

Web Accessibility in the European Union

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ABSTRACT

People with disabilities constitute about 15% of the EU's population. Most of them encounter barriers when using products and services on the web. Even if making the benefits of the web available to the widest possible number of people is a social, ethical and political imperative in the EU, there are still many inaccessible web sites.

In this paper, we give a comprehensible explanation of EU policy in the matter of web accessibility. Its aim is to serve as a starting point for further research. We approach the problem by defining the "European" model of web accessibility, explaining its underlying principle – non-discrimination, and discussing the actual EU policy and legislation.

We are going to show that different application of the EU provisions and lack of common standards still constitute a barrier towards acceptable level of web accessibility.

INTRODUCTION

Access to the web is essential for equality of all the persons that participate in information society.

A) WHAT IS WEB ACCESSIBILITY?

General definition. “Web accessibility refers to the practice of making web sites usable by people of all abilities and disabilities. When websites are correctly designed, developed and edited, all users can have equal access to information and functionality.”¹

W3C. Web accessibility means that persons with disabilities can use the Web. More specifically, Web accessibility means that “persons with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web.

“Web accessibility also benefits others, including older persons with changing abilities due to aging. It encompasses all disabilities that affect access to the Web, including visual, auditory, physical, speech, cognitive, and neurological disabilities.”²

EU. In the European Union, web accessibility is an important aspect of a larger concept: eAccessibility. It “offers disabled people the possibility to perceive, understand, navigate, interact with and contribute to the Web. It also benefits other people confronted with visual, dexterity or cognitive limitations, such as elderly people.”³

B) WHY IS WEB ACCESSIBILITY IMPORTANT?

Web accessibility is important because it plays an essential role in today’s digital society. The explosive growth of online services such as eBanking, eCommerce, eGovernment etc. means that the web is important in day-to-day life, as well as in dealing with public services. “Public” means “for the people”, e.g. all of them, including those with disabilities. Web can allow greater accessibility to public and other services. This means that accessible web sites allow persons with disabilities and elderly persons to take active part in information society.

For these groups of persons, web accessibility is a key element for full participation in social and economic life. However, if web sites are not accessible, numerous groups of persons are at risk of being completely excluded from information society.

¹ http://en.wikipedia.org/wiki/Web_accessibility

² <http://www.w3.org/WAI/intro/accessibility.php>

³ **Commission of the European Communities**, *Towards an accessible information society*, Communication from the Commission to the European Parliament, the Council, The European economic and social committee and the Committee of the regions, COM(2008) 804 final, Brussels, December 1, 2008, p. 9

C) WHO IS CONCERNED?

Groups of persons affected by lack of web accessibility are persons with disabilities, elderly persons, persons with dyslexia, those non-fluent in the given language; persons with slow Internet connections, persons using older technologies, mobile devices with small display etc.

The European Commission explains in one of its communications that “The scale of the accessibility challenge is huge and growing: around 15% of Europe's population has a disability and up to one in five working-age Europeans have impairments requiring accessible solutions. Overall, three out of every five people stand to benefit from eAccessibility, as it improves general usability of the web sites”.⁴

Many of these persons face different barriers when trying to use the web. This group of persons will tend to be even larger as the Europe's population ages. Accessible web sites that offer online products and services are of great importance in the European Union as over one third of its population will be over 60 years old by 2030.⁵

Even if web accessibility can help every person by making web sites easier to use, assessing the benefits from it on a European level requires a more precise definition of the core group of concerned persons – persons with disabilities.

D) WHAT DOES “DISABILITY” MEAN?

Disability is an evolving concept. There is no international universal legal definition of disability.

UN. UN Convention on the Rights of Persons with Disabilities states that persons with disabilities are those “who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.”

In the European Union, every Member State has its own definition (or definitions) of disability. These definitions vary in accordance with the criteria for disability, and policy objectives. They change according to developments in science, as well as different legal purposes.

From the EU's point of view, this situation can create difficulties in creating a general, “European” definition of disability. Nevertheless, there is harmonization emerging. Many

⁴ **Commission of the European Communities**, *Towards an accessible information society*, Communication from the Commission to the European Parliament, the Council, The European economic and social committee and the Committee of the regions, COM(2008) 804 final, Brussels, December 1, 2008, p. 4

⁵ **Commission of the European Communities**, *eAccessibility*, Communication from the Commission to the Council, the European Parliament, the European economic and social committee and the Committee of the regions, COM(2005) 425 final, Brussels, September 13, 2005, p. 2

Member States abandon the traditional “medical model” and move to the “social model” of defining disabilities. They approach the issue from a human rights perspective.

Medical model. In the medical or individual model, disability is considered to be a consequence of some kind of impairment: physical, sensorial or mental. According to this model, disability presents itself as a problem of the individual.

Social model. The social model of disability, which current European policy is based upon, regards the problem of disability as a social problem. In this model it is not the impairment itself that causes disability - it is the environment that is disabling.

As opposed to the medical model, in which the solution is often considered charity, this new approach recognises that persons with disabilities have the same rights as those without disabilities. The new approach underlines the equal rights of persons with disabilities to be included in society. It requires social action on the European level, and is based on the collective responsibility of society at large to make the changes necessary for the full inclusion of persons with disabilities.⁶

E) WHY THIS PAPER?

