



Promoting Accessible Information  
for Lifelong Learning

Recommendations and findings of the i-access project





# **Promoting Accessible Information for Lifelong Learning**

**Recommendations and findings of the i-access project**

**European Agency for Development in Special Needs Education**



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More information on the Accessible Information Provision for Lifelong Learning project is available on the project website: [www.european-agency.org/agency-projects/i-access](http://www.european-agency.org/agency-projects/i-access)

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## FOREWORD

Access to information is a fundamental right of every learner, with or without disabilities and/or special educational needs. In a society that increasingly relies on ICT to communicate and share information and knowledge, it is essential that information be provided in a way that every person has the opportunity of participating on an equal basis.

Since 1999, the European Agency for Development in Special Needs Education (the Agency) has examined the influence of ICT on learning for learners with different types of special educational needs. The Agency's project Information and Communication Technology in Special Needs Education (ICT in SNE) from 1999-2001 led to dedicated web-based resource banks which aimed to present easily accessible information on policies, key issues, examples of interesting and innovative practice, key information sources plus future challenges in the field. This project was followed by SEN-IST-NET (2003) European Network of Excellence in Information Society Technologies for Special Educational Needs.

In recent years the Agency has contributed to UNESCO consultations focused on ICTs for people with disabilities. In a joint project with the UNESCO Institute for Information Technologies in Education (UNESCO IITE), the Agency developed a review on innovative practice related to ICT in Education for people with disabilities (2011). Currently the Agency's work with member countries in this area focuses upon the ICT for Inclusion project (2012), which builds on the results of the UNESCO IITE joint project.

The need for accessible information relevant for lifelong learning is a recurring theme throughout all projects and in Summer 2010, the Agency submitted an application for a one-year project to explore this issue. In Winter 2010, the Agency was awarded the grant and the project began in March 2011 co-financed by a European Community Grant under the Lifelong Learning Transversal Programme, Key Activity 1: Policy Co-operation and Innovation, agreement number: 190583-LLP-2010-DK-KA1-KA1ECETA.

The Accessible Information Provision for Lifelong Learning (i-access) project has run from March 2011 to February 2012. The 21 Agency member countries involved in the i-access project were: Belgium (both the Flemish and French speaking communities), Cyprus, Denmark, Estonia, France, Germany, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and United Kingdom (both England and Scotland).

Over 70 experts participated in and contributed to this report as well as all other project outputs. These professionals included policy makers, journalists, researchers, ICT experts and service providers as well as representatives of international and European organisations (notably UNESCO, G3ict, the International Association of Universities and European Schoolnet). Their contributions to the Accessible Information Provision for Lifelong Learning (i-access) project are gratefully acknowledged.

The contact details of all project experts along with all the materials developed during the i-access project can be downloaded from the project web area on the Agency website:

<http://www.european-agency.org/projects/i-access>

The Agency, as an organisation has a mission to act as an information provider for lifelong learning and all Agency outputs are relevant for stakeholders involved in providing learning opportunities. Therefore providing information in an accessible way is a great concern, affecting multiple work processes within the Agency. The recommendations from the



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i-access project are of great importance to the Agency's own work and they will be the basis for future developments.

However, it is also hoped that the recommendations presented in this document will provide inspiration and foster discussions for a range of key stakeholders involved in providing information for lifelong learning.

**Cor Meijer**

Director

European Agency for Development in Special Needs Education



## EXECUTIVE SUMMARY

Access to information is a fundamental right of every learner, with or without disabilities and/or special educational needs. In a society that increasingly relies on ICT to communicate and share information and knowledge, it is essential that information is provided in a way that ensures every person has the opportunity of participating on an equal basis.

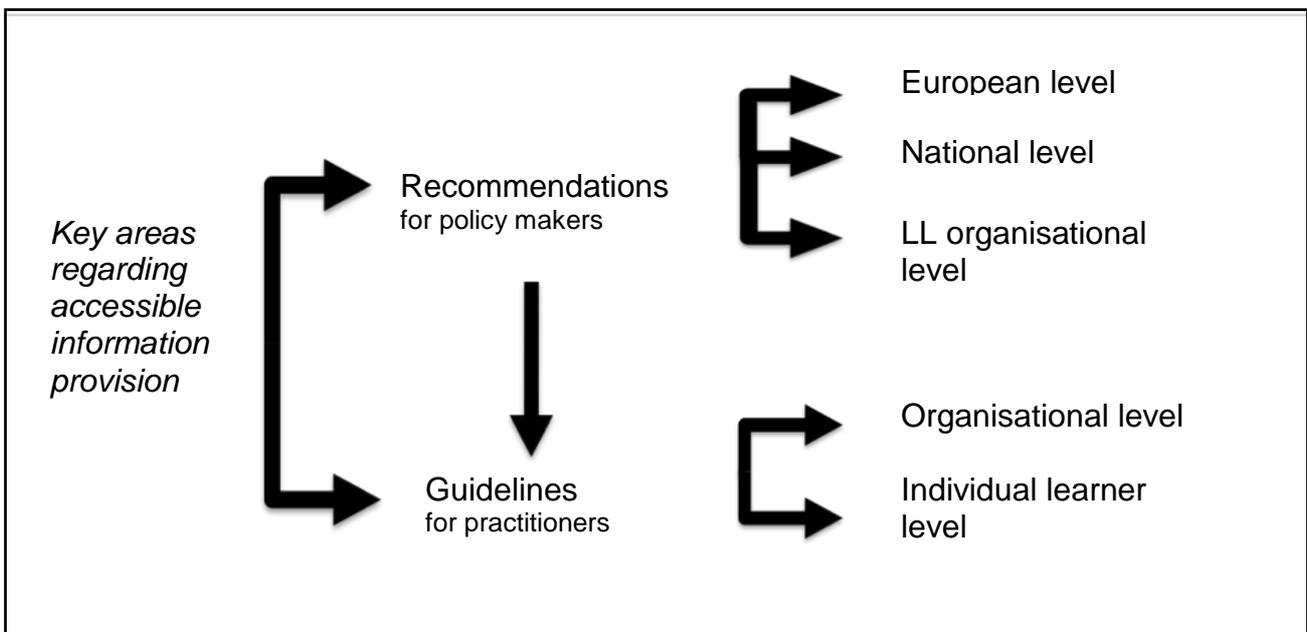
The need for accessible information relevant for lifelong learning is a recurring theme throughout all Agency projects and in Summer 2010, the Agency submitted an application for a one-year project to explore this issue. In Winter 2010, the Agency was awarded the grant and the project began in March 2011 co-financed by a European Community Grant under the Lifelong Learning Transversal Programme, Key Activity 1: Policy Co-operation and Innovation, agreement number: 190583-LLP-2010-DK-KA1-KA1ECETA.

