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“Towards an accessible information society”

Status and challenges of e-accessibility in Europe

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1. **INTRODUCTION**

This staff working paper provides background information on the 2008 Communication “Towards an Accessible Information Society”. It deals with both e-accessibility in general and web accessibility as a specific priority. This staff working paper is based upon two study reports prepared for the Commission in 2008 on e-accessibility and web accessibility respectively (both with an extensive analysis of legislation in Member States, USA, and some other third countries, and at EU level), the public consultation held from July — September 2008, consultation workshops, the impact assessment of the 2007 e-Inclusion Communication, the ‘MEAC’ study\(^1\), and a range of other documents quoted in the notes.

The paper first presents general information on e-accessibility (and web accessibility), namely who is concerned and which EU-level policy instruments are at our disposal. Section 2 of the paper deals with e-accessibility in general, presenting both non-legislative and legislative activities, and subsequently providing more background information for the action proposed in the Communication to achieve a more coherent and effective approach to improving e-accessibility.

Section 3 then deals in more detail with web accessibility. It presents the current state of play addressing both non-legislative and legislative activities, and then provides more background information on initiatives that are proposed in the Communication to accelerate web accessibility.

1.1. **E-accessibility — who is concerned?**

E-accessibility means overcoming the technical barriers and difficulties that people with disabilities and others like elderly people experience when trying to participate on equal terms in the information society.\(^2\) It potentially concerns any type of information and communication technology (ICT) used by citizens. Full e-accessibility is a huge challenge, as there is a wide range of disabilities and ICTs are constantly and rapidly evolving.

E-accessibility is of great importance for many citizens:

Up to 15% of the population across the European Union has a disability, such as a visual, hearing, speech, cognitive, or motor impairment\(^3\).

The elderly population is also much concerned by e-accessibility as disability correlates strongly with age. In the EU 27 countries about 16% of the population are over 65, a number that is estimated to rise rapidly in the coming years\(^4\).

Many other citizens could also benefit from e-accessibility in adverse or special usage environments such as noisy environments, hands-free and poor lighting environments.

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\(^1\) Study on ‘Accessibility to ICT Products and services by Disabled and Elderly People’ (reports e-accessibility and web accessibility), ‘MeAC’ study (Measuring progress of e-accessibility in Europe), Report from the Public Consultation on web accessibility and other e-accessibility issues. All available at [http://ec.europa.eu/information_society/activities/einclusion/index_en.htm](http://ec.europa.eu/information_society/activities/einclusion/index_en.htm)


\(^3\) Report of the Inclusive Communications (INCOM) subgroup of the Communications Committee (COCOM) COCOM04-08.

\(^4\) Eurostat yearbook 2008.
The core group of disabled persons for whom e-accessibility is relevant comprises some 84 million persons in Europe, of which 50 million in the age range 15-64 and 34 million in the age range 65 and above.  

As there is a wide variety of impairments, needs are very diverse and likewise a great variety of solutions is needed. As shown in Figure 1 there are many barriers to ICT and many ICT-enabled products and services that may pose accessibility challenges to persons with disabilities, as well as many potential solutions.

**1.2. EU policy instruments**

In the early 90’s e-accessibility was addressed through the EU’s Framework programmes for research and technological development. Ten years later e-accessibility became part of the broader research theme of e-inclusion, first through telematics for elderly people and people with disabilities, then through the 6th and 7th Framework programmes. Research on e-accessibility was complemented by work on European standards.

In the second half of the 90’s e-accessibility gradually became an integrated part of European policy on the Information Society. The policy approach had several aims, including to encourage cooperation of stakeholders (people with disabilities and other users, ICT industry and authorities), to provide political guidance and to benchmark progress.

In particular a dedicated chapter on e-Accessibility was available in the eEurope initiative.

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5 Based on Eurostat data.
At the same time, references to e-accessibility started to appear in EU legislation related to the ICT sector, notably in the telecommunication Directives (currently called ‘electronic communications’ Directives), and the radio & telecommunication terminal equipment directive (R&TTE Directive), as explained in section 2. Non-ICT sectoral legislation also incorporated explicit and implicit references to persons with disabilities and to e-accessibility, notably in the field of copyright, public procurement and structural funds regulations. General EU legislation on equal rights explicitly covers disability and implicitly rights of disabled people to use ICT, namely the Employment Equality Directive and most recently the proposal for a Council Directive on “implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation”. Details on this EU legislation are provided in Section 2.1.2.

For e-accessibility policy in general, and web accessibility policy in particular, several instruments exist at EU level. This is further developed in section 2.1.2.
2. **E-ACCESSIBILITY**

2.1. **E-accessibility state of play**

This chapter provides a short overview of the current state of provision of accessible ICTs, followed by an overview of current non-legislative and legislative measures at EU-level regarding e-accessibility. Then a short overview is given of legislative measures in Member States and third countries. Finally, an explanation is provided for the action proposed by the 2008 Communication “Towards an Accessible Information Society”.

2.1.1. **Provision of accessible ICTs — the e-accessibility deficit**

The ‘MeAC’\(^6\) study conducted for the European Commission in 2006-2008 provides an extensive analysis of the e-accessibility situation in the Member States and in some third countries. **One of the main findings is that people with disabilities in Europe continue to face many barriers when using everyday ICT products and services** that are now **essential aspects of social and economic life**.

This lack in e-accessibility can be found across the spectrum of ICT products and services, for example telephony, TV, web and self-service terminals. The following striking examples of the state of play of e-accessibility (as at end 2007 unless otherwise indicated) point to the barriers encountered by people with disabilities:

**Text relay services** (essential for the deaf and speech impaired) are only available in half of the Member States and emergency services are directly accessible by text telephone in only seven Member States.

**Mobile operators** in only seven Member States provide dedicated information for customers with disabilities on their websites.

On average, less than one-third of national language broadcasts of main **public broadcasters** in Europe were provided with **subtitling** (for deaf people) in 2006; there is wide variability (from 95% to none) in the amount of subtitling across individual countries.

On average, less than one-tenth of national language broadcasts of main **commercial broadcasters** in Europe were provided with **subtitling** in 2006; most of this is provided in just a few countries.

Public broadcasters in only five Member States provided any of their programmes with **audio description** (for the visually impaired) in 2006 and, where they did, the levels provided amounted to a very small percentage of their overall programming.

Only a very small proportion of key **government websites** in the Member States meet the accepted minimum international standards on accessibility (12.5% passed automated testing and only 5.3% passed both automatic and manual examination).

The share of key **commercial/sectoral websites** (e.g. railways, TV, newspapers, retail banking) providing this minimum level of accessibility is even lower (only 3.9% passed automated testing while not a single site passed both automatic and manual testing).

Only in six Member States has one of the leading retail banks installed **ATMs** with ‘talking’ output (enabling self-service for customers with visual impairments). Across countries, on average only 8% of all ATMs installed by the main retail banks in the EU of 25 Member States provide this output, with the bulk of this provided in just a few countries.