The primary aim of this paper is to explain the link between web accessibility and the European concept of human rights, as well as to give an overview of EU legislation concerning web accessibility. Next, by analysing principal barriers towards full implementation of European web accessibility policy, we will shed light on legal and social issues that European legislator and policy makers will have address in order to achieve acceptable levels of web accessibility in the future.

⁶ For more informations on definitions of disability in EU see:

Degener (T.), *Definition of Disability*, EU network of experts on disability discrimination, August 2004

Online:

<http://ec.europa.eu/social/BlobServlet?docId=4393&langId=en>

Web Accessibility: A High Priority in the EU

Web accessibility is a highly visible policy of the European Union. For more than a decade, the European Union has been trying to sort out this issue on multiple levels, and in different ways. Being aware that information and communication technologies (ICT) are a “powerful driver of growth and employment”⁷, the European Union focuses its action in order to achieve full social participation of all individuals in all aspects of information society.

In this chapter we will analyse the principles that European policy considering web accessibility are based upon (Section A), as well as concrete actions that the European Union undertook in order to enhance web accessibility and respond to priorities and policy goals (Section B).

⁷ **Council of the European Union**, *ICT for an Inclusive Society*, Ministerial Declaration adopted on 11 June 2006 at the conference on eInclusion held in Riga

Online:

ec.europa.eu/information_society/events/ict_riga_2006/doc/declaration_riga.pdf

A. BASIS

Starting Points for EU Policy

The debate on the medical and social model of disability influenced European web accessibility policy. In general, it “has had a large impact on the European disability policy in general because it has led to the paradigm shift from charity-based to rights-based disability policy, and has helped to understand disability as a social construct”.⁸ Current European web accessibility policy is based on human rights, more precisely, on the right to equality.

1. Equality and Non-Discrimination

Equality. Equality is one of the founding principles of the EU. It is integrated in the community law, and means that identical or analogue situations cannot be treated in a different manner.⁹ In the community law, equality is understood as a principle of non-discrimination.

Discrimination. Discrimination is the ability to recognize and understand the differences between two things. In everyday language, discrimination has a negative connotation. Perceived as the arbitrary and unjustified difference of treatment, it is often prohibited.

On the international level, the principle of non-discrimination is considered fundamental in the domain of human rights. On the European level, the Court of the EU confirms it as general principle of community law. The Court defines discrimination as a violation of the obligation to deal with similar situations in a similar way, and to reserve dissimilar treatment to dissimilar situations.¹⁰ In this sense, interdiction of discrimination means application of the principle of equality.

Accessibility. Accessibility is an interpretation of non-discrimination. Accessibility legislation concerning ICT relates to a complex field where specific and new interpretations of accessibility are constantly under development. From the human rights perspective, equality and non-discrimination should be the guiding principles for all policies and legislation.

⁸ **Degener (T.)**, *Definition of Disability*, EU network of experts on disability discrimination, August 2004, p. 5
Online:

<http://ec.europa.eu/social/BlobServlet?docId=4393&langId=en>

⁹ CJEU, 05.03.1980, *Ferweda*

¹⁰ CJEU, 19.10.1977, *SA Huileries de Pont-À-Mousson*

2. Political and Technical Manifestations of Equality

A) eINCLUSION

eInclusion is a broader concept based on the principle of equality. It refers to “the actions to realise an inclusive information society, that is, an information society for all. The aim is to enable every person who so wishes to fully participate in information society, despite individual or social disadvantages.”¹¹ In other words, eInclusion means that every person has an equal right to participate in information society.

Promoted by the Commission, eInclusion is one of the parts of its information society policy. The Commission promotes eInclusion as part of its overall Information Society policy.¹² eInclusion is considered essential for social justice, and, on the other hand, to completely realise the potential of information society for economic growth.

B) eACCESSIBILITY

As part of eInclusion, eAccessibility means “overcoming the technical barriers and difficulties that people with disabilities, including many elderly people, experience when trying to participate on equal terms in information society.”¹³

It concerns ICT products and services by guaranteeing that they can be accessed and used by as wide a range of persons as possible, including those with disabilities.

C) WEB ACCESSIBILITY

Web accessibility, in this sense, is a part of eAccessibility related to the web sites. In the European Union, web accessibility focuses on persons with disabilities. It is closely related to the “Design for All” philosophy.

D) DESIGN FOR ALL

Design for All represents the approach to the design of products and services, which makes those products and services accessible to as broad a range of users as possible. Design for All

¹¹ **Commission of the European Communities**, *European i2010 initiative on e- Inclusion, "To be part of information society"*, Communication from the commission to the European Parliament, the Council, the European economic and social committee and the committee of the regions, COM(2007) 694 final, Brussels, November 8, 2007, p. 2

¹² **Commission of the European Communities**, *Towards an accessible information society - Background note*, December 2008

Online: http://ec.europa.eu/information_society/activities/einclusion/docs/access/comm_2008/background.pdf

¹³ **Commission of the European Communities**, *Towards an accessible information society*, Communication from the Commission to the European Parliament, the Council, The European economic and social committee and the Committee of the regions, COM(2008) 804 final, Brussels, December 1, 2008, p. 4

philosophy is present in EU policies related to web accessibility. It is closely related to the concept of Inclusive Design, and is a way to achieve a more user-friendly society in Europe.