The Accessible Information Provision for Lifelong Learning (i-access) project has run from March 2011 to February 2012. 21 Agency member countries have been involved in the i-access project: Belgium (both the Flemish and French speaking communities), Cyprus, Denmark, Estonia, France, Germany, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and United Kingdom (both England and Scotland).

Over 70 experts participated in and contributed to this project. These professionals included policy makers, journalists, researchers, ICT experts and service providers as well as representatives of international and European organisations.

The ultimate goal of the project has been to raise awareness of the issues surrounding accessible information provision for lifelong learning in order to facilitate positive developments towards accessible information provision. The main aims have been to use existing European and international policy and standards for information accessibility as a basis for discussing the implications and the practical implementation of accessible information provision within lifelong learning.

Within the project the experts have agreed to differentiate between recommendations and guidelines as is outlined in the figure below.



**Distinction between recommendations and guidelines linked to target groups**



*Recommendations* are targeted at policy makers for lifelong learning as well as ICT, working at the European, national or lifelong learning organisational levels. Recommendations focus upon what needs to be included within a written policy in order to direct accessible information provision in organisations;

*Guidelines* are targeted at educational, ICT and media practitioners and include tools such as checklists and indexes for monitoring action. Guidelines focus upon how the policy can be implemented in a practical way at the organisational, as well as individual learner level.

The collective results of the i-access project led to guiding principles and key areas for recommendations to support accessible information provision for lifelong learning agreed at the European level by the key stakeholders in the field. The i-access guiding principles as well as the recommendations are aimed at policy makers in their role as leading the implementation of accessible information provision.

### **Guiding principles**

During the i-access project conference, there were a number of inputs considering policy and practice related to providing accessible information for lifelong learning. Representatives of key international organisations working in the field of accessibility – UNESCO, G3ict, the World Wide Web Consortium/ Web Accessibility Initiative (W3C/WAI) and the DAISY Consortium – presented their priorities and work in this field. Representatives of Adobe and Microsoft offered information on the relevance of policy for their work and supplied practical information on making information more accessible.

As a result of all of the project conference debates and inputs, the i-access experts agreed upon a number of guiding principles that underpin any recommendations for policy and practice related to providing accessible information for lifelong learning.

*Rights Principle:* Access to information is a fundamental right – it empowers learners and facilitates their participation in society. This access must be provided in the earliest phases of learning and accompany a learner throughout their lifetime.

*Structural Principle:* It is vital that any policy or recommendation does not regard technology as an end in itself. The systemic factors that determine the use of tools for lifelong learning must be recognised and considered.

*All-Inclusive Principle:* Accessible information provision needs to be considered in its widest interpretation to include people with all forms of disabilities and/or special educational needs.

*Synergy Principle:* Accessibility benefits users with disabilities and/or special educational needs and may often benefit all users.

### **Recommendations for promoting accessible information for lifelong learning**

The Recommendations for promoting accessible information for lifelong learning draw upon a range of information sources collected and analysed throughout the project activities, including:

*A review of European and international policy and recommendations on accessibility* – the initial policy review was conducted as a stimulus for drafting the country survey (described below). It was then added and used as an input for the i-access project conference (also described below). As a result of the final outcomes of the project conference, the policy review was re-worked and completed in order to link to existing policy content and key issues for policy implementation. The review showed the UNCRPD as the most influential of policies in relation to accessibility as it is legally binding to its signatories (including the European Union) and promotes attention to accessibility in both European and national



level policies. It also underlined that on the European level there is no one policy that refers to all types of information (web, electronic documents, print material, audio, video and any form of communication and information) specifically, instead various aspects of accessibility policy are covered in varying policy sectors.

*A country survey on accessibility policy and implementation* – the results of the country survey are based on 29 replies from 18 countries. The results showed that respondents were generally more aware of international policies and guidelines for accessible information provision, than corresponding European policies. Most countries represented in the survey have a national policy for accessibility as well as organisational style guides, however, only half of the later cover accessibility aspects.

*The i-access conference inputs and conclusions* – the i-access conference was held in Copenhagen 22–24 June 2011 and was hosted by the Agency and the Danish Ministry of Education. Over 70 participants from 21 countries attended the event. The aim of this conference was to identify the implications of international and European policy on accessibility for information providers in the field of education as well as the processes that organisations need to consider in order to ensure accessible information provision were also identified. The participants reflected on policy requirements and current practice regarding the accessibility of information relevant for lifelong learning and identified key issues relevant for developing a set of proposed recommendations.

The final project recommendations were drafted and then endorsed through a process of re-drafting based on feedback from project experts, the Project Advisory Group members, Agency member country ministerial representatives, as well as representatives of all key stakeholder organisations involved in the conference and project activities.

These recommendations are targeted at policy makers for lifelong learning as well as ICT, working at the European, national or lifelong learning organisational levels.

*Raising awareness about accessible information for lifelong learning as a rights issue.* Policy makers, organisations and professionals in lifelong learning, ICT specialists, people with disabilities and/or special educational needs and their families and support networks should be made aware of learners' rights to accessible information provision.

*A multi-stakeholder approach based upon co-operation and information exchange should be taken.* Highly specific policies focused upon single interest group issues alone cannot achieve the provision of accessible information for lifelong learning. Policies must be developed and then implemented based upon the principle of a multi-stakeholder approach.

*Issues around accessible information provision should be covered in the education of all professionals involved in lifelong learning.* ICT can contribute to effective access to learning opportunities only if all professionals in lifelong learning are educated in the use of ICT as a tool to enable equal opportunities in education.