2.1.2. Non legislative EU action on e-accessibility

2.1.2.1. Research support

Sustained R&D in e-accessibility is important, as ICTs evolve rapidly and as new e-accessibility challenges appear. An example is digital television, whose menus are hard to navigate for people with dexterity or cognitive impairments or persons with reading difficulties (including some of the dyslexic, illiterate or foreign language speakers that in several countries represent a significant portion of the population).

Equally important, new technologies offer new opportunities to address participation barriers for persons with disabilities. A good example is direct brain-computer interaction by which a severely motor-disabled person (e.g. only able to blink an eye) is able to control devices ‘just’ by thinking.

Related to e-accessibility research is the Ambient Assisted Living joint research programme, (AAL) launched in 2008 to stimulate innovative ICT-based solutions for independent living and the prevention and management of chronic conditions of elderly people including their related disabilities.

For several years the approach in EU R&D has been that accessibility is best not “patched onto” existing mainstream technology, but rather designed into mainstream technology from the outset. This universal design or design for all approach is believed to deliver a double benefit: firstly, technology that nearly anyone can use, including disabled persons; and secondly, cheaper e-accessibility. Specific research on assistive technology has also been undertaken. Current R&D work on e-accessibility therefore seeks to embed e-accessibility into modern mainstream ICT (e.g. mobile communications, navigation systems, home systems, personal computers and web) as well as continued work on assistive technology.

The mainstreaming approach to e-accessibility also enables a better alignment between research and e-accessibility policy in general. Notably, research should deliver technical specifications that can provide input for formal or informal standardisation and thus can become reference points for “soft” or “hard” legislation. For example current audio-description legislation in the UK is based on research work undertaken in the 90’s with European funding under the TIDE programme. The alignment of e-accessibility research and other policy measures (deployment support, standardisation, legislative measures) is not always addressed in a systematic way.

2.1.2.2. Deployment / innovation support

The ICT Policy Support Programme, a sub-programme of the Competitiveness and Innovation Programme (CIP ICT PSP) provides support for innovation and deployment in e-accessibility. It can fund deployment pilots that validate technology solutions in real-life settings and business models in line with European policy goals, as well as fund thematic networks for cooperation between stakeholders, exchanging best practice and benchmarking.

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7 www.aal-europe.eu.
8 An overview of e-accessibility EU funded R&D projects and related work in independent living of elderly which include a strong component of e-accessibility is available at: http://ec.europa.eu/information_society/activities/einclusion/research/index_en.htm.
9 A voice-over of television programmes that describes the scenes for better understanding of visually impaired persons.
10 Telematics for the Integration of Disabled and Elderly people.
As regards e-accessibility, the CIP is potentially a very important instrument: since the e-accessibility market is fragmented, deployment validation can deliver the evidence needed for industry and authorities to accept e-accessibility solutions across the board.

The CIP work programmes for 2007 and 2008 finance pilot schemes on e-accessibility and ICT for ageing.

2.1.2.3. Standardisation: Mandate 376

Standards are important to coordinate e-accessibility efforts across Europe. They are needed both in general to ensure a common understanding and application of e-accessibility principles, and more specifically to provide a yardstick against which e-accessibility can be assessed.

In 2005 the Commission issued a mandate\(^\text{12}\) to the European Standardisation Organisations (ESOs) to develop common requirements for ICT in the field of public procurement, including conformance assessment mechanisms. The ESOs have the duty to establish efficient coordination mechanisms and to work in close cooperation with relevant stakeholders.

The main objectives of this mandate are to harmonise the accessibility requirements of public procurement of accessible ICT products and services, to identify a set of functional European requirements and to deliver European standards for e-accessibility. Mandate 376 will provide an electronic toolkit, enabling public procurers to make use of these harmonised requirements.

2.1.2.4. Measurement and benchmarking

An extensive survey of the implementation of e-accessibility provisions in the electronic communications Regulatory Framework was undertaken in 2006 by INCOM, the Inclusive Communication subgroup under the Communications Committee (COCOM).\(^\text{13}\) A significant lack of progress in implementing these e-accessibility provisions was reported, with a clear indication that this was due to their non-mandatory character. This has motivated the Commission to propose a reinforcement of the provisions in the context of the revision of the Directives.

The MeAC study (referred to in the introduction) delivered a major report in 2007 which constitutes a primary reference on the current availability of accessible ICT and the extent and effectiveness of policies across Europe and third countries, including the USA.

The results of the study contributed to the ‘Riga Dashboard’, which measures progress on the targets for 2010 in digital inclusion agreed at the Riga Ministerial Conference on e-Inclusion in 2006. The first edition of this dashboard was published at the end of 2007 together with the Communication on e-Inclusion.\(^\text{14}\)

2.1.2.5. Awareness and promotion

Exchange of best practices is supported through the ePractice portal\(^\text{15}\). In order to enhance the visibility and recognition of good practices, the Commission launched in 2008 an e-Inclusion


\(^{13}\) COCOM is the regulatory committee following the implementation of the electronic communication directives. INCOM 2006 report is available at: http://ec.europa.eu/information_society/activities/einclusion/groups/index_en.htm.


\(^{15}\) http://www.epractice.eu.
Award scheme\textsuperscript{16} in which e-accessibility is one of the 7 categories. The MeAC study created a website providing country reports, benchmarking results and other relevant information.\textsuperscript{17} Industry, non-profit organisations and authorities regularly organise e-accessibility events. The European Commission also organises events on e-inclusion, including e-accessibility aspects, such as the ministerial conference on e-inclusion, in Vienna, from 30 November — 2 December 2008.\textsuperscript{18}

2.1.2.6. Cooperation and coordination

Several groups collate information and draft policy papers in the field of e-accessibility:

– INCOM addresses the state of play of implementing e-accessibility provisions in the electronic communications framework, as previously explained.

– A sub-group under TCAM\textsuperscript{19} focused on real-time text, which is essential for hearing and speech-impaired users to communicate via telephone and reach among others emergency services. No solution could be agreed upon although the discussions did lead to the Commission proposing a pilot scheme under the ICT-PSP work programme on total conversation / accessible emergency services.

– The e-inclusion subgroup of the i2010 high-level group\textsuperscript{20} held in-depth discussions on e-accessibility and specific working sessions on web-accessibility. Participants in this subgroup are representatives from Ministries most concerned with e-inclusion in general.

– The High level Group on disability that supports the Commission in the implementation of the European Disability Action Plan\textsuperscript{21} that covers, amongst other ICT, links with disability policy in general.

– User-industry cooperation, notably on accessible digital television involved amongst others EDF, AGE and EICTA\textsuperscript{22}. An example was the e-Inclusion Partnership\textsuperscript{23}, an informal gathering of user organisations and ICT industry organised by the Commission.