In its Communication on eAccessibility¹⁴, the Commission describes three main strategies for Design for All. Those are: 1) design for most users without modifications, 2) design for easy adaptation to different users (e.g. using adjustable interfaces) and 3) design with a view to connect seamlessly to assistive devices.

This approach has a dual benefit. On the one hand, it ensures that almost everyone can participate in information society, and, on the other hand, cheaper eAccessibility. Highlighted by the European Commission and supported by specialized organisations^{15 16}, it has become a significant question to deal with because of the ageing of the European population and its multiethnic composition.

All these technical approaches and political umbrella terms are closely related to the principle of equality. They only represent its different forms, more adapted to political and technical environment in which they are used. Together with the principle of equality, they serve as a legal basis or philosophical source of influence for the elaboration of European Union's law and policy.

¹⁴ **Commission of the European Communities**, *eAccessibility*, Communication from the Commission to the Council, the European Parliament, the European economic and social committee and the Committee of the regions, COM(2005) 425 final, Brussels, September 13, 2005, p. 7

¹⁵ **EIDD - Design for All Europe** www.designforalleurope.org

¹⁶ **European Design for All e-Accessibility Network (EDeAN)** www.edean.org

B. ACTIONS

European Approach to Web Accessibility

The issues related to web accessibility have already been on the European policy agenda for some time. We have come to conclusion that the European Union has rather elaborated policies with clearly identified goals and deadlines at least on paper. Policy goals are addressed on different levels. In this regard, both legislative (1.) and non-legislative (2.) measures have to be considered.

1. Legislative Approach

In the European Union, at present, there is no specific legislation in relation to web accessibility, despite the fact that the web has developed into a network of vital importance. Nevertheless, there is sectoral legislation that includes some provisions related to accessibility in general. These provisions have limited impact on web accessibility. They represent a more general approach, and do not cover all the significant areas, such as web sites.

Still, the European Union has a good legal, political and technical basis for the elaboration of legal norms that could approach the issue of web accessibility directly. The general legal framework includes, first, the Charter of Fundamental Rights of the European Union, as well as Treaties and directives.

A) CHARTER OF FUNDAMENTAL RIGHTS OF THE EU

The Charter of Fundamental Rights of the European Union represents a central framework for fundamental rights. In relation to equality, it contains provisions about equality before the law (Article 20)¹⁷, non-discrimination (Article 21)¹⁸, cultural, religious and linguistic diversity (Article 22)¹⁹, equality between men and women (Article 23)²⁰, the rights of the

¹⁷ Everyone is equal before the law.

¹⁸ 1. Any discrimination based on any ground such as sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation shall be prohibited.

2. Within the scope of application of the Treaty establishing the European Community and of the Treaty on European Union, and without prejudice to the special provisions of those Treaties, any discrimination on grounds of nationality shall be prohibited.

¹⁹ The Union shall respect cultural, religious and linguistic diversity.

child (Article 24)²¹, the rights of elderly persons (Article 25)²² and integration of persons with disabilities (Article 26)²³.

Provisions relevant to web accessibility in particular are those related to non-discrimination, diversity, the rights of elderly persons as well as integration of persons with disabilities. However, those are all general norms that do not concern web accessibility as a particular issue.

B) ARTICLE 19 (FORMERLY ARTICLE 13 OF THE AMSTERDAM TREATY)

Article 19 of the Treaty on the Functioning of the European Union, introduced into community law by the Treaty of Amsterdam, grants new powers to combat discrimination on the grounds of sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation.

Since its introduction in 1999, it has served as a legal base for elaboration of multiple directives in the area of anti-discrimination. In the future, if the European Union finds it necessary, it will serve as a legal basis for elaboration of directives concerning web accessibility in particular. For the moment, there are several important directives that may be applied in the domain of web accessibility.

C) EU DIRECTIVES

Directives are binding, as to the result to be achieved, for each Member State to whom they are addressed. On the other hand, the national authorities have the choice of form and methods to achieve their objectives.

Even if the Member States are only bound by the objectives laid down in directives, and even if they have some discretion when introducing them into internal legal system, directives become more and more precise and there is less of a margin for interpretation by the Member States.

Furthermore, directives contain a deadline by which the incorporation into the national law must be completed. In the process of introduction of directives into national law, which is

²⁰ Equality between men and women must be ensured in all areas, including employment, work and pay. The principle of equality shall not prevent the maintenance or adoption of measures providing for specific advantages in favour of the under-represented sex.

²¹ 1. Children shall have the right to such protection and care as is necessary for their well-being. They may express their views freely. Such views shall be taken into consideration on matters which concern them in accordance with their age and maturity.

2. In all actions relating to children, whether taken by public authorities or private institutions, the child's best interests must be a primary consideration.

3. Every child shall have the right to maintain on a regular basis a personal relationship and direct contact with both his or her parents, unless that is contrary to his or her interests.

²² The Union recognises and respects the rights of the elderly to lead a life of dignity and independence and to participate in social and cultural life.

²³ The Union recognises and respects the right of persons with disabilities to benefit from measures designed to ensure their independence, social and occupational integration and participation in the life of the community.

called “transposition”, the Member States are free to choose national legal forms that most be adapted to guarantee the effectiveness of community law.

