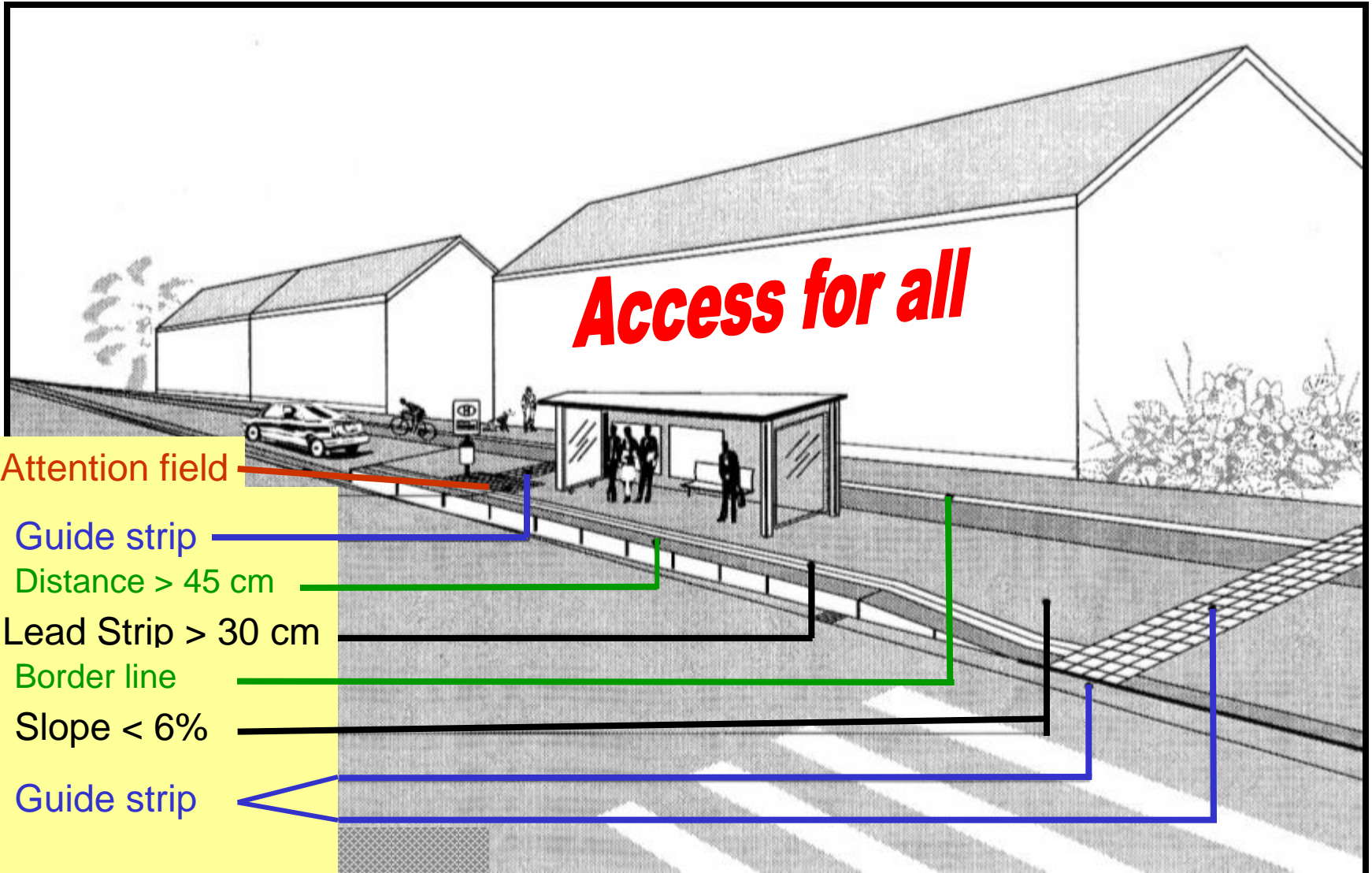
So viele Webseiten wie noch nie erreichen zweite Runde des Wettbewerbs für barrierefreie Webgestaltung / Umfang und Qualität der Angebote steigt