Despite the above mentioned activities, systematic coordination and cooperation at European level that brings together all stakeholders and that addresses e-accessibility in a prospective rather than retrospective way is still lacking.

2.1.3. Legislative approaches

2.1.3.1. EU level

There is no specific EU legislation on e-accessibility. Nevertheless, there is sectoral legislation that, whilst e-accessibility is not the principal aim, does explicitly or implicitly include some e-accessibility-related provisions. However, coverage is limited as some sectors are not (clearly) covered by EU legislation: websites, mobile telephony services, TV equipment, computer hardware and software, consumer electronics, assistive technologies. Relevant sectoral EU legislation includes:


\textsuperscript{17} http://www.eaccessibility-progress.eu/project.

\textsuperscript{18} http://ec.europa.eu/information_society/events/e-inclusion/2008/index_en.htm.

\textsuperscript{19} TCAM is the group created under the terminal equipment Directive (1999/5/EC).

\textsuperscript{20} http://ec.europa.eu/information_society/europe/i2010/high_level_group/index_en.htm.


\textsuperscript{22} European Disability Forum (EDF), the European Older People’s Platform (AGE) and the European digital technology industry Association (EICTA).

Electronic Communications Regulatory Framework

The Framework Directive\textsuperscript{24} on electronic communication requires national regulatory authorities to promote equal choice, price and quality, and access to universal service for all users, including disabled users. The Universal Service Directive\textsuperscript{25} addresses a number of issues relevant to e-accessibility of fixed telephony services, such as specific measures to ensure access and affordability for all, where appropriate; access to operator and directory services; access to emergency calls; availability/access to public payphones and special tariffs.

These provisions are limited in two regards: they only cover fixed telephony services (not mobile telephony or telephone equipment) and they are not compulsory. In practice, Member States have made limited use of these provisions.

In the context of the current revision of the EU Electronic Communications Directives, the Commission has proposed strengthening existing provisions (see section 2.2.4).

Terminal equipment covered by the R&TTE Directive\textsuperscript{26}

Article 3.3.f of the Directive entitles the Commission to propose an EC Decision establishing that some equipment should support certain features to facilitate use by users with a disability. So far, this option has not been used. This Directive is currently being reviewed.

Broadcast TV covered by the Audiovisual Media Services Directive\textsuperscript{27}

Article 3.c of the Audiovisual Media Services Directive states that Member States shall encourage media service providers to ensure that audio-visual media services are gradually made accessible to people with a visual or hearing disability. The Commission follows up on this provision with Member States and encourages its implementation.

Digital content covered by the copyright Directive\textsuperscript{28}

Article 5.3.b. of the copyright Directive allows Member States to make exceptions to copyright rules and protections to facilitate access for disabled people. A recently published Green Paper\textsuperscript{29} shows that, although Member States seem to have implemented the exceptions to some extent, there is considerable variation across countries in the disabilities that are covered and requirements for some form of compensation to those holding the rights to use the works subject to the exception.

\textsuperscript{24} Directive 2002/21/EC.
\textsuperscript{25} Directive 2002/22/EC.
\textsuperscript{26} Directive 1999/5/EC.
\textsuperscript{27} Directive 2007/65/EC.
\textsuperscript{28} Directive 2001/29/EC.
\textsuperscript{29} COM(2008) 466 final.
Goods and services covered by the Public Procurement Directive\(^{30}\)

The EU Public Procurement Directives of 2004 include provisions that encourage accessibility and design-for-all requirements to be included in public procurement. Practice shows that there is very little inclusion of accessibility requirements in public procurements of ICTs in Europe to date.

The Commission issued a mandate to the European Standardisation Organisations (see section 2.1.2.3) to draft standards and a toolkit to help public procurers (and suppliers) in Europe address e-accessibility requirements.

Equality legislation\(^{31}\)

Article 5 of the Employment Equality Directive requires employers to take reasonable measures to ensure equality of access to employment for people with disabilities, unless such measures impose a disproportionate burden on the employer. Accessibility to ICT is indirectly concerned as an adaptation to equipment ensuring access to employment.

In addition, the Commission has recently adopted a proposal for a horizontal Directive on equal treatment among others on access to and supply of goods and services, also covering (even if not mentioned explicitly) ICT goods and services.\(^{32}\) Article 4 of this proposal for a Directive deals with effective and non discriminatory access for persons with disabilities and it is an important aspect of the EU’s work towards implementation of the United Nations Convention on persons with disabilities\(^{33}\).

Other legislation

Other pieces of EU legislation contain provisions on ICT and people with disabilities, such as legislation on value added tax and state aid exemptions.\(^{34}\)

2.1.3.2. Member State and third country legislation

The previously mentioned study carried out in 2008 on accessibility of ICT products and services for disabled and elderly people provides a comprehensive view of the legislative landscape across the Member States, and in some third countries.

Sectors covered by legislation

The pattern of sectoral coverage of e-accessibility legislation across the Member States closely mirrors that at EU level, with by far the most commonly covered sectors being fixed telephony services, TV broadcasting and public websites. All other sectors (e.g. private websites and mobile telephony) have only sparse coverage, with just a few examples of legislation addressing these sectors in some Member States. Looking at third countries, it is noteworthy that both Australia and the United States, and particularly the latter, have a much wider sectoral coverage than most EU Member States.

Almost all Member States have implemented the revised EU public procurement directives, the employment equality directive and the digital copyright directive.

\(^{30}\) Directive 2004/18/EC.

\(^{31}\) Directive 2000/78/EC.


Apart from this, in the absence of any EU legislation to date, a number of Member States have implemented anti-discrimination legislation in the field of goods and services, which address the accessibility of at least some commercial websites.

More generally, almost all Member States have some assistive technology legislation and/or public service provision in place to help people with disabilities acquire assistive technologies.

**Horizontal or non-sector-specific legislation**

Apart from legislation regulating specific ICT sectors, there are also examples of cross-sectoral and/or non-sector-specific approaches in some Member States, covering a number of ICT sectors within a single e-accessibility policy framework or measure. However, such approaches are not widespread amongst Member States. At EU-level, there is no such cross-sectoral measure in place.

There are two different types of cross-cutting legislative approaches in Member States and third countries, namely laws that make specific reference to ICTs in general and/or e-accessibility in particular and laws on broader disability (equality) themes, with an implicit e-accessibility component.

**E-accessibility an explicit focus**

Non-sectoral legislation that explicitly addresses e-accessibility issues can be found in some European countries, sometimes inspired by EU regulation such as the ‘employment equality’ Directive. Several countries have introduced equality or other legislation that explicitly addresses e-accessibility issues in a more cross-cutting manner. According to the different jurisdictions within which such legislation has been enacted, they vary in terms of scope and other legal characteristics. No uniform approach is apparent, and the various approaches each have their strengths and weaknesses. Aspects of various approaches might serve as models of good practice, but no single approach yet appears to provide a comprehensive and effective horizontal approach.