*Issues around accessible information provision should be covered in the education of ICT and media professionals.* Educating media and ICT specialists on the impact of disabilities and/or special educational needs on people using ICT, it is possible to develop more accessible technology from design to production and avoid later work to make the finished product more accessible.

*Accessibility should be a guiding principle for procurement of all goods and services.* Goods or services should not be purchased from organisations that do not fully account for accessibility issues.



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*Research should be promoted in order to develop an evidence base for future policy design, implementation and evaluation.* Long-term research efforts in this area should inform policy-making, monitoring and evaluation but – more importantly – should aim to identify areas for future development and work.

*Compliance to policy should be systematically monitored.* Monitoring of compliance can only be encouraged at present, but should be extended. Compliance with accessibility policy is monitored on an international level for signatories of the UNCRRPD, however, currently not all countries provide these annual reports. In the long term monitoring of compliance to accessibility policy should be mandatory at the national level.

For each of the seven recommendations issues of applicability to three possible policy levels: the European, national and organisational are presented.

Both the guiding principles and recommendations can be considered as a core framework to be developed and localised based on different country and regional contexts. The focus of next steps in work related to developing accessible information provision will be to build on the seven recommendations by developing them into guidelines targeted at practitioners who have the responsibility for implementing policy within lifelong learning organisations.

It is hoped that the guiding principles and recommendations can be a stimulus for debate and exchange in and beyond Europe; in particular it is considered they can provide inspiration for discussions within different communities of practice.



## 1. THE I-ACCESS PROJECT

The increase in signatories and ratifications of the United Nations Convention on the Rights of Persons with disabilities (UNCRPD, 2006) has increased debates on critical issues relating to equal access to information to all – especially in the field of education.

The justifications for this concern are very clear at not only the international level, as can be seen in relation to the UNCRPD, but also at the European level, the Digital Agenda for Europe (COM, 2010) suggests ‘Enhancing digital literacy, skills and inclusion’ as an action area and to facilitate a ‘Memorandum of Understanding on Digital Access for persons with disabilities’ (p. 27) in compliance with the UNCRPD as a specific action.

However, the European Commission study ‘Measuring progress of eAccessibility in Europe’ (Cullen et al, 2009) also shows that there is still a disparity between present accessibility policies and their practical implementation. The 2011 Monitoring eAccessibility Consortium study notes: ‘despite the policies implemented over the past decade, the overall level of eAccessibility remains quite low’ (p. 19).

Digital literacy and e-accessibility are seen as key factors in supporting access to lifelong learning; access to information is not only a factor in equal opportunity in education, but also in wider social inclusion. Crucially they are factors underpinning an individual learner’s opportunities to access information about lifelong learning possibilities.

It can be argued that there is policy in place at different levels to support accessible information provision for lifelong learning, but it is also clear that there are barriers to the implementation of existing policy that require examination. This project aims to respond to this issue and propose solutions for overcoming barriers to policy implementation with regard to accessible information provision.

### 1.1 Rationale behind the project

All organisations whose mission it is to act as information providers in the field of lifelong learning have a duty to make their information accessible for everyone. The UN Convention on the Rights of Persons with Disabilities (UN, 2006) emphasises:

- The obligation to ‘provide accessible information to persons with disabilities’ (Art.4);
- The need for ‘the design, development, production and distribution of accessible ICT’ (Art.9);
- The right to education ‘without discrimination and on the basis of equal opportunity’ for persons with disabilities (Art.24).

Key information providers within Lifelong learning – such as the Agency – need clear guidance on translating policy (e.g. Council Conclusions on an Accessible Information Society, 2009) and standards (e.g. Web Content Accessibility Guidelines 2.0 relating to information accessibility) into practical tasks for implementation, making use of innovative ICT solutions in a sustainable way.

Raising awareness of and offering practical approaches for enhancing effective access to information for people with disabilities and/or special educational needs is recognised as an essential strategy for Lifelong learning within the member countries of the Agency.

The Agency argues that a main barrier for providing accessible information is not the lack of flexible ICT solutions, but a lack of clarity on what policy relating to accessibility implies and the necessary ways forward to implementing accessibility standards effectively within organisational processes.



## 1.2 Target group

The main experts as well as target group for the project are information providers within lifelong learning from the Agency member countries.

Two such groups of information providers were nominated to take part in the project by the Agency's ministerial representatives:

- National information providers (policy makers) for lifelong learning;
- National multipliers (journalists and researchers) who had the role of disseminating the project outputs in their countries.

The main focus of the project has been to raise awareness of the issue of improving information accessibility within lifelong learning by providing these key information providers with:

- Opportunities to exchange and share experience with specialists and other key stakeholders in the field of information accessibility;
- Policy recommendations for accessible information provision.

The end point target group for the i-access project outputs are the consumers (end users) of lifelong learning related information. This group includes all learners, but impacts more strongly on people who are learners with disabilities and/or special educational needs who require information to be provided in accessible formats. To ensure equity in learning opportunities it is vital that learners with disabilities and/or special educational needs in particular can find and access relevant information.

## 1.3 Project aims and activities

The ultimate goal of the project has been to raise awareness of the issues surrounding accessible information provision for lifelong learning in order to facilitate positive developments towards accessible information provision.

The main aims have been to use existing European and international policy and standards for information accessibility as a basis for discussing the implications and the practical implementation of accessible information provision within lifelong learning. The objective has been to produce a set of recommendations agreed at the European level by key stakeholders in the field that can be used by information providers across Europe to support the provision of accessible information for lifelong learning for all learners who need it and the European, national and organisational levels.

To achieve these aims, two main activities have been implemented:

1. Information collection before, during and after a European conference that brought together the various stakeholders involved in the provision of accessible information within lifelong learning – notably policy makers concerned with information provision and representatives of stakeholder groups working with accessible ICT. All of these information activities focussed upon examining the implications of policy on accessible information for lifelong learning and its implementation.

The involvement of these stakeholders allowed a holistic approach to understanding the critical factors for, as well as how to support educational opportunities for all through accessible information provision.

2. The dissemination of the project outcomes and recommendations at the European and national levels. This has been achieved through a clear dissemination strategy involving the national level multipliers (journalists and researchers nominated by the ministerial



representatives of the Agency) who not only presented their national perspective on accessible information provision within project debates, ensuring the relevance of outcomes for country situations, but also disseminated the project outcomes within their national networks, acting as facilitators and multipliers for the i-access project.