Numerous European Directives relate to information society. They contain legal norms related to inclusion of persons with disabilities and elderly persons. Some of the most important are:

- The Framework Directive on electronic communication²⁴, which requires Member States to encourage equal choice, price and quality, and access to universal service for all users, including disabled users;
- The Universal Service Directive²⁵, addressing various issues of eAccessibility in the field of fixed telephony services, such as specific measures to ensure access for all;
- The Audiovisual Media Services Directive²⁶, stating that national authorities shall promote and help media service providers to ensure that audio-visual media services gradually become accessible to persons with a visual or hearing disability;
- The EU Public Procurement Directive²⁷, which encourages accessibility and Design for All in public procurement;
- Employment Equality Directive²⁸, which requires employers to provide equality of access to employment for persons with disabilities. In particular, the Directive states that “Appropriate measures should be provided, i.e. effective and practical measures to adapt the workplace to the disability, for example adapting premises and equipment...”.

All these directives implement the principle of equality in their respective sectors. Transposed into the legal systems of the Member States, they influence national legislation. Along with European directives, there is a vast network of other non-binding legal acts.

2. Non-legislative approach

An important number of non-legislative measures related to web accessibility have already been implemented with varied success. These measures include various other complementary actions. The most important are related to standardisation at the international and European levels, coordination activities, research and development financing, exchange of best practices and benchmarking.

²⁴ Directive 2002/21/EC

²⁵ Directive 2002/22/EC

²⁶ Directive 2007/65/EC

²⁷ Directive 2004/18/EC

²⁸ Directive 2000/78/EC

A) STANDARDISATION

Common standards are an important tool for the implementation of policy. They make possible the success of the single European market. The existence of standards is an essential element for coordination of web accessibility efforts across Europe.

Standards are important for two reasons. First of all, they constitute a general referent system for unified application of web accessibility principles. Secondly, they serve as a benchmarking tool against which accessibility of web sites can be measured.

The European Union recognises the W3C/WAI Web Content Accessibility Guidelines. These are the basic requirements for web accessibility codified and published by the World Wide Web Consortium that have become a de facto international standard.

The first version (WCAG 1.0), published in 1999, consists of 14 separate guidelines, each of which has an associated set of checkpoints. There are 65 checkpoints organised into three priority levels. The second, revised version (WCAG 2.0) was issued in December 2008. There is a consensus that these guidelines will be the technical specifications to be followed by the EU.

In 2005, the European Commission requested the development of common requirements for ICT in the field of public procurement, by the European Standardisation Organisations. This was formulated in so-called "Mandate 376".

According to Mandate 376, European Standardisations Organisations must create efficient coordination mechanisms, and consult relevant stakeholders. Mandate 376 refers to the work of W3C/WAI. The primary goal of this mandate is to create common standards with functional accessibility requirements for ICT (including the web) "that can be used for public procurement to specify the accessibility requirements in the tender specifications and in official document refer to a formal European standard".²⁹

On the national level, accessibility standards for web sites exist in most Member States. Almost all of them are based on the WCAG 1.0 guidelines. Nevertheless, for the unified application of european guidelines by public as well as private sector, it is very important that they become transposed to national legal systems.

B) COORDINATION AND COOPERATION

An important objective of the EU is to fight fragmentation of web accessibility requirements. Created by uncoordinated approaches by the Member States, this fragmentation is in part caused by the lack of EU legislative provisions on web accessibility. Additional action must be

²⁹ **Commission of the European Communities**, *Ensuring accessibility and non-discrimination of people with disabilities. Toolkit for using EU Structural and Cohesion Funds*, Office for Official Publications of the European Communities, Luxembourg, 2009, p. 31

taken at the EU level. The EU should coordinate its Member States to strengthen existing efforts to fully implement web accessibility.

Today, many Member States have legislative measures to support web accessibility. Several groups that prepare policy papers concerning web accessibility, and eAccessibility in general coordinate those efforts:

- INCOM addresses the state of play of implementing eAccessibility provisions;
- eInclusion subgroup works on specific issues of web accessibility.³⁰

Organisations involved in coordination and cooperation, as well as European Standardisation Organisations depend on the results of the European research projects to better understand the needs of disabled or older persons when using the web, and to be able to better coordinate.

C) FINANCIAL SUPPORT FOR RESEARCH AND DEVELOPMENT

European research projects play an important part in supporting development, improvement and use of accessible technologies. For example, in the area of web accessibility, the most recent activity in this area is WAI-Age, which “aims to better understand the needs of older people when using the web, and adapt accordingly the Web Accessibility Initiative guidelines”.³¹

D) BENCHMARKING

Benchmarking of the accessibility of web sites must provide feedback to decision makers and help them to redefine and improve policies. At the national level, this kind of benchmarking exists in less than half of the Member States, and the “various monitoring efforts pursued so far vary greatly in terms of scope (e.g. number and types of websites sampled) and methods applied”.³²

On the European level, the Commission supports the Web Accessibility Benchmarking (WAB) Cluster of projects³³. The cluster serves as a developing platform for EU-harmonised assessment methodology for web accessibility. It is based on W3C/WAI. Its goal is to