In the USA the ‘Section 508’ of the Rehabilitation Act is a key reference point.

**Implicit coverage of e-accessibility**

Although equality legislation may not necessarily make explicit reference to ICTs, it may nevertheless have an impact on e-accessibility. Examples are legislation encouraging accessibility in general, and legislation providing for active involvement of NGOs in oversight and enforcement mechanisms. In the USA the prime example of such legislation is the Americans with Disabilities Act.

**2.2. Further action towards a coherent and effective approach for e-accessibility**

E-accessibility has become a high priority on the EU policy agenda, with recognition of its importance not only to achieve the social objectives of the Union but also its competitiveness and internal market objectives. However, the impact assessment accompanying the e-inclusion Communication of 2007 concluded that the field of e-accessibility was inadequately addressed across Europe in terms of efficiency and effectiveness, coherence and

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completeness of existing measures and the degree to which existing measures are future-proof. There is no reason to assume that this situation has drastically improved since 2007. Reinforcement of a general approach to e-accessibility would therefore still have to aim for further improvement in these criteria.

The range of policy measures, illustrating the need for coherence and for cooperation and coordination is shown in the diagram below.

![General policy approach to e-accessibility — overview of policy instruments](image)

**Figure 2 General approach to e-accessibility — overview of policy instruments**

A coherent and timely policy approach is proposed by the 2008 Communication “Towards an Accessible Information Society”. Coherence is needed because of the multi-sectoral and multi-dimensional range of issues to be addressed, as traditional boundaries blur, new themes emerge and technologies and markets change over time. A timely response is needed because ICT-based products and services continue to present major barriers to participation for large numbers of Europeans. In addition, the trend in fragmentation in the regulatory requirements being introduced across Member States may soon pose significant threats to the smooth functioning of the internal market.

An overall coherent e-accessibility approach would be desirable to address all such aspects. This is also strongly supported by the public consultation on e-accessibility and web accessibility. The approach consists of a mix of sector-specific measures and general e-accessibility measures. Background to these measures is provided in the remaining sections of this chapter and in chapter 3 on web accessibility.

### 2.2.1. Increasing coherence and timely action by cooperation and coordination

To ensure coherent and effective management and coordination of both web accessibility and e-accessibility issues, existing support for co-operation with and between stakeholders should be stepped up.

- A dedicated ad-hoc high level e-accessibility group is proposed in the Communication. This would provide guidance for a coherent approach to e-accessibility at European level,
and define priority action to improve e-accessibility. Representatives of key actors would collate work on existing priorities so that there is coherence between the necessary components (research and innovation, standardisation, legislation etc). Priority areas of work based on the public consultation and ongoing work are web accessibility, accessible digital TV, total conversation/accessible emergency services. PCs and self-service terminals are other priorities. This e-accessibility group will be reporting to the i2010 High Level Group, and financed through the budget foreseen for this in the CIP ICT PSP programme. Budget only concerns a few meetings per year for about 20 experts.

- This group could receive input from and provide guidance to existing relevant groups, i.e. i2010 e-inclusion subgroup, mandate 376, INCOM, TCAM, and the Disability High level group.

- As the measures proposed are not mandatory, there is a strong appeal for users and industry to take efforts to step up cooperation.

- Moreover, continued monitoring of both web accessibility and general e-accessibility progress and implementation mechanisms is necessary. Studies in 2009 are due to produce e-accessibility implementation reports as well as further details on costs and benefits of e-accessibility.

- Under the 2009 CIP-ICT Policy support programme, a new thematic network on e-accessibility and web accessibility, as proposed by the Communication, will further enhance and support stakeholder cooperation and the collation of experience and good practices.

- There is clearly a lack of awareness of possibilities and user needs. The 2008 public consultation indicated strong support for information measures and exchanging best practice. The ePractice good practice exchange network on e-government, e-health and e-Inclusion, has already amassed much expertise on e-accessibility. Further support for this portal is proposed.

### 2.2.2. Supporting innovation and deployment

The Commission proposes to actively continue supporting e-accessibility and ICT for independent living of elderly and disabled people through the EU research programme with a further call for proposals in 2009.

In addition to the CIP pilot schemes on accessible digital TV, which began started in 2008, and on total conversation/accessible ‘112’ emergency call (expected to start in 2009), the Commission proposes for 2009 that the CIP continues to support e-accessibility and ICT for ageing well (notably as mentioned before, through a network to exchange best practice, cooperate and measure e-accessibility and web accessibility). With the proposed schemes the mainstreaming approach to research and innovation will continue to be the red line of a common European approach.

The Structural Funds’ Regulation[^38] requires that "accessibility for disabled persons shall be one of the criteria to be observed in defining operations co-financed by the Funds and to be taken into account during the various stages of implementation" (Article 16).

2.2.3. Facilitating standardisation activities

More than 90% of respondents to the public consultation considered standardisation and technical specifications a high or relevant priority for future EU action on e-accessibility. Internationally, in particular, standards cooperation can be further pursued, notably with the US, in the context of the review of ‘Section 508’ of the US Rehabilitation Act (dealing with ICT) and the EU’s work on Mandate 376.

2.2.4. Legislation

The ‘MEAC’ study shows a clear correlation at national level between the existence of legislation and the current level of progress on e-accessibility. Studies also point to the risks of legal fragmentation in the EU due to different legislative measures. Based on this, and building on the 2005 Communication on e-accessibility and the 2007 Communication on e-Inclusion, the Commission has explored a more general legislative approach to e-accessibility. However, given the vast, complex and evolving nature of e-accessibility, there is not yet a clear consensus on EU legislation specifically targeting e-accessibility. In the public consultation, 90% of user organisations considered binding legislation a high priority, versus only 33% of industry and public authorities.

There are also many open questions on the aspects of EU legislation on e-accessibility such as its scope, standards, compliance mechanisms, links to existing legislation, mix of bottom-up and top-down approach, mix of sectoral and general legislative action. A particularly relevant development is the recent proposal for a directive on equal treatment. Furthermore, although there is a clear consensus on the need to act jointly to improve e-accessibility, there are different views on the next priorities to tackle.

The 2008 Communication “Towards an Accessible Information Society” emphasises the various options under current EU legislation that remain under-used. In addition it stresses the need to explore the options for improving e-accessibility through several pieces of EU legislation that are, or will be soon, under review, or have recently been proposed, notably:

- Directive 1999/5/EC on terminal equipment is under review: here the issue is whether to activate Article 3.3.f for adopting specific accessibility provisions.
- The Commission recently tabled a proposal for a directive on equal treatment, which refers to access to and supply of goods and services which are available to the public and whose Article 4 guarantees compliance of the principle of equal treatment in relation to persons with disabilities. The final adoption of this Directive will contribute to the implementation of some provisions of the United Nation Convention on the rights of persons with disabilities.
- Legislative proposals for electronic communications include provisions on disabled users in relation to: setting binding national commitments, emergency services, conditions to authorise service provision and representation of user interests in bodies responsible for implementation of legislation. These proposals are now in the process of adoption by the Council and European Parliament.