Berlin/Bonn, 25. August 2009 - Neuer Rekord bei der Qualifikation für die Feintestphase des BIENE-Wettbewerbs der Aktion Mensch und der Stiftung Digitale Chancen. Mit 146 Angeboten haben so viele Teilnehmer wie noch nie die zweite Runde des Wettbewerbs für die besten deutschsprachigen barrierefreien Webseiten erreicht. Insgesamt 326 Seiten hatten sich in diesem Jahr um den begehrten Preis beworben. "Umfang und Qualität der zum Wettbewerb eingereichten Seiten sind noch einmal deutlich gestiegen", freut sich Jutta Croll, Geschäftsführerin der Stiftung Digitale Chancen. "Die Seiten des Jahrgangs 2009 bieten Nutzerinnen und Nutzern deutlich mehr Funktionen und Inhalte als in den Vorjahren." Außerdem setzen Anbieter vermehrt barrierefreie Techniken, die über die gesetzlichen Verpflichtungen hinaus gehen wie beispielsweise Gebärdensprachvideos ein. Auch Iris Cornelissen, Projektleiterin BIENE-Wettbewerb bei der Aktion Mensch, sieht in den Ergebnissen der ersten Testphase ein positives Signal: "Immer mehr Anbieter integrieren Social-Web-Funktionen und gestalten diese barrierefrei. Dadurch eröffnen sie den Nutzerinnen und Nutzern zusätzliche Möglichkeiten, um sich untereinander auszutauschen und sich die Inhalte und Funktionen einer Webseite individuell zu erschließen."

Nächster Prüfstein Feintestphase

On the left side of the page, there is a vertical navigation menu with the following items: "Start", "Biene-Spiel", "Leichte Sprache", "Gebärdensprache", "Kriterien", "Ausschreibung", "Beirat", "Bewerben", "Vorschläge", "Nominierungen", and "Preisräger". At the bottom of this menu is the logo for "AKTION MENSCH" and "stiftung digitale-chancen".

The Windows taskbar at the bottom shows the "Start" button, several application icons, and the system tray with the time "10:57".



Mobility through information – Example Frankfurt



Rhein-Main-Verkehrsverbund

SUCHE INHALT meinRMV AGBs IMPRESSUM

Start Verkehrshinweise Fahrpläne Tickets Service Auto & Co. Freizeit Kontakt Wir über uns

Verbindungsauskunft

Textversion

Von

Nach

jetzt später öfter

Nächste Abfahrt

Dynamischer Haltestellenfahrplan

Antrag

Barrierefreies Reisen

meinRMV

Name

Passwort

Login

HandyTicket

TicketShop

Freizeit

BUS UND BAHN AKTUELL

Frankfurt: Haltestelle der Linien 15, 16 und 19

Bis 2.10. ist die Haltestelle "Stresemannallee/ Gartenstraße" vor die Einmündung Schaubstraße verlegt.

MEHR >>

RMV-Bahnlinie 10: Verspätungen und Zugausfall

Wegen Bauarbeiten kommt es am 28.9., 3. und 4.10. sowie dem 10. und 11.10. zu Teilausfällen und Verspätungen.

MEHR >>

Darmstadt: Bauarbeiten am Mathildenplatz

Für viele Straßenbahn- und Buslinien gibt es bis 31.10. Änderungen bei den Haltepositionen und vereinzelt bei den Abfahrtszeiten.

MEHR >>

Neue RMV-XtraTour speziell für Senioren

In der RMV-XtraTour "Unternehmungslust" gibt es 100 der spannendsten Ziele in der Region, die alle mit Bus und Bahn gut zu erreichen sind.

MEHR >>

Blickachsen und Parkspaziergänge

Ungewöhnliche Kunstwerke und ein Spaziergang durch die Altstadt - der RMV-O-Ton begleitet Sie heute durch Bad Homburg.

MEHR >>

Herbstliche Weinwanderung im Rheingau

Eine Wanderung in den Weinbergen des Rheingaus ist ein besonderes Vergnügen - Busse und Bahnen bringen Sie unbeschwert hin und zurück.

MEHR >>

Mobility through Information – Example Frankfurt



The screenshot shows the RMV website interface. At the top, there is a navigation bar with the RMV logo and links for 'SUCHE', 'INHALT', 'meinRMV', 'AGBs', and 'IMPRESSUM'. Below this is a search bar and a menu with options like 'Start', 'Verkehrshinweise', 'Fahrpläne', 'Tickets', 'Service', 'Auto & Co.', 'Freizeit', 'Kontakt', and 'Wir über uns'. A sidebar on the left contains language selection options and a 'Textversion' link. The main content area features a large yellow banner with the text 'Barrierefreies Reisen' and icons for a wheelchair, a person with a cane, and a stroller. Below the banner, there are several news items with images and titles, such as 'Blickachsen und Parkspaziergänge' and 'Herbstliche Weinwanderung im Rheingau'. A red circle highlights the 'Barrierefreies Reisen' link in the sidebar.

