Executive summary

Universal Design is a strategy for making environments, products, communication, information technology and services accessible to and usable by everyone – particularly people with disabilities – to the greatest extent possible. Barriers to participation in social life can be avoided when Universal Design principles are applied to mainstream policies and solutions right from the early stages of planning.

This report shows that many European countries have had very positive experiences with Universal Design/Design for All initiatives, but also that full advantage of the possibilities has not yet been taken.

To change this, a number of recommendations to governments are presented under the headings of (1) Adoption and decision on principles; (2) Co-ordination; (3) Implementation; and (4) Evaluation, with a clear focus on the planning process.

A selection of examples of good practice is provided and linked to many of the key action lines in the Council of Europe Action Plan to promote the rights and full participation of people with disabilities in society: improving the quality of life of people with disabilities in Europe 2006-2015 (Recommendation Rec(2006)5).

1. Introduction

Many Europeans, especially people with disabilities, are unable to take part in important activities and aspects of society in an equal manner, simply because policies, societies and environments are not designed to meet their requirements. Additionally, with the number of elderly people increasing rapidly, future European societies face the challenge of adequately addressing the particular requirements of a growing number of people with disabilities. This report consequently invites member states to:

- promote full participation in community life by ensuring access to and usability of all aspects of society, including the built environment, transport, products and goods, information, public services, education, employment and care;
- implement Universal Design as a strategy to ensure equal and democratic rights in society for all individuals, regardless of age, abilities or cultural background, including persons with disabilities.

1.1. Definition of Universal Design/ Design for All

Building upon the Tomar Resolution[1] adopted in 2001:

- Universal Design is a strategy which aims to make the design and composition of different environments, products,

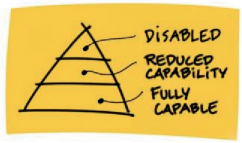
1. Council of Europe Resolution ResAP(2001)1 on the introduction of the principles of universal design into the curricula of all occupations working on the built environment ("Tomar Resolution").

communication, information technology and services accessible and understandable to, as well as usable by, everyone, to the greatest extent in the most independent and natural manner possible, preferably without the need for adaptation or specialised solutions.

- The aim of the Universal Design concept is to simplify life for everyone by making the built environment, communication, products and services equally accessible, usable and understandable.
- The Universal Design concept promotes a shift to more emphasis on user-centred design by following a holistic approach and aiming to accommodate the needs of people with disabilities, including the changes that people experience in the course of life.
- Consequently, Universal Design is a concept that extends beyond the issues of mere accessibility of buildings for people with disabilities and should become an integrated part of policies and planning in all aspects of society.

For the purpose of this report the terms "Design for All", "integral accessibility", "accessible design", "inclusive design", "barrier-free design", "transgenerational design" and "accessibility for all" are regarded as converging towards the term "Universal Design" used in this text.

The general idea is that planning and shaping policies, built environments, information, products and services must be made responsive to the needs of people with diverse abilities.



The challenge is to develop mainstream solutions with built-in adaptability and compatibility, accommodating as many people as possible, including people with disabilities. For people with special needs, assistive technology and personal services will be part of the total solution, and this solution will cover more people if, for example, standardised interfaces are integrated into the design.

To cater for this in practice, Universal Design offers a philosophy and strategy which support the implementation of full citizenship, independent living and integration. Mainstreaming is a keyword in this process, implying that all policies and solutions have to be carefully designed to accommodate all users. The aim is to achieve this to the greatest extent possible, diminishing the need for segregated solutions and special services.

As a design-in-time methodology Universal Design contributes to the prevention and elimination of barriers to integration, whether psychological, educational, family-related, cultural, social, professional, urban or architectural. Universal Design thus has the potential to help define a coherent European policy of integrating people with disabilities, strengthening the European goal of enhancing the autonomy of people and making them self-supporting.

In the Council of Europe perspective, human rights, participation and inclusion are brought together in the Council of Europe Disability Action Plan 2006-2015, and Universal Design is one of the means of accomplishing the goals set in the Action Plan.

From an industry perspective the International Organization for Standardization has contributed with Universal Design and Accessible Design guides on the requirements of groups of disabled citizens. The guides assist industry in translating the basic values into products and environments that in fact are more usable for more citizens, regardless of age or disabilities.