39 See the MeAC study and the study on accessibility to ICT products and services by disabled and elderly people.
40 Top down legislation imposes positive e-accessibility obligations, while bottom up legislation give rights of redress/complaints on accessibility grounds.
3. **WEB ACCESSIBILITY**

3.1.1. **Relevance and state of play**

a) Relevance of web accessibility

Web accessibility gives people with disabilities the opportunity to perceive, understand, navigate, interact and contribute to the Web. The lack of web accessibility affects many people: people with disabilities; elderly people; people with dyslexia, low literacy or not fluent in the language; people with low-bandwidth connections, older technologies or devices with limited display or interaction capabilities and new web users. When web accessibility is implemented it also benefits people whose abilities change as they age. These persons can only make use of websites if they are properly designed and if they meet their specific needs (see Figure 3).

Web accessibility has become particularly important because of the explosive growth in online information and interactive services provided on the web, from online banking and shopping, dealing with government and public services to communicating with distant relatives. If web accessibility is not achieved, many people are at risk of being partially or totally excluded from the information society.

<table>
<thead>
<tr>
<th>Visual impairments</th>
<th>Barriers</th>
<th>Solutions</th>
<th>Hearing impairments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use flexible layouts that can be adapted by users to viewing needs (e.g. size, formatting, colour and background colour of text)</td>
<td>Cannot hear sound at all or at usual volume</td>
<td>Provide volume control when using sounds, background music, videos with sound etc.</td>
<td>Provide sign-language alternatives of all textual content for users that only speak sign-language, e.g. signing videos or animations</td>
</tr>
<tr>
<td>Provide textual descriptions of images, graphs and animations (so-called “alt” text) that can be read by screen reader software</td>
<td>Cannot see visual content (images / multimedia)</td>
<td>Provide textual descriptions of images, graphs and animations (so-called “alt” text) that can be read by screen reader software</td>
<td>Provide text alternatives of all relevant audio, e.g. sub-titles / captioning for videos</td>
</tr>
<tr>
<td>Provide audio description of the visual part of multimedia content such as videos</td>
<td>Difficult to understand large amounts of unstructured text</td>
<td>Use images, icons or graphs in a sensible manner to illustrate textual content</td>
<td>Avoid user alerts that are only based on sound and provide a visual alternative</td>
</tr>
<tr>
<td>Provide content in a way that it can be read by screen reader software, e.g. by using valid HTML code</td>
<td>Confused by animations, sounds etc.</td>
<td>Use flexible layouts that can be adapted by users to viewing needs</td>
<td>Provide elements (like buttons, menu items, form fields) of sufficient size and with sufficient margin to adjacent elements</td>
</tr>
<tr>
<td>Cognitive impairments</td>
<td>Confused by uninituitive / badly structured menus</td>
<td>Confused by complicated language, jargon</td>
<td>Alternatively, use flexible layouts that allow users to control the size and formatting of those elements</td>
</tr>
<tr>
<td>Structure large amounts of texts, e.g. by using headings and sub-headings or by breaking down into several pages</td>
<td>Viewing needs require adaptation of layout (small display)</td>
<td>Provide elements (like buttons, menu items, form fields) of sufficient size and with sufficient margin to adjacent elements</td>
<td>Provide full support for keyboard-only users, e.g. by defining keyboard shortcuts</td>
</tr>
<tr>
<td>Use images, icons or graphs in a sensible manner to illustrate textual content</td>
<td>Long loading times due to large amounts of data</td>
<td>Avoid response mechanisms (like pressing a button) that impose time limits or ensure that time limits are not too restricted</td>
<td>Avoid response mechanisms (like pressing a button) that impose time limits or ensure that time limits are not too restricted</td>
</tr>
<tr>
<td>Avoid confusing, fast moving, flashing animations and unexpected, loud, out-of-context sounds</td>
<td>Difficult to understand large amounts of unstructured text</td>
<td>Make reasonable efforts to ensure that a website remains usable when the transmission of images and multimedia content has been turned off by the user in order to save bandwidth</td>
<td>Avoid user alerts that are only based on sound and provide a visual alternative</td>
</tr>
<tr>
<td>Low literacy</td>
<td>Dexterity impairments</td>
<td>Provide volume control when using sounds, background music, videos with sound etc.</td>
<td>Provide volume control when using sounds, background music, videos with sound etc.</td>
</tr>
<tr>
<td>Provide easy, clearly structured menus, using labels that are familiar to users</td>
<td>Provide simple alternatives of all textual content for users that cannot read textual content at all or at usual volume</td>
<td>Provide text alternatives of all relevant audio, e.g. sub-titles / captioning for videos</td>
<td>Provide text alternatives of all relevant audio, e.g. sub-titles / captioning for videos</td>
</tr>
<tr>
<td>Avoid unnecessarily complicated language and jargon, provide alternative easier descriptions and explanations of jargon or abbreviations</td>
<td></td>
<td>Low literacy</td>
<td>Provide easy, clearly structured menus, using labels that are familiar to users</td>
</tr>
</tbody>
</table>

**Figure 3: Some web-related e-accessibility challenges and solutions**
b) EU policy measures

The importance of web accessibility has been recognised for many years by the European Institutions and Member States:

– In 2001 the Commission adopted a Communication on web accessibility, encouraging Member States to endorse the Web Accessibility Initiative Guidelines41.
– In two Resolutions adopted in 2002 and 200342, the Council stressed the need to increase efforts to speed accessibility to the web and its content.
– The European Parliament suggested in 2002 that all public websites be fully accessible to disabled persons by 2003, the European Year of Disabled Persons43.
– In 2005, the Commission Communication on e-accessibility44 again drew attention to the importance of EU-level policies in this field and the Ministerial Declaration on eInclusion at Riga in 2006 set as one of its priorities the promotion of inclusive eGovernment by ensuring accessibility of all public websites by 2010. However despite increasing awareness of authorities and other schemes, progress on web accessibility remains unsatisfactory. It was already clear at the end of 2007 that this objective would not be met, as only around 5% of public websites and only 3% of commercial websites across the EU were sufficiently accessible.
– The Communication on e-Inclusion in 200745 called upon Member States to agree by mid 2008 on a roadmap for accessibility of public websites.

c) Websites accessibility in Member States

When the MeAC study tested a sample of key public and sectoral/commercial websites in each Member State, only a very small percentage were found to meet accepted international accessibility standards.

– 12.5% and 5.3% of government websites were accessible for automated and manual testing respectively46.
– For sectoral/commercial websites, just 3.9% passed the automated test and none passed the manual test.
– These results mean that only a small proportion of key public websites (national governments, national parliament, and key ministries such as social, employment, health and education) meet the accessibility standards and the situation is even worse for key sectoral/commercial websites (e.g. railways, TC, newspapers, retail banking). In a few countries, the majority of the public websites tested met the standards, but in many none of them did.