³⁰ **Commission of the European Communities**, *Status and challenges of e-accessibility in Europe*, Commission staff working document, Accompanying document to the *Towards an accessible information society*, (Communication from the Commission to the European Parliament, the Council, The European economic and social committee and the Committee of the regions, COM(2008) 804 final, Brussels, December 1, 2008), SEC(2008) 2916, Brussels, December 1, 2008, p. 9

³¹ **Commission of the European Communities**, *Towards an accessible information society - Background note*, December 2008

Online: ec.europa.eu/information_society/activities/einclusion/docs/access/comm_2008/background.pdf

³² **Commission of the European Communities**, *Status and challenges of e-accessibility in Europe*, Commission staff working document, Accompanying document to the *Towards an accessible information society*, (Communication from the Commission to the European Parliament, the Council, The European economic and social committee and the Committee of the regions, COM(2008) 804 final, Brussels, December 1, 2008), SEC(2008) 2916, Brussels, December 1, 2008, p. 19-21

³³ www.wabcluster.org

facilitate migration from WCAG1.0 to WCAG2.0. This should ensure that mutual compatibility of tools and methods developed for global monitoring or for local evaluation.

Despite all the efforts undertaken on both the EU and the national levels, many barriers towards web accessibility persisted. On the one hand, by removing some of the difficulties disabled persons encounter in everyday life, the web can help create an equal and more inclusive information society. On the other hand, when web sites are not accessible they present new barriers for equality. Not only are the positive effects of the web for equality are lost, but also as web services develop into the most important or only way for participation, entirely new problems appear as well.

Web Accessibility: An Unachieved Ideal

Web accessibility levels in the EU are still very low. Despite efforts by the European Union, persons with disabilities still encounter a great number of problems when trying to use web-based services. Web accessibility is still an unachieved ideal in the EU. On the one hand, the fact is that current legislative and non-legislative measures have not had sufficient impact, and have not achieved at least reasonable levels of web accessibility across the European Union. This situation remains unchanged despite the fact that the benefits of web accessibility should be evident.

In this chapter, in order to determine possible course of action on the EU level (Section B), we will deal with different types of barriers that prevent the EU to raise the level of web accessibility with the benefits pointed out in its policy (Section A).

A. STATE OF PLAY

Insufficient Progress and Disregard for Benefits

When trying to use the web, persons with disabilities encounter a large number of problems, due to lack of accessibility. Numerous vital services become progressively out of the reach of disabled persons even if the web technology can in fact facilitate access to those services. As the web becomes more important and more services become exclusively web-based, lack of accessibility disadvantages disabled persons and excludes them from our society (2.).

On the other side, web accessibility, if applied correctly, can benefit not only persons with disabilities, but other larger groups too (1.).

1. Benefits

A. BENEFITS FOR USERS

The general benefits of web accessibility include better equality for persons with disabilities. Web accessibility is a necessary condition for them to use the web at all. In addition, other users can benefit from increased level of accessibility in the many areas of life influenced by the web.

The importance of web accessibility in modern society is not just limited on ensuring that persons can use the web. It enables them to have equal opportunity to participate in the growing variety of everyday social, economic and cultural activities, in which the web is crucial.

One of the most important benefits of the web is in the flexibility of services that it provides. This signifies reduced time, effort and costs related to interaction with public and other services through other means, such as by phone, face-to-face or by mail.

eGovernment. Accessible web sites are important for the free movement of citizens. In this area, online public services have a positive impact for persons who move across Member States for employment or residency purposes, and for connecting them with their country once they have moved.

On side of the broader social agenda, “web accessibility can greatly increase the reach of eGovernment services to those that might be excluded and provides an important vehicle for the exercise of corporate social responsibility by businesses.”³⁴

eCommerce. Low levels of web accessibility in the European Union represent a barrier for consumers. They cannot efficiently take part in online shopping either within countries or across borders. From the point of view of online businesses, this decreases the market and leads to loss of potential sales.

eHealth. Other benefits can be identified in the area of ICT related to healthcare, also known as eHealth. Investments in accessibility of those services can benefit patients as well as medical specialists, by improving quality of medical care in the EU. Services, such as online medical consultation and monitoring of health conditions at a distance provide greater freedom of movement.

B) BENEFITS FOR COMPANIES

On the side of companies and online business, web accessibility can provide favourable cost-benefit return in many business sectors. More accessible websites offer services to a greater number of users extending the market reach of the company.

From a financial standpoint, the lack of web accessibility is related to productivity losses. When users cannot access online products and services, this limits their consumption. In the European Union, this affects the single internal market by fragmenting it.

On the other hand, correctly implementing a web accessibility policy carries costs for companies. Even if this argument often serves as an excuse for social irresponsibility on the part of companies and sometimes state authorities, it is generally accepted that costs are a lot lower at the first stages of web site design.

On the European level, several independent studies³⁵ conducted for the Commission provide indications about the costs and benefits of web accessibility. Creating products and services and making them accessible for a larger market increases profits for companies. In addition to benefits from reaching a greater numbers of users, there are also benefits from a more technical point of view.