## 1.4 Project methodology

The i-access project has acted as a platform for exchange between different stakeholders involved in accessible information provision for lifelong learning. This has included:

- National level policy makers for lifelong learning and journalists and researchers in the field;
- Representatives of organisations who act as information providers for lifelong learning (notably, European Schoolnet (<http://www.eun.org/>), the International Association of Universities (<http://www.iau-aiu.net/>), as well as the Agency);
- Representatives of stakeholder groups working with accessible ICT (Adobe (<http://www.adobe.com/accessibility/>), Daisy Consortium (<http://www.daisy.org/>), Microsoft (<http://www.microsoft.com/enable/>), W3C/WAI (<http://www.w3.org/WAI/>));
- Representatives of international organisations (UNESCO (<http://www.unesco.org/>) and G3ict (<http://g3ict.com/>)).

It was important for the project to represent the different perspectives on policy requirements and current practice regarding accessibility of information relevant for lifelong learning, in order to identify key issues relevant for both policy and its implementation.

Three main information gathering activities were implemented and the results used as the basis for drafting the recommendations presented in this report:

### 1. *A review of European and international policy and recommendations on accessibility*

The review of accessibility policy preceded and was extended during the project activities.

The initial policy review was conducted as a stimulus for drafting the country survey (described below). It was then added and used as an input for the i-access project conference (also described below). As a result of the final outcomes of the project conference, the policy review was re-worked and completed in order to link to existing policy content and key issues for policy implementation.

### 2. *A country survey on accessibility policy and implementation*

Building on the policy review information, a survey was designed and sent to all project experts. The survey aimed to explore the existence and focus of national policy on accessibility as well as perceived factors supporting or acting as barriers to its implementation. A central question of this survey was: What forms of additional information would be useful for you in implementing policy for accessible information in your country?

The survey was sent out before the conference. Following the wish of the experts the survey was re-launched after the conference and the responses of both survey rounds collated into the final results. The results of this survey influenced the structure, content and focused discussions of the i-access conference.

### 3. *The i-access conference inputs and summary*

The i-access conference was held in Copenhagen from 22-24 June 2011 and was hosted by the Agency and the Danish Ministry of Education. Over 70 participants from 21 countries attended the event. The aim of this conference was to identify the implications of international and European policy on accessibility for information providers in the field of



education. The processes that organisations need to consider in order to ensure accessible information provision were also identified.

The participants reflected on policy requirements and current practice regarding the accessibility of information relevant for lifelong learning and identified key issues relevant for developing a set of proposed recommendations. More information on the project conference is available from: <http://www.european-agency.org/agency-projects/i-access/i-access-conference>

Through the discussions and inputs at the conference, a number of critical areas for further exploration were highlighted – one of these being the need for greater reflections on existing resources to support the implementation of accessibility policy. This was a post conference activity conducted as a result of the conference discussions and debates.

Each of these information-gathering activities is described in more detail in the following sections of this report.

The final project recommendations were drafted and then endorsed through a process of re-drafting based on feedback from project experts, the Project Advisory Group members, Agency member country ministerial representatives, as well as representatives of all key stakeholder organisations involved in the conference and project activities.

### **1.5 The i-access project report**

This is the final document developed during the i-access project and draws upon a range of information sources collected and analysed throughout the project activities, including:

- A review of European and international policy and recommendations on accessibility;
- A country survey on accessibility policy and implementation;
- The i-access conference inputs and conclusions.

The aim of this report is to summarise the discussions and project outcomes regarding European and international accessibility policy and the challenges and opportunities for its implementation at national and organisational levels.

The Accessible Information Provision for Lifelong Learning (i-access) project has employed a number of working definitions as the basis for the project discussions and outcomes. These are presented below.

*Accessibility* - is the ability to access something 'on an equal basis with others' (UNCRPD, 2006, p.9).

Work on accessibility is often focused on the accessibility of websites. Relatively little attention is often paid to the additional media presented in accessible web pages, such as text files or PDF documents for download. Where accessible web pages are mentioned in this report, this refers not just to html pages, but to a completely accessible presentation of web-based information and other media content.

Accessibility necessarily also covers other forms of electronic information provision, such as word files or pdfs being made available electronically. Offering accessible alternatives for print material in the form of eBooks, for example using the DAISY format should also be included when referring to accessibility.

*Lifelong Learning* - covers all learning opportunities from early childhood to adulthood, in both formal and informal settings.



*Information* - within the i-access project the term 'information' is extended to information in any given format - print or electronic, audio, visual or tactile - and is also extended to communication and interaction to cover, for example, the possibility of contacting an organisation to get relevant information. The project focus is on information relevant for lifelong learning. However, the recommendations of the i-access project will be equally valuable for any form of information provision.

Accessible information for lifelong learning covers a range of issues:

- Educational content and the form in which it is presented, ranging from eBooks and eLearning platforms to audio-visual content;
- Information on educational opportunities, such as international, European, national, regional and local information on courses, exchange programmes, studying abroad opportunities or on Higher Education Institutions;
- Resources for formal and informal learning, including libraries, web pages and books;
- Information on individual rights in relation to lifelong learning opportunities.

In this report the term *learners with disabilities and/or special educational needs* is used to refer to the potential target group of people who can benefit from more accessible information provision. This phrasing respects the terminology of both the UNCRPD (2006) and agreements reached with the Agency member countries as the term special educational needs often covers a broader range of learners with additional needs than those identified as having disabilities as defined under the UNCRPD.

The remainder of this report presents:

Section 2. Country survey on accessibility policy

Section 3. i-access conference results

Section 4. Review of accessibility policy

Section 5. Recommendations to support accessible information provision

Section 6. Conclusions

As well as a full reference list and details of the nominated country experts contributing to this project, this report also contains an Annex including a Glossary of Key Terms as well as an overview of the resources reviewed in relation to the issue of accessible information provision.