Across the Member States the most common instruments used to promote and improve web accessibility are detailed technical guidance, support training schemes, monitoring and

42 2002/C 8602 and 2003/C 39/03.
44 COM2005(425).
46 The automated test uses a software tool Test Accesibilidad Web (TAW) of the Spanish Fondacion CTIC (http://www.tawdis.net/taw3/cms/en). Sites that passed Level A from this automated test were then subjected to a human (manual) assessment by web-accessibility experts.
assessment of websites, various awareness campaigns, coordination with relevant stakeholders and research activities both at national and European level.

The public consultation showed that the majority of the respondents indicated that the above mentioned actions would contribute to a high level of availability of accessible web sites. (83.4% generally agreed, whilst 38.5% strongly agreed and only 4.9% disagreed). About one in ten respondents (11.8%) had no opinion. Also, a clear majority of respondents perceived the need to encourage intranet websites to be accessible. In addition, 94.3% of respondents agreed with the statement that Member States should seek alignment with international standards.

3.2. Web accessibility activities

3.2.1. Non legislative activities supporting web accessibility

a) Research support

An example of EU R&D input to technology developments is the link between the W3C Web Accessibility and Ageing Task Forces 47, supported for data collection and dissemination by the WAIAge project 48 funded under the 6th Framework Programme. This action aims at better understanding the needs of the ageing community in the context of existing web accessibility guidelines. To this end, it provides a contribution from the ageing community into the work of the W3C in revising and complementing educational materials to better reflect the needs of the elderly and to pursue standards coordination in order to promote adoption and implementation of a common set of guidelines.

A cluster of research projects funded under the 6th Framework Programme also investigated the harmonisation of web accessibility measurement, resulting in an assessment methodology (UWEM) 49, a CEN Workshop Agreement on Specifications for a Web Accessibility Conformity Assessment Scheme and a Web Accessibility Quality Mark 50.

b) Deployment / innovation support

In relation to deployment and innovation support, support can also come from the CIP programme. However, in the first two years of this programme (2007-2008), web accessibility was not singled out for funding.

c) Web accessibility standardisation

As regards web content, the current de facto standard is version 1 of the Web Content Accessibility Guidelines (WCAG 1.0) from W3C, although this is not a European standard. W3C has been working on version 2 of the guidelines (WCAG 2.0) for several years and is about to officially adopt it. These guidelines are the result of a long process involving many

48 www.w3.org/WAI/WAI-AGE.
49 Uniform Web-accessibility Evaluation Methodology (http://www.wabelcluster.org/uwem), to be used both when reviewing a web site, attributing quality marks or implementing an automatic surveillance observatory. Specifications for statistical indicators: http://www.eiao.net/publications/Indicator_refinement_FINAL_v1.31.pdf.
specialised bodies and, when adopted, it will become the international reference for web accessibility.

W3C has developed three sets of guidelines to ensure web accessibility: Web content accessibility guidelines (WCAG), authoring tools accessibility guidelines (ATAG), and User agents’ accessibility guidelines (UAAG)\(^\text{51}\), addressing website owners, providers of authoring tools and providers of user agents (web browsers and related assistive technologies) respectively.

At European level, work continues on the Mandate 376, which closely follows the work of W3C/WAI.

Strong support was given for the coordination of web accessibility efforts across Europe in the public consultation.

Many Member States have developed national standards or regulations based on these W3C WAI guidelines.

**d) Measurement and coordination**

Both at national and European levels substantial measurement and benchmarking are being carried out. One of the most recent is the MeAC study, which reported at the end of 2007 the finding of a severe lack of web accessibility, as mentioned above.\(^\text{52}\)

**e) Awareness and promotion**

In the specific field of web accessibility, the Commission supports the Web Accessibility Benchmarking (WAB) Cluster of projects.\(^\text{53}\) The cluster is developing an EU-harmonised assessment methodology for Web accessibility, based on W3C/WAI and to be synchronised with the planned migration from WCAG1.0 to WCAG2.0. This should ensure that evaluation tools and methods developed for global monitoring or for local evaluation are mutually compatible and coherent (and with WAI).

Awareness and promotion campaigns are carried out in many countries. At European level, awareness and promotion campaigns were launched at Ministerial conferences and related exhibitions (Riga 2006, Lisbon 2007 and Vienna 2008), and the 2008 e-Inclusion Award in which e-accessibility, including web accessibility, is one of 7 best practice award categories. Best practices in web accessibility are promoted through the ePractice portal.

However, there remains a lack of awareness and promotion of web accessibility issues. Results from the public consultation confirm this: a large majority of respondents (over 90%) are in favour of more schemes to train relevant bodies, exchange best practice and provide information and guidance to people with disabilities.

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\(^{51}\) [www.w3c.org/WAI](http://www.w3c.org/WAI).

\(^{52}\) Another study was done in 2007 by Cap Gemini as part of the e-Government benchmark into availability of online public services. In that case the presence of a web accessibility compliance mark was measured. National level measurement activities are extensively reported in the web accessibility study report.

3.2.2. Legislative approaches

a) At European level

There are no specific web accessibility legislative measures at European level. However, some of the legislation on e-accessibility mentioned in section 2.1.3 also applies to web accessibility.

b) At Member States and third country level

In Member States, accessibility of public websites has received policy attention in recent years. However, there is considerable variation in terms of the type and nature of policy approaches implemented. The study report on web accessibility mentioned in the introduction gives a detailed overview of the situation and identifies key differences between Member States, e.g. in terms of:

**Type of approach:**
Six Member States have direct legislation on web accessibility (AT, DE, CZ, ES, FI, IT, SK), while others have indirect legislation (e.g. equal rights legislation) on web accessibility (F, IE, MT, UK). Other Member States have addressed web accessibility through non-legislative approaches of various types.

**Websites covered:**
The majority of Member States focus only on public websites in their direct measures on web accessibility. The available evidence indicates that the scope of coverage of public websites varies; some Member States include all levels of government and public entities, whereas others only directly cover central government. One country (DE) explicitly covers the intranets of public bodies. In the few cases where commercial websites are directly covered (DE, IT, PT), this tends to be done through ‘encouragement’ measures.

**Timeframe for web accessibility:**
About half of the Member States have implemented a specific timeframe within which web accessibility is be achieved, with time horizons ranging from 2005 to 2010. In some countries (NL, SK, UK) new websites are given an immediate deadline whereas existing websites are given some time to adapt.

**Accessibility requirements:**
W3C’s Web Content Accessibility Guidelines (WCAG 1.0) represent a major reference point in almost all Member States that have put in place some type of measure. A few countries have developed variants, based on national norms and/or the US section 508 standards (CZ, IT, NL, SE). Most countries refer to WCAG 1.0 single A and/or double A requirements; triple A requirements are referenced to a lesser extent. The forthcoming WCAG 2.0 guidelines seem to have been formally addressed by only one Member State (DE).