Awareness, Education and Training

- Education on the idea, the methodology and the benefits of UD already at high school and university level.
- Integration of UD in the curricula of economics, engineering, computer science, architecture, industrial design, rehabilitation science, social science etc. Education for future joint efforts towards UD.
- Policy level encouragement of schools, universities and other educational settings to take up UD in their courses.
- Public support of networking, research, development of teaching material and its provision free of charge.
- Inside the companies awareness raising, further education and training of existing staff and selection of educated employees are the main roads to follow.

Coursework

- BA Level
 - Introduction to Universal Design, all students (2-6 h)
 - Universal Design in the Built Environment, architecture, civil engineering (4-8 h)
 - Universal Design in ICT, computer science, electrical engineering (4-6 h)
 - Universal Design in product the product lifecycle, designers, mechanical engineers, graphic designers, economics, ...
- MA Level
 - Specialised themes like webdesign, user interface engineering, design of public services, health and rehab, education, usw.

Curriculum Guidelines MSc Design-for-all in ICT

¶
MSc Design-for-All-in-ICT¶
A masters-level programme¶
Second-cycle, EQF-level 7¶
Programme-credit level 90-120 ECTS¶

The principles and practical disciplinary perspective of people to have access process of designing technologies and services

The curriculum guidelines have been developed in industry, user organizations have a professional qualification to design and services, help to advance on accessibility, and development of new, fully

¶ Masters students are expected to have knowledge and research show critical awareness to demonstrate special innovative solutions. ¶

A flexible learning experience

The Masters-level Design-for-All-in-ICT programme is made up from a number of modules that can be adapted to meet European, national and local academic requirements. The full programme leads to a specialised qualification. ¶

The content and learning outcomes of individual modules can be adapted to offer a challenging experience both to students with pre-requisites in computing and information sciences and to students from different backgrounds including human-computer interaction, design, humanities and social sciences. ¶

Programme modules¶

The programme modules allow students to acquire the relevant knowledge, personal and professional skills and competencies. These will enable the student to design, develop, implement, evaluate and manage a wide range of ICT products and services that adhere to the principles of social inclusion, and to understand the ethical underpinnings for this work. ¶

¶
Fundamentals of Design-for-All and accessibility in-ICT ¶

Develops a critical understanding of Design-for-All principles and the latest practices with respect to a range of current and novel ICT solutions ¶

Networking towards an inclusive Information Society ¶

¶
Design-for-All Regulation, Legislation and Standardisation ¶
Develops a critical understanding of how the implementation of Design-for-All theory and practice is supported by the use of regulation, legislation and guidelines and affects the design of ICT equipment. ¶

First course is run by
Middlesex University
starting autumn 2009

¶
Design-for-All in-ICT ¶

¶ → Developing an interdisciplinary programme and modules ¶

¶ → Improving access to the information society ¶

EDeAN
European Design for All
e-Accessibility Network



Provides the students with the experience of utilising Design-for-All principles to understand and solve a real-world problem. ¶

¶
MSc Digital Inclusion ¶

The first European Masters pilot programme has been developed to run at Middlesex University, UK. For more information on this programme go to: www.mdx.ac.uk/digitalinclusion ¶

¶
Developing training and education in Design-for-All in-ICT ¶

Education and training of students and professionals working in ICT is a vital part in the process of achieving inclusion throughout Europe. Curriculum development for courses at professional level, Bachelor level and Masters level has been supported by the European partners of the DfA@Inclusion (DFAB) project from 23 countries, and the European Design-for-All eAccessibility Network (EDeAN). ¶

¶
Further information ¶

For further information and advice on developing Bachelor modules or a Masters programme, or developing professional training, please go to: <http://www.dfaei.org/dissemination.html> ¶

¶
Email-Contact ¶

¶ → EDeAN Secretariat ¶
secretariat@edean.org ¶
URL: www.edean.org ¶

¶ → Project Coordinator ¶
Dfa@inclusion@fac.cnr.it ¶
URL: www.dfaei.org ¶

EDeAN
European Design for All
e-Accessibility Network



User Orientation

End Users

- Average Users
- Users with special capacities/ abilities
(restricted - enhanced)
- Users in different situations

Other kind of users

- Industrial designers
- Decision makers
- Company stakeholders
- Marketing People

Relevance of Universal Design

- UD has considerable market potential.
- UD supports participation of all citizens.
- Characteristics of products and services aiming at the support of people with functional restrictions can serve the better usability for all.
- Number of general users is usually much bigger than the number of people with disabilities.
- Universal Design for situative restrictions.
- Universal Design can only be implemented looking at the requirements and abilities of all.

Thank You!

Universal Design – Go for it!

Thank you!

Questions?