³⁴ **Empirica Gesellschaft für Kommunikations und Technologieforschung mbH, Bonn, Work Research Centre Ltd, Dublin** and others, *Accessibility of ICT products and services to Disabled and Older People. Evidence-based analysis for a possible coordinated European approach to web accessibility*, November 2008

Online:

ec.europa.eu/information_society/activities/einclusion/docs/access/comm_2008/coordinated_approach.doc

³⁵ **Measuring Progress of eAccessibility in Europe** www.eaccessibility-progress.eu

Study, called MeAC was implemented as part of the follow-up to the European Commission’s Communication on eAccessibility of 2005

These consist of improved search engine optimization, as well as lower maintenance costs, reduced server load, and improved interoperability. These benefits can result in substantial economic benefits in terms of increased business reach and direct costs savings through reduced personnel costs, amount of server capacity needed and avoiding the need for multiple versions of a site for different user devices.³⁶

2. Barriers

A recent study³⁷ on accessibility of ICT products and services showed that only 5% of public web sites comply with minimum web accessibility guidelines. In other words, almost all of public web sites remain inaccessible to certain groups of persons.

From the European Union point of view, web accessibility poses challenges in many ways. Regulatory barriers should be dealt with in order to implement effective measures for achieving web accessibility in the public sector and in other sectors of importance to public interest.

Technical barriers exist as well.

A) REGULATORY BARRIERS

Legal fragmentation. Divergent legislative measures lead to legal fragmentation across the EU in regard to legal provisions concerning web accessibility and eAccessibility in general. The most important problem is rapid development of web accessibility field – in other words, its evolving nature.

A predominant factor of insufficient improvement in the field of web accessibility is a large number of different approaches in addition to different degrees of prioritisation of web accessibility across the Member States. Some of them have strong policy goals, but lack the legal means for implementation. Other Member States have only a general policy based on the principle of equality, but have achieved some results concerning web accessibility. Only a few countries have strong legislation supported by extensive follow-up measures.³⁸

³⁶ Empirica Gesellschaft für Kommunikations und Technologieforschung mbH, Bonn, Work Research Centre Ltd, Dublin and others, *Accessibility of ICT products and services to Disabled and Older People. Evidence- based analysis for a possible coordinated European approach to web accessibility*, November 2008
Online:

ec.europa.eu/information_society/activities/einclusion/docs/access/comm_2008/coordinated_approach.doc

³⁷ **Measuring Progress of eAccessibility in Europe** www.eaccessibility-progress.eu Study, called MeAC was implemented as part of the follow- up to the European Commission's Communication on eAccessibility of 2005

³⁸ Empirica Gesellschaft für Kommunikations und Technologieforschung mbH, Bonn, Work Research Centre Ltd, Dublin and others, *Accessibility of ICT products and services to Disabled and Older People. Evidence- based analysis for a possible coordinated European approach to web accessibility*, November 2008

The continuous legal fragmentation across Member States is on the one hand a consequence of non-existence of clear legislative action at European level, and, on the other hand reason for the EU to act. Legal fragmentation affects the internal market, “constitutes barriers to consumers and citizens in this cross-border environment, and hinders industry development.”³⁹

However, it is difficult to imagine any legislative action on the EU level without broader consensus on the part of Member States.

Lack of consensus. A consensus regarding the need of EU legislation dedicated to web accessibility does not exist. Nevertheless, there is a very clear consensus on the need to coordinate efforts in order to improve web accessibility. The main barrier on the path to establishing a consensus regarding binding web accessibility legislation on the EU level is different point of view on the factors such as scope, compliance mechanisms, and more important - standards.

Lack of common standards. Standards are effective as long as there is consensus on the content. In many documents, the European Union has pointed at W3C/WAI accessibility standards as being the norms to follow. The first problem with these standards is that Member States in general prefer not to adopt them directly, as consider that W3C is not an official standards body. From a point of view of a Member State, these are neither standards developed with broad international input, nor do they reflect the specific needs of the Member State.

Some resistance towards common standards is based on the belief that only local guidelines can meet the needs of the local community with disabilities. This is wrong for multiple reasons. First, the web is global, and as such permits access to web resources of any country regardless of the location of the user. Secondly, the needs of persons with disabilities are the same in any part of the world. Third, because the web is global, web accessibility can be easily achieved by adoption of globally applicable standards.

In conclusion, common standards are necessary to achieve accessibility of web sites, but it is not a simple task to specify them. They have limited impact unless there is an effective system for enforcement.

Lack of effective legal frameworks. Almost all Member States have some type of accessibility norms and standards. These may be found in legally binding texts, such as laws, as well as in many other legally non-binding forms such as recommendations. The application of these norms can be compulsory or voluntary.

Online:

ec.europa.eu/information_society/activities/einclusion/docs/access/comm_2008/coordinated_approach.doc

³⁹ **Commission of the European Communities**, *Towards an accessible information society*, Communication from the Commission to the European Parliament, the Council, The European economic and social committee and the Committee of the regions, COM(2008) 804 final, Brussels, December 1, 2008, p. 10

In some areas, such as web accessibility, there is only consensus among Member States to use W3C/WAI standards, but no legally binding norms on the EU level. Consequently, web accessibility legislation is fragmented across the European Union and has limited impact. This increases the risk of exclusion for certain groups of users, as there are no safeguards to their rights.

B) TECHNICAL BARRIERS

Lack of information. The reduced conformance to web accessibility standards is apparently due to the lack of information or misunderstanding of their importance on the part of content designers. Despite considerable efforts in promoting web accessibility undertaken by the European Union, it appears that the application of Design for All and other concepts related to web accessibility are far from reality.