**Support for web owners:**
The evidence available suggest that the countries (AT, DE, DK, UK) that have adopted dedicated measures to support web owners in implementing accessibility-related policies focus on three key aspects: awareness rising, networking of relevant actors and organisational capacity building.
Enforcement:

Enforcement is not very visible in the majority of countries. Where it is the case, it tends to be based on persuasion (e.g. through award schemes, “naming and shaming”). Penalties for non-compliance are only apparent in a few countries (ES, FR, IT, SK).

Conformity assessment:

In the majority of countries conformity assessment schemes have not been put in place; only in three Member States have these schemes so far been set up as part of a dedicated government policy (AT, NL, IT). In some countries voluntary web accessibility labelling schemes have emerged, operated by NGOs or commercial parties.

Monitoring:

Benchmarking of accessibility of web sites has been identified in less than half of the Member States; where it happens, annual benchmarking has remained an exception. The various monitoring efforts pursued so far vary greatly in terms of scope (e.g. number and types of websites sampled) and methods applied (e.g. accessibility criteria applied, self-evaluation vs. external evaluation); it is thus difficult to compare outcomes across countries.

As regards third countries, it is important to mention the USA: Section 508 of the Rehabilitation Act specifically provides that federal agency websites must be accessible to federal employees and the general public. Federal contractors also are bound by this mandate. The obvious strength of Section 508 is its clear applicability to federal websites as provided by statute. Its weakness lies in the reliance on individuals with disabilities to bring about enforcement by filing complaints.

3.3. Further web accessibility actions

3.3.1. Rationale for further action on web accessibility

There is clear consensus on the importance of accessing the internet, the modest achievements to date as regards web accessibility, and the need for further action to improve the situation.

Since there are no EU legislative provisions on web accessibility, the main responsibility for improving web accessibility remains with the Member States and individual service providers. Nevertheless, as explained in the Communication “Towards an Accessible Information Society” further action can also be taken at EU level. The overall goal would be, by better coordinating Member States’ action, to reinforce, accelerate and extend existing efforts to remove accessibility barriers that prevent citizens, government and business in Europe from realising the full potential of the web.

The key objective would then be to accelerate web accessibility (in order to fulfil the Riga target of accessibility of 100% of public websites by 2010). A second objective would be to overcome fragmentation in web accessibility specifications caused by uncoordinated approaches in Member States over the years. In this respect the timing is right given the move to new web specifications. Specifically, two important future developments in web accessibility are the official adoption by W3C of WCAG 2.0, expected in the near future and the establishment of a European standard on web accessibility as an outcome of Mandate 376.

Preparing the ground for these — in a way that avoids the fragmentation of the past — would mean jointly anticipating compliance and preparing migration towards the modern technical requirements for accessible websites by Member States, website owners, authoring tools providers and providers of user agents. Currently the best reference point for these technical
requirements — in absence of a European standard — is WCAG 2.0 as the guidelines are not yet approved.\textsuperscript{54}

While binding web-accessibility legislation might be expected to have a stronger and more consistent impact across the Member States, for practical purposes such legislation would require the availability of the relevant standard. For this reason the schemes in the Communication, for which additional background is presented below, focus on the preparation for a swift implementation of the new standard.

3.3.2. Estimated benefits and costs of implementing web accessibility

There is no definitive picture available of the costs of web accessibility for websites owners. Part of the reason for this is that costs vary according to many different factors. However, it is generally accepted that costs are typically much lower at the design stage than the costs of retrofitting accessibility for existing websites. Costs are likely to increase with increasing size and complexity of websites, particularly for retrofitting existing websites. The evidence suggests that costs are often overestimated and they have tended not to be considered excessive by the courts when action is taken by disabled people on grounds of inaccessibility\textsuperscript{55}.

Despite the likely variability in costs according to the circumstances, the available evidence to date suggests that costs of accessibility would not represent an undue burden for web owners in most cases.

Alongside costs, benefits should also be taken into account. The study on ‘the accessibility to ICT products and services for disabled and elderly people’ (mentioned in the introduction) provides a detailed model of the cost-benefits of investment in web accessibility linked to transaction cost savings from citizens using eGovernment services. Based on the available evidence, the model takes a range of estimates for the additional costs associated with making public websites accessible in the Member States and examines how the cost-benefit implications vary with increasing ‘reach’ to the disabled and older people, who would otherwise be excluded through lack of accessibility.

The model makes a number of assumptions:

(1) The costs of annual spending on online public web sites are extrapolated from UK data from 2004 to 2007 and from the EU-25, correcting for the actual online public services availability of each country. The empirical data available on the additional costs for making a website accessible are limited. Therefore the model allows these costs to be taken as a variable (see the column headings in the table below, with additional costs varying from 2\% to 30\%).

(2) The additional costs are the same for all government websites (which is in fact very unlikely as it is estimated that at least 40\% of current government websites may be quite close to being accessible and relatively easily made accessible so that even 20\% would be a reasonable upper limit to costs at this point in time).

\textsuperscript{54} WCAG 2.0 was published as a W3C Proposed Recommendation on 3 November 2008.

\textsuperscript{55} For example, in Australia in the context of a judgment in favour of a complaint against the inaccessibility of the Sydney Olympics website the courts brought in expert witnesses and a commission determined that it would cost relatively little (and a lot less than was originally estimated) to make the site accessible. The site’s creator estimated for instance that fixes would cost around US\$2.2 million. Experts’ cost estimates were $29,450.00. C. f: Olympic Failure: Tom Worthington: A Case for Making the Web Accessible.
(3) There is the same level of recurring costs per annum. This also is a conservative assumption as in many cases the costs of maintaining accessibility should be a lot lower than the initial (retrofit) costs, especially if good design principles are adopted at an early stage.

(4) Government cost savings per transaction of €18.22, which is a conservative estimate (based on data from the UK).

(5) On average an online citizen will use online government services (of any type) twice a year.

(6) Consumer benefits are calculated taking average time savings of 69 minutes by using online instead of ‘traditional’ services (data from EU-15, Norway, Iceland). Time savings are valued on the basis of actual consumer wages in each country. Consumer costs of PC and Internet connection are not taken into account (as these are likely not specifically incurred for consumers carrying out transactions with government).

The analysis shows that the overall cost-benefit return becomes increasingly positive as cost estimates for accessibility go down and additional reach percentages go up. Most cost/reach scenarios are positive for governments and only the highest cost and lowest reach ones are negative.