To accompany this report, a summary of the project findings and recommendations has been produced and translated into all Agency member country languages. These and all other project materials and outputs can be accessed from the project web area: <http://www.european-agency.org/agency-projects/i-access>



## 2. COUNTRY SURVEY ON ACCESSIBILITY POLICY AND ITS IMPLEMENTATION

The country survey was sent out via an online tool prior to the i-access conference and was open to all i-access experts as well as the Agency country representatives. The survey collected information on the respondents (country, professional role, type of organisation), the awareness of and influence of accessibility policy and guidelines on their work, national policy and organisational style guides relevant for accessible information, formats of accessible information offered, as well as final questions asking what additional support the respondents would need to implement accessibility policy.

The results were collated, summarised and used to structure the presentations, workshops and discussions of the i-access conference. As a conference agreement the survey was re-launched to collect more responses.

The results of the country survey are based on 29 replies from 18 countries: Belgium (Flemish speaking community) (1), Cyprus (2), Finland (1), Germany (2), Ireland (2), Latvia (2), Lithuania (1), Malta (1), Netherlands (2), Norway (2), Poland (2), Portugal (2), Slovenia (2), Spain (1), Sweden (2), Switzerland (1), UK (England) (2), UK (Scotland) (1). (Although Finland did not participate fully in the i-access project, the country did reply to the survey). As not all questions were mandatory the total number of respondents varies across questions.

The survey respondents described themselves as:

- Policy makers and information providers for education;
- Policy makers and information providers for ICT;
- Researchers;
- Representatives of support organisations;
- ICT advisors.

The full results of the survey can be found in the annex of the i-access conference report (<http://www.european-agency.org/agency-projects/i-access/i-access-conference-files/iaccess-conference-report.pdf>). The key findings for the survey are presented below.

The respondents were generally more aware of international policies and guidelines for accessible information provision (such as the UNCRPD or the Web Content Accessibility Guidelines - WCAG), than the European policies (such as the Digital Agenda 2010 and the European Council Conclusions on Accessible Information Society). The table below shows the number of replies for the relevant policy, how many respondents were aware of the policy and described its relevance for their work.



<b>Policy document</b>	<b>Total number of respondents</b>	<b>Respondents aware of policy</b>	<b>Respondents describing relevance of policy for their work</b>
<b>UNCRPD</b>	29	25	24
<b>Web Content Accessibility Guidelines</b>	27	19	16
<b>Digital Agenda</b>	29	16	11
<b>European Council Conclusions on Accessible Information Society</b>	29	14	9

**Table 1: Awareness of policies and guidelines and relevance for experts work**

As shown in the table respondents indicated international policies and guidelines for accessible information provision to be more relevant for their work than European Guidelines.

In the paragraphs below the number of respondents is listed in numbers in brackets.

While these policy documents are considered to cover most relevant areas of accessibility, the respondents (19) still considered that there is a general lack of awareness and understanding with regarding accessible information (4), it is difficult to implement web related issues (4) or providing accessible content (3), dealing with procurement (1) and providing sign language interpreters (1) remains difficult. The main barrier to implementation was reported to be achieving universal compliance to policy (5).

Most countries represented in the survey have a national policy for accessibility (21 of 29). The national policies mainly focus on web, electronic files, print files and to a lesser extent on audio and video files. Within organisational style guides more weight is given to web and print files followed by electronic files with less attention given to audio or video files.

20 of the 29 organisations represented in the survey have an organisational style guide for presenting information. However, only half of the organisational style guides include accessibility aspects.

The following table shows which types of information are covered by national policies and corporate style guides of the countries and organisations represented in the survey. However, only 15 of the organisations with a corporate style guide also have an accessibility policy which is either part of the corporate style guide (7), the main focus of the corporate style guide (1) or a separate organisational policy (7). Therefore not all corporate style guides listed in the following table specifically cover the accessibility of the type of information presented.



Type of Information	National Policy (21 Total)	Corporate Style Guide (20 Total)
Websites	19	19
Electronic text documents	16	15
Printed documents	15	17
Audio files	11	7
Videos	11	7
Others	4	4

**Table 2: Types of information covered in national policies and corporate style guides**

The main focus of both national policies and organisational style guides are the web, electronic and print files. Approximately half of the national policies reported on make reference to videos and audio files. These issues are even less prominent in organisational style guides.

The table below summarises the respondents' organisations provision of accessible formats, highlighting in which cases all, some or no information is offered in a accessible format, or if it is only offered upon request.

Type of information	All information offered in this format	Some information offered in this format	No information offered in this format	This format only offered upon request
Braille	2	4	9	8
Large print	3	11	4	9
Accessible word files	11	5	6	4
Accessible PDF files	9	6	6	4
Easy to read	3	15	5	5
Sign video	2	7	12	5

**Table 3: Provision of accessible formats of organisations represented**

For the organisations that supplied information on the provision of accessible formats, accessible electronic files in word or pdf were the formats most commonly provided.

When asked what additional information would help respondents implement policy for accessible information provision information on the following was requested:

- Possibilities for motivating or enforcing compliance,
- Summaries of or a resource guide on latest research findings,
- Ideas and examples for awareness raising activities,
- Clarity over copyright arrangements, and most importantly
- Examples of practice.



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Although 21 countries have an accessibility policy and 15 indicate an organisational accessibility policy (within or additional to the corporate style guide) dealing with accessibility, the actual provision of accessible formats lags behind, as Table 3 shows.

These results were used to identify key issues to prepare for the various inputs and discussion sessions to be held during the project conference. These issues were further developed throughout the conference.



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### 3. I-ACCESS CONFERENCE RESULTS

During the i-access project conference, there were a number of inputs considering policy and practice related to providing accessible information for lifelong learning. Representatives of key international organisations working in the field of accessibility – UNESCO, G3ict, the World Wide Web Consortium/ Web Accessibility Initiative (W3C/WAI) and the DAISY Consortium – presented their priorities and work in this field. Representatives of Adobe and Microsoft offered information on the relevance of policy for their work and supplied practical information on making information more accessible.