Lack of awareness among web owners of the benefits of accessible web design, and of the close overlaps between accessible design and good design more generally, is one of the problems. This seems to be another key factor underlying the low levels of accessibility currently being achieved. Another problem is that many web sites fail to maintain accessibility once it has been achieved.⁴⁰

Lack of interoperable solutions. An additional important technical problem is related to issue of interoperability. In many cases, even if assistive technology is created for a specific operating system, it becomes impossible to use following the release of new versions of the same system. The situation is even worse as numerous web sites that offer important services such as eBanking, allow access only to users with specific web browsers, which are often proprietary.

This issue becomes more complicated even if there is willingness and technical possibilities to override it, due to proprietary nature of the software included. On the other hand, this reduces possibility of free choice on the part of user and often leads to reinforcement of the dominant position in the internal market.

⁴⁰ Empirica Gesellschaft für Kommunikations und Technologieforschung mbH, Bonn, Work Research Centre Ltd, Dublin and others, *Accessibility of ICT products and services to Disabled and Older People. Evidence- based analysis for a possible coordinated European approach to web accessibility*, November 2008

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ec.europa.eu/information_society/activities/einclusion/docs/access/comm_2008/coordinated_approach.doc

B. FUTURE DEVELOPMENT

In May 2010, the European Commission promised in its Digital Agenda for Europe that it “will also make proposals by 2012 to ensure that websites providing public services are accessible to all citizens, including the elderly and persons with disabilities, by 2015.”⁴¹

Keeping in mind that such promises have been made on previous occasions, and that no real progress have been made, we can conclude that this time the Commission intends to change its approach to web accessibility. On its way towards more inclusive information society, it is going to encounter both legal (1.) and diverse social (2.) challenges.

1. Legal Challenges

In order to deliver all the goals announced in new Digital Agenda, the Commission must intensify its efforts to overcome regulatory barriers. One way to do so is to propose binding legislation dedicated to web accessibility, and eAccessibility in general.

A) BINDING WEB ACCESSIBILITY LEGISLATION

Legal action is needed on the EU level. Numerous barriers related to web accessibility are solvable from a technical point of view. Nevertheless, this approach requires coordination between Member States, as well as between Member States and the EU. Intervention is justified by the need to guarantee equal rights, coherence of internal market and organised action of Member States.

As a great number of Member States has legislation in this field, reasons for an EU-level intervention are based on the fact that this leads to legal fragmentation and insufficient protection of the human rights across the European Union. Furthermore, it is evident that a non-legal approach does not provide sufficient impact.

At present, EU-level anti-discrimination legislation related to accessibility only covers workplace and employment. A broader approach is required. In our opinion, the appropriate approach would be the combination of direct web accessibility legislation and indirect

⁴¹ **Commission of the European Communities**, *A Digital Agenda for Europe*, Communication from the Commission to the European Parliament, the Council, The European economic and social committee and the Committee of the regions, COM(2010) 245 final, Brussels, May 15, 2010

Online:

http://ec.europa.eu/information_society/digital-agenda/documents/digital-agenda-communication-en.pdf

legislation based on the existing the framework that ensures equality and prohibits discrimination.

This approach, based on non-discrimination legislation, would provide users with the possibility to demand legal protection in the case they have been discriminated. On the other side, web owners would be in much more clear situation as they would know what obligations they have towards users.

The difficulty with this approach is that binding web accessibility legislation requires the existence of the relevant standards on the European level. However, these standards are not yet available. One of the reasons is slow progress of the adoption and incorporation of the WCAG 2.0 specifications by the European Standardisation Organisations.

On the other hand, any standards incorporated in specific legislation are easily outdated due to rapid technological development. The best way to counteract this is by a combination of general legislation related to non-discrimination, specific legislation related to accessibility, clear standards, and soft law as a set of non-binding legal documents such as recommendations or best practices. It is important to asses which legal measures are most effective in each context.

B) STRENGTHENING EXISTING LEGISLATION

Reinforcement of the existent ways to improve web accessibility is another important task. One of the most important procedures that can serve in this way is public procurement.

Public procurement. Public procurement has a significant impact in the achievement of web accessibility. It offers the possibility to provide accessible public sector web sites, as well as to give an impulse to the web-related products and services connected to it. In addition, it positively influences the internal market of web-related products and services. Public procurement also has important social implications. In the European Union there is a public debate related to social responsibility in relation to public procurement. The main idea is that equality and non-discrimination must be taken into account, when public authorities are making public procurements.

One of the ways to integrate social considerations into the legal framework related to public procurement is to add accessibility requirements to tenders. Non-compliance by tenderers with those accessibility requirements should lead to their exclusion, so they must comply with them. In addition, “contracting authorities can require the successful tenderer to comply with contractual clauses relating to the manner in which the contract will be executed”.⁴²

⁴² Gubbels (A.) and Kemppainen (E.), *A review of legislation relevant to accessibility in Europe*, eEurope eAccessibility expert group, Final draft, November 15, 2002

Online:

www.inst-informatica.pt/servicos/informacao-e-documentacao/biblioteca-digital/sociedade-da-informacao-1/2005-e-anos-antiores/eacc_rev_leg.pdf

The principal problem with this system is that once when contracting authorities need to define the requirements, they need European standards. If there is no precise specification then it is difficult to enforce.