The European Commission Public Procurement Directive and rules for future European Union legislation also incorporate Universal Design to reach the long-term goals of full participation and inclusion.

1.2. Accessibility

All universally designed buildings, websites, services, etc. have to be accessible. It is important that accessibility as a feature is built into solutions in a way that promotes integration, and not just solves a technical problem.

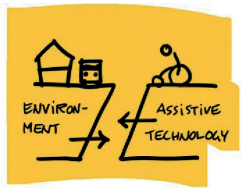
Universal Design can be said to add principles like "the same entrance for all" or "the same opportunity for all" to accessibility, in order to ensure participation and integration in a more equal manner.

For this reason it is necessary to be specific about accessibility requirements of major user groups, in order to give planners and designers an idea about the specific Universal Design targets. It is also necessary to make it clear that Universal Design consultants and representatives of end users have to be involved early in the planning process.

Suggested user groups that should be involved in establishing accessibility guidelines, mainstream policies and solutions are wheelchair users and persons with reduced mobility, with visual or hearing impairments, with intellectual disabilities, or with asthma and allergies. In the majority of cases the requirements of these groups will also cover most other user groups.

1.3. Universal Design and assistive technology

Universal Design makes an environment, a communication device or a service easier to use for everyone and for people with disabilities in particular, but does not make assistive technology obsolete. People with disabilities in need of a certain level of support will continue to require the use of assistive technology, and Universal Design solutions must be able to interact with these technologies.



Compatibility and adaptability to commonly available assistive technology devices become keywords, and in-depth knowledge of user requirements and assistive technology is thus indispensable when shaping society's services and environments. Without this knowledge the results will be costly adaptations, retrofitting or a low degree of usability.

Examples of Universal Design and assistive technology interaction:

- A built environment designed for use by all types and sizes of wheelchairs, walking frames, etc., is an efficient environment for users of this kind of assistive technology, and is at the same time easier to use for parents with prams, travellers with suitcases on wheels, etc.
- In a cinema many people with hearing aids can hear the sound track if the cinema is equipped with a compatible induction loop system.
- A website complying with web accessibility requirements is more useful for blind and dyslexic persons with screen readers reading the page aloud, and screen readers are increasingly becoming a standard feature of common software.
- Powered height-adjustable tables, when properly designed, can be seen as compatible with wheelchairs, as they allow everyone, including wheelchair users, to find a comfortable working position.

1.4. Universal Design as a method

The most widespread method of working with Universal Design on a national basis is through defining accessibility requirements with the underlying principles of "the same entrance for all" or "the same opportunities for all". Traditionally, the

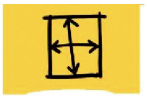
following seven main principles[2] are listed when explaining Universal Design, but it should be noted that they have their roots in the design of built environments and products, and that they have to be expanded further. When it comes to achieving equal rights, accessibility and democracy through Universal Design, the challenge is to incorporate these seven principles into mainstream thinking, planning and methods in all fields of society:

- equitable use: useful and marketable to people with diverse abilities;
- flexibility in use: accommodates a wide range of individual preferences and abilities;

- simple and intuitive use: easy to understand regardless of the user's experience, knowledge, language skills, or current concentration level;

- perceptible information: communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities;

- tolerance for error: minimises hazards and adverse consequences of accidental or unintended actions;
- low physical effort: can be used effectively and comfortably and with a minimum of fatigue;

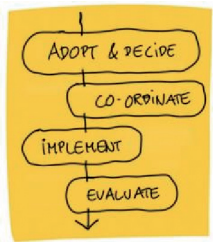


- size and space: appropriate size and space is provided for approach, reach, manipulation and use, regardless of the user's body size, posture or mobility.

Besides the translation of principles, attention should be paid to the stages of the Universal Design process, not least in national or local projects that need to be robust, sustainable

2. University of North Carolina, Center for Universal Design, 1995.

over time and with lower costs. If practical results are desired the focus should be placed on:



- adoption and decision on principles;
- co-ordination between key actors;
- practical implementation;
- evaluation and efficient follow-up.

In this sense Universal Design projects do not differ from other projects or policies.

In product- and service-oriented organisations it is essential to have strategies for supporting planners and designers in the development process, and some of the ingredients are: provision of adequate tools, skills and education of personnel, accompanied by assigning of responsibilities in Universal Design to management levels, ranging from research over development and engineering to marketing.