These various inputs contributed to the debates within the workshops and plenary held later in the meeting. All of the inputs as well as the full results of the event are available from: <http://www.european-agency.org/agency-projects/i-access/i-access-conference>

Also in the conference, observers followed the 8 workshops that were hosted by European Schoolnet, Belgium (Flemish speaking community), Denmark, Poland, Sweden, UK (England), UK (Scotland) and the Agency to identify key issues that need to be considered within international and national policies to provide accessible information for learning. These key issues included:

*The impact of models of disability:* in particular the importance of focusing on capabilities instead of disabilities;

*Development of evidence based policy:* with a critical issue being the availability of data and how it is then used in policy making;

*Motivators for implementing policy:* including rights arguments, market forces as drivers for change and costs versus added value debates;

*Cross-sectoral policies:* co-ordination between policy sectors – for example e-government, and education – to ensure co-ordinated policy-making and implementation;

*Procurement:* as a key factor influencing the market and for implementing policy;

*Monitoring compliance with policy and standards/goals:* to collect evidence on the implementation of policies and standards e.g. for websites;

*Availability and production of accessible content:* defining what this is for various users of the policy;

*Availability of in-country assistive technology:* covering the need of country specific assistive technology for example speech engines in the respective national language(s).

The conference discussions highlighted a number of central arguments. To enable successful policy implementation and practice for accessible information provision, agreements should be reached and action taken in the following key areas:

- Raising awareness to foster and then share positive strategies: informing educators of accessible content, looking beyond Europe for examples, identifying who to contact for accessible services/support, compiling of national policies, opening up national policies for feedback and debate;
- Producing accessible content: involving users in developing/implementing practical policy, motivating publishers for eBooks to build accessibility into their format, opening up education content, ensuring that mass produced technologies are compatible with assistive technologies, clarifying copyright issues, using plain language that is clear and non-technical as a means of supporting accessibility, setting clear goals e.g. WCAG2.0;



- Ensuring procurement policies include clear requirements for people with disabilities and/or special educational needs.

### 3.1 Guiding principles

As a result of all of the project conference debates and inputs, the i-access experts agreed upon a number of guiding principles that underpin any recommendations for policy and practice related to providing accessible information for lifelong learning.

#### **Rights Principle**

Access to information is a fundamental right - it empowers learners and facilitates their participation in society. This access must be provided in the earliest phases of learning and accompany a learner throughout their lifetime.

The argument for providing information that is accessible for all is often presented as a business case, describing the long term financial benefits of accessibility, such as reaching a larger market, increasing job opportunities, etc. However, such business cases are difficult to prove and recommendations can lose their credibility if the business case is overstated.

The strongest argument is the moral argument. Every person has the right to access information on an equal basis. In today's information society access to information is a key factor in personal empowerment and meaningful participation in society.

The UNCRPD (2006) states: 'disability is an evolving concept and (...) results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others' (p. 1). The 'attitudinal and environmental barriers' are those that prevent equal participation in society.

#### **Structural Principle**

It is vital that any policy or recommendation does not regard technology as an end in itself. The systemic factors that determine the use of tools for lifelong learning must be recognised and considered.

In today's society there is very little which cannot be achieved with the support of technology.

However, technology and assistive technology in particular, cannot be considered without taking a systemic approach. As stated in the report *ICTs in Education for People with Disabilities* (UNESCO IITE, 2011) a systemic approach means: '... that at the level of the individual learner, an organisation or the wider educational system levels, a range of interconnected factors need to be considered and addressed. Key amongst these factors are issues surrounding access to ICT, training of professionals, the development of new approaches and tools as well as the policy framework supporting the use of ICT in education for people with disabilities.' (p. 87).

#### **All-Inclusive Principle**

Accessible information provision needs to be considered in its widest interpretation to include people with all forms of disabilities and/or special educational needs.

Most recommendations and guidelines focus on specific disabilities and/or special educational needs. For example, regarding the web, guidelines often consider mainly the



needs of people with visual impairments and barely touch upon the needs of deaf users. An organisation needs to consider approaches that encompass the needs of all users, or learners – including accessibility issues for various disabilities or special educational needs – when aiming to make their information as accessible as possible.

### **Synergy Principle**

Accessibility benefits users with disabilities and/or special educational needs and may often benefit all users.

A Microsoft survey has shown that 57% of adults are likely to benefit from accessible technology at least once in their lifetime – this ranges from people with ‘traditional’ disabilities, to temporary conditions (repetitive stress injury, eye fatigue, injury or surgery) or different visual preferences (colour adjustment, font size, varying input devices). Assistive technology or – to use a term focused more on creating opportunity than overcoming a deficit – ‘enabling technology’ often proves useful for a large variety of users.

Both the Synergy Principle and the All-Inclusive Principle are based on the Universal Design (Design for All) approach – that is the design of tools and technology meant to be usable and accessible to all users. The European Commission has also stated its commitment to the concept of Design for All to support an inclusive information society (COM, 2008, p.4).

Designing technology and processes based on universal design from the start will avoid costly ‘add-ons’ to achieve accessibility at a later stage of product implementation. Building accessibility features into technology from its early development can potentially enable it to reach a larger target audience than originally intended. Assistive technology aimed at supporting elderly people is a growing issue, focused upon in the Digital Agenda for Europe (COM, 2010).

This approach aims to account for the needs of all people and is a step towards a more inclusive society. Past Agency projects have shown that what is good for learners with special educational needs is good for all learners (European Agency for Development in Special Needs Education, 2003) a conviction also echoed in the Design for All / Universal Design approach which is increasingly supported in the ICT field.

### **3.2 Reflections on existing resources to support the implementation of accessibility policy**

During the i-access conference it was argued that one difficulty within policy and any accompanying recommendations is that often the question of how the implementation can be practically supported is not clear. Despite the existence of a vast quantity of information on accessibility, work within the i-access project indicates organisations aiming at improving their level of accessibility of information provision have difficulties finding appropriate support for this process.

Therefore, in addition to the task of reviewing the various policy frameworks on accessible information provision, it was agreed an additional post conference task would be to conduct a limited review of existing resources offering practical guidance relevant for organisations aiming to improve their accessibility.

The main resources considered during this activity are listed in the Annex of this report (see p. 43).



This review led to the identification of a number of propositions that need to be taken into account in developing recommendations for information accessibility policy that must be implemented at an organisational level:

*1: The most relevant information is available, but it is diffused*

Searching for relevant information on accessibility is a difficult process. Google delivers 176 million hits for 'accessibility' in English alone. With this quantity of resources, redundancy of information is very likely. While there seems to be a few key resources for specific sub-topics of accessibility – especially the World Wide Web consortium's Web Accessibility Initiative pages (<http://www.w3.org/wai>) – it is necessary to screen vast numbers of resources to gather information relevant for specific purposes.