2. Social Challenges

It is not acceptable that the web, as a technology that should be accessible to everyone, reinforces old and creates new barriers not only for persons with disabilities, but for a various other groups as well. Social challenges in the field of web accessibility are significant. Web owners and designers seem to be unaware of the benefits web accessibility provides.

A) PROMOTE WEB ACCESSIBILITY

Lack of awareness of the positive cost-benefit returns and of the close linkage of accessible web design and good web design more generally is one of the difficulties. However, it is up to actors on the EU as well as on the national, regional and local levels to create awareness.

The EU and its Member States must ensure that EU citizens have access to information regarding requirements, and implementation of web accessibility. This information should always be accessible to persons with disabilities. Today, more than ever there is a strong need for better awareness and visibility of the barriers and benefits of web accessibility.

The European Union must play its part in the promotion of web accessibility by providing clear information and encouraging the use of web accessibility standards. Member States must be an example by purchasing accessible websites in their public procurement, as well.

B) RAISE AWARENESS OF THE ISSUES

On all levels, concrete actions must be undertaken in order to raise awareness of the difficulties that persons with a disability face. This will create a favourable environment to deal with those difficulties. European institutions and organisations, Member States and private sector actors must participate in this. All those involved must work together to combat accessibility issues. This action must include persons with disabilities and their representative organisations.

CONCLUSION

The current situation concerning web accessibility in European Union is unsatisfactory. A small number of accessible web sites leads to inequality and exclusion. Additionally, the integrity of internal market as well as free movement of persons is affected.

On the other side, continuous disregard for all sorts of benefits that web accessibility may provide is problematic. This situation demands strong action on the European level.

Successful European policy related to web accessibility depends on many factors. In order to overcome regulative and technical barriers, it demands coherent action based on effective combination of legal and non-legal measures.

Existing consensus on the need of coordinated action must be concretised into a strong initiative to create binding legal norms that would tackle important issues such as definition of common standards on supranational level. Furthermore, in order to support legislation, existing non-legal actions must be reinforced, and new ones need to be introduced, because the most difficult issues to deal with are social and cultural ones.

The development and implementation of sensible policy in the area of web accessibility is an important task for the European Union. No matter what action needs to be taken, it should always be with the idea that persons with disabilities have the same rights as others, and that those rights need to be effectively protected. Finally, society as a whole is ultimately responsible for ensuring that no person is discriminated against because of prejudices in regard to his or her abilities.

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eInclusion@EU www.einclusion-eu.org/

Project ended in the beginning of 2007. It was set up to support Information Society policy-making in the European Union by initiating a Europe-wide dialogue among those working for an accessible and inclusive Information Society and establishing a knowledge base that will provide a resource on key eInclusion and eAccessibility policies and practice.

Web Accessibility Initiative (WAI) www.w3.org/WAI/

The Web Accessibility Initiative (WAI) works with organizations around the world to develop strategies, guidelines, and resources to help make the Web accessible to people with disabilities.

European Telecommunications Standards Institute (ETSI) www.etsi.org

The European Telecommunications Standards Institute (ETSI) produces globally-applicable standards for Information and Communications Technologies (ICT), including fixed, mobile, radio, converged, broadcast and internet technologies. Recognized by the EU as a European Standards Organization.

European Design for All e-Accessibility Network (EDeAN) www.edean.org

The European Design for All e-Accessibility Network is a network of 160 organisations in EU member states. The goal of the network is to support all citizens' access to information society.

Europe's Information Society Portal ec.europa.eu/information_society

A one-stop-shop for news and information on all EU Information Society policies and activities.

EU e-Inclusion Home ec.europa.eu/information_society/activities/einclusion

European Commission's e-Inclusion web portal.

EIDD - Design for All Europe www.designforalleurope.org

EIDD - Design for All Europe is a European network, founded in Dublin, Ireland in 1993 with the name of European Institute for Design and Disability. The aim of EIDD is to encourage

active interaction and communication between professionals interested in the theory and practise of Design for All.

eGovMon www.egovmon.no

eGovernment Monitor project is developing methodology and software for quality evaluation of web services, in particular eGovernment services, concerning four areas: Accessibility, Transparency, Efficiency, Impact.

Measuring Progress of eAccessibility in Europe www.eaccessibility-progress.eu

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ePractice portal www.epractice.eu

ePractice.eu is a portal created by the European Commission which offers a new service for the professional community of eGovernment, eInclusion and eHealth practitioners. It is an interactive initiative that empowers its users to discuss and influence open government, policy-making and the way in which public administrations operate and deliver services.

John Gill Technology www.johngilltech.com

John Gill Technology specialises in the needs of disabled and elderly people, including assistive technology and inclusive design. Website contains scientific and technological reports related to accessibility.

WAB Cluster www.wabcluster.org

The EU Web Accessibility Benchmarking Cluster, Evaluation and benchmarking of Accessibility. A cluster of European projects to develop a harmonized European methodology for evaluation and benchmarking of websites.

Digital Agenda for Europe ec.europa.eu/information_society/digital-agenda

The Digital Agenda is Europe's strategy for a flourishing digital economy by 2020. It outlines policies and actions to maximise the benefit of the Digital Revolution for all.