<table>
<thead>
<tr>
<th>Reach amongst target group</th>
<th>Economic costs-benefit categories</th>
<th>Additional costs to achieve website accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>government costs for e-accessibility</td>
<td>2%</td>
</tr>
<tr>
<td>5%</td>
<td>government transaction cost savings</td>
<td>-24,256,800</td>
</tr>
<tr>
<td></td>
<td>net government costs/benefits</td>
<td>158,223,882</td>
</tr>
<tr>
<td></td>
<td>consumer benefits</td>
<td>133,967,082</td>
</tr>
<tr>
<td></td>
<td>total cost/benefit</td>
<td>287,079,790</td>
</tr>
<tr>
<td>10%</td>
<td>government costs for e-accessibility</td>
<td>-24,256,800</td>
</tr>
<tr>
<td></td>
<td>government transaction cost savings</td>
<td>316,447,764</td>
</tr>
<tr>
<td></td>
<td>net government costs/benefits</td>
<td>292,190,964</td>
</tr>
<tr>
<td></td>
<td>total cost/benefit</td>
<td>598,416,379</td>
</tr>
<tr>
<td>20%</td>
<td>government costs for e-accessibility</td>
<td>-24,256,800</td>
</tr>
<tr>
<td></td>
<td>government transaction cost savings</td>
<td>632,895,528</td>
</tr>
<tr>
<td></td>
<td>net government costs/benefits</td>
<td>608,683,729</td>
</tr>
<tr>
<td></td>
<td>consumer benefits</td>
<td>612,450,829</td>
</tr>
<tr>
<td></td>
<td>total cost/benefit</td>
<td>1,221,089,558</td>
</tr>
</tbody>
</table>

Table 1 Cost-benefit modelling for accessible eGovernment: net cost-benefit p.a. (in €, EU 25)

The overall cost-benefit (for governments and users) is only negative in the least favourable cost-reach scenario (30% additional costs for achieving web accessibility and 5% increase in reach). In the most favourable scenario (2% additional costs for web accessibility and a 20% increase in reach) the model suggests total estimated benefit of more than €1.2 billion.

In addition to the benefits of reaching core groups (people with disabilities and older people with functional limitations) there are also the benefits of reaching and/or providing better usage experiences for other groups, such as those using low bandwidth connections, using mobile phones or other small display devices and the like. Other tangible benefits can also be
achieved because accessible design requires attention to good design principles\textsuperscript{56}. These include increased search engine optimisation, enhanced usability for all users and technical benefits such as lower site maintenance costs, reduced server load, improved interoperability and preparation for advanced technologies. These benefits can result in substantial economic benefits in terms of increased business reach and direct cost savings through reduced personnel costs, amount of server capacity needed and avoiding the need for multiple versions of a site for different user devices\textsuperscript{57}.

### 3.3.3. Accelerating in a common way the realisation of modern web accessibility

A common approach for web accessibility at European level is supported by 96\% of respondents to the public consultation. Success of a common European approach relies mainly on Member States, individual service providers and the Commission. A common approach should address accelerated and coherent (joint) preparation for the new international guidelines WCAG 2.0 and the outcome of Mandate 376 as well as awareness and promotion.

There is broad consensus that WCAG 2.0 guidelines are the technical specifications to be met for web accessibility. Once W3C reaches agreement on the guidelines, European Standardisation can be completed within the framework of Mandate 376.

To prepare for a swift incorporation of the new specifications into national rules and actively promote their implementation, Member States should take the following steps:

- Update the rules to take account of the new specifications (or adopt rules where accessibility requirements do not yet exist).
- Ensure the requirements are made public and visible (e.g. through a single contact point, see below).
- Translate the specifications and accompanying documentation to ensure a proper understanding and implementation at national level.
- Follow the same timeline for updating and publication, so that Member States are in a position to compare their choices for aspects of the WCAG 2.0 specification and Mandate 376 results and seek alignment in order to avoid fragmentation and reduce efforts (economies of scale).

To improve implementation of web accessibility, it is suggested that Member States set up a list of the websites from their national authorities that should be accessible by 2010. As soon as this list is available, the websites concerned can begin preparations. By comparing the lists fragmentation can be addressed. Together with this list Member States would be expected to set targets (such as the level of accessibility to reach) and milestones (i.e. deadlines). Again, this is also information that should be made public. By making their intranets accessible Member States also are in a better position to comply with the Employment Equality Directive, which requires employers to take reasonable measures to ensure employment of persons with disability in the cases where accessible intranets would be part of the accommodation required.

To better leverage awareness and information, Member States can play an active role by supporting training schemes which are essential for bodies such as websites designers, ICT


tools providers, web content providers, etc. In such training schemes direct involvement of persons with disabilities is desirable to understand their needs and expectations.

Member States can also encourage non public websites providing services of general interest to be made accessible. 93% of respondents to the public consultation agree that the common European approach should not merely address public websites but also other websites providing services of general interest. The aim here is to ensure that people with disabilities are not excluded from essential services (see the detailed explanation of services of general interest in the related Communication\textsuperscript{58}).

In terms of supporting the exchange of practices, a role can be played by the ePractice portal as the one stop shop to exchange advice, experiences and events on practices of e-Government, e-Health and e-Inclusion. ePractice offers the most complete information and exchange opportunities for these areas in Europe. Real life cases, insight and lessons learnt are shared. It represents a real bridge between these communities, as there is a wealth of interesting lessons to be learnt.

An important task is to improve the awareness and understanding of web accessibility. Problems of accessibility often stem from a lack of proper information. Member States can make sure that persons with disabilities receive sufficient and clear information on web accessibility. This should also include information on how to use assistive technology in relation to websites.

For better visibility and support, an accessibility statement on a website can provide useful information such as the accessibility policy of the website, compliance with relevant specifications and support for persons with disabilities. It can be presented in the way “privacy statements” or other “legal information” is available in many websites today. It can of course be linked to a certification and labelling scheme if that exists. The general level of agreement in the public consultation in favour of such a statement was 89%.

Reporting on web accessibility implementation is crucial to assess the situation and progress made and to decide on further steps. In order to reduce fragmentation Member States can work together to develop a common assessment and monitoring methodology. Assessment and reporting should then also concern compliance and costs for web accessibility. Likewise, collecting user input is key to comprehensively assess the situation and better understand their needs and expectations.

Lastly, a single national contact point has already been raised as a one stop shop to find web accessibility related information and a single entry point for stakeholders. It can simply take the form of a website.

The Commission uses an Information Provider’s Guide\textsuperscript{59} which is mandatory for webmasters, editors, content providers and others dealing with websites in the Commission. This set of standards and guidelines includes a chapter on e-accessibility that currently makes direct reference to WCAG 1.0 from W3C. Action from the Commission includes updating the Guide and strengthening the internal policy towards web accessibility.

Although Member States have the prime responsibility of ensuring swift implementation of modern accessibility requirements, this does not prevent the Commission from proposing legislative measures at a later stage where necessary.

\textsuperscript{58} COM(2007) 725.
\textsuperscript{59} http://ec.europa.eu/ipg/index_en.htm