*2: The amount of information suggests more than one 'type' of accessibility*

Organisations representing people with disabilities and/or special educational needs often appear to consider accessibility in terms of the requirements of their specific target group for technology, the built environment or information design. Software companies often appear to consider accessibility by merely listing features of their products that provide specific solutions to implementation issues. Legal documents often appear to consider accessibility by, for example, emphasising rights of citizens.

Whether these implicit definitions of accessibility are consistent is often up to the judgement of those affected by them: companies or organisations obliged to comply with legal requirements and individuals who ask for their rights to be implemented to the widest possible extent. With regard to organisations, there seems to be no common definition of what it means to make an organisation's information provision accessible as a whole.

*3: Information on accessibility is not aligned to the requirements of organisations in the field of lifelong learning*

Despite the vast range and scope of resources relating to accessibility, there appears to be no one-stop resource available for the support needs of lifelong learning organisations trying to provide accessible information beyond accessible websites. In addition, many accessibility resources are generic and not developed with the particular information provision needs of educational providers in mind.

*4: Organisational accessibility includes more than accessible technology*

Online searches for accessibility lead to web resources focusing on web accessibility (W3C/WAI), software accessibility (Microsoft, Apple, BBC, Adobe), advice on legal frameworks, or definitions of accessibility. Although accessibility is a horizontal principle touching on all areas of organisational life, the majority of resources focus on technology. However, organisations need information on what areas and work processes need to be reviewed, adapted or changed. Accessibility resources are often not aligned to the variety of requirements organisations in the field of lifelong learning may have.

*5: Accessibility must involve people at all organisational levels*

Making an organisation accessible often appears to be a complex and daunting task. Organisations often assign an accessibility officer to take on this task, but it is clear that more people involved in various organisational processes need to have knowledge on how to provide accessible information. Practical guidance is needed for: authors and editors preparing information to be shared electronically, or in print; for designers of forms or worksheets; for front desk personnel, call centre employees and staff with client contact, etc. All of these professionals are requested to make their information, or their communication and interaction accessible. As a result more people in organisations need to be aware of the needs of clients, users or customers with disabilities and/or special



educational needs and any policy recommendations must ultimately consider the needs employees with different roles within organisations may have.

*6: There is a lack of information on organisational processes*

People in organisations rarely work on their own; although they have particular responsibilities, they are often part of complex workflows. Organisations should consider how accessibility impacts upon such workflows. The resource review activity leads to the conclusion that there is very little advice available on where to start, how to progress or which resources to include when pursuing the goal of making the organisation's information provision accessible.

Aligned with this, to achieve accessibility within a whole organisation, a number of interconnected, smaller scale activities must be conducted, focusing on certain areas (e.g. web accessibility). It can be argued that each organisation needs to invent its own development process, whereas in reality, many aspects of this process will potentially be similar to other organisations and could be usefully exchanged or used as a template.

*7: Tools to assess the level of compliance with legal and other requirements are only available in few areas*

While the level of compliance with legal frameworks for the built environment, or for web sites can be assessed systematically, there are few tools for areas such as information design or the accessibility of face-to-face communication. Some organisations provide information on the extent to which their products match specific legal requirements. In areas where compliance cannot be judged by legal experts, more subjective evaluations of accessibility might be needed. Organisations potentially require support to involve people with disabilities and/or special educational needs as well as accessibility experts in the evaluation of their information provision.

*8: There is a need to systematically build up accessibility capacity within the organisation*

Once an organisation has started to make progress towards accessible information provision, capacity building is needed to empower all members of the organisation to deal professionally with the challenges of accessibility. However, suitable resources to guide such capacity building in organisations appear to be very limited.

*9: Keeping track of (technological) progress and developments in the field of accessibility*

New technology is continuously entering and flooding markets and the way organisations communicate with customers / clients and users is changing rapidly. A status of 'sufficient' accessibility obtained at one point may become quickly insufficient as a result of new legal requirements, changing customer / client or user expectations, or technological developments. Organisations need advice on how to deal with this change to implement continuous development in their accessible information provision.

### **3.3 Developing the project recommendations**

The various project activities – policy review, country survey, project conference findings and review of accessibility resources – and resulting information sources were all used as the basis for developing the final i-access project recommendations.

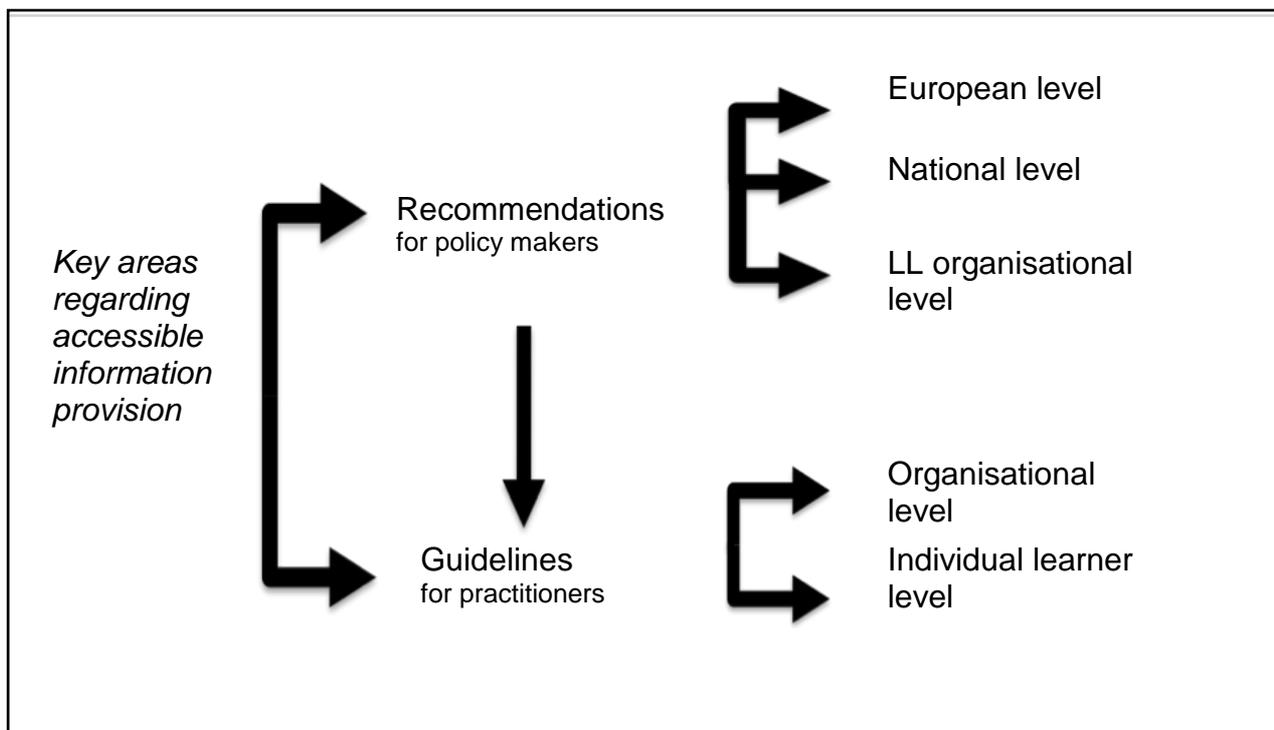
During the debates with project experts, it became clear that it was necessary within the project work to distinguish between recommendations and guidelines as such tools have different audiences and hence different foci. The i-access project work has used the following agreed operational definitions:



*Recommendations* are targeted at policy makers for lifelong learning as well as ICT, working at the European, national or lifelong learning organisational levels. Recommendations focus upon what needs to be included within a written policy in order to direct accessible information provision in organisations;

*Guidelines* are targeted at educational, ICT and media practitioners and include tools such as checklists and indexes for monitoring action. Guidelines focus upon how the policy can be implemented in a practical way at the organisational, as well as individual learner level.

Using this distinction, it can be seen that inter-connected recommendations and guidelines need to be developed for different stakeholders working at different levels within lifelong learning. This inter-connection is represented in the figure below:



**Figure 1: Distinction between recommendations and guidelines linked to target groups**

Within the one-year i-access project, the focus of all activities was upon developing a suitable set of recommendations for policy makers in the field of lifelong learning.

The development of new, or the adaptation of existing, guidelines is considered to require far more extensive, longer term work which was outside the scope of the current project.

All of the various sources of information from project activities led to the identification of seven key areas for recommendations regarding accessible information provision agreed upon by all i-access project experts:

1. Raising awareness about accessible information for lifelong learning as a rights issue.
2. A multi-stakeholder approach based upon co-operation and information exchange should be taken.
3. Issues around accessible information provision should be covered in the education of all professionals involved in lifelong learning.
4. Issues around accessible information provision should be covered in the education of ICT and media professionals.



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5. Accessibility should be a guiding principle for procurement of all goods and services.
  6. Research should be promoted in order to develop an evidence base for future policy design, implementation and evaluation.
  7. Compliance to policy should be systematically monitored.

The areas for recommendations are deliberately broad as they are intended to be applicable within the different contexts and structures that may or may not be in place within different European countries.

These seven key areas were used as the basis for final stages of the policy review activities, presented in next section.

## 4. REVIEW OF ACCESSIBILITY POLICY

The review aimed at identifying policy common themes and issues began prior to the i-access conference. Policy was considered in its widest sense, to include both legally binding documents, drafted as a commitment or guide to decision-making, as well as efforts towards standardisation aiming at ensuring and co-ordinating quality, interoperability and compatibility of goods and services.

The selection of documents was based on a systematic online search for both international and European policy relating to accessibility. Search words included accessibility policy, accessibility and special needs (as well as special educational needs), accessibility and disability, special needs education and more.

Relevant websites and resources provided by organisations such as the United Nations, UNESCO, World Bank and European Union were consulted. Previous research for the joint report 'ICTs in Education for People with Disabilities' of UNESCO IITE and the Agency was also used as a starting point.

The documents considered cover educational, economic, ICT and other sectors and vary between policies, recommendations, guidelines and standards.

The final selection of document for this policy review could not include all related documents, as this would extend beyond the scope of the project. The final policies for review were selected on the basis of their legal status, level of applicability and areas of information covered. The policies considered were:

- UNCRPD: <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
- Digital Agenda for Europe: [http://ec.europa.eu/information\\_society/digital-agenda/publications/index\\_en.htm](http://ec.europa.eu/information_society/digital-agenda/publications/index_en.htm) (and related actions)
- Digital Agenda, Action 63: [http://ec.europa.eu/information\\_society/newsroom/cf/fiche-dae.cfm?action\\_id=221&pillar\\_id=48&action=Action%2063%3A%20Systematically%20evaluate%20accessibility%20in%20all%20revisions%20of%20legislation](http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=221&pillar_id=48&action=Action%2063%3A%20Systematically%20evaluate%20accessibility%20in%20all%20revisions%20of%20legislation) and Action 65 (Memorandum of Understanding on Digital Access for persons with disabilities): [http://ec.europa.eu/information\\_society/newsroom/cf/fiche-dae.cfm?action\\_id=223](http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=223)
- Council of the European Union Conclusions on Accessible Information Society: [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/trans/107014.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/trans/107014.pdf)
- Memorandum of Understanding on Digital Access for Persons with disabilities: [http://ec.europa.eu/information\\_society/newsroom/cf/fiche-dae.cfm?action\\_id=223](http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=223)
- World Summit on the Information Society (WSIS) – Tunis Commitment: [http://www.itu.int/wsis/documents/doc\\_multi.asp?id=2266%7C0](http://www.itu.int/wsis/documents/doc_multi.asp?id=2266%7C0)
- M/376 Standardisation Mandate to CEN, CENELEC and ETSI in Support of European Accessibility Requirements for Public Procurement of Products and Services in the ICT Domain: [http://ec.europa.eu/enterprise/standards\\_policy/mandates/database/index.cfm?fuseaction=search.detail&id=333#](http://ec.europa.eu/enterprise/standards_policy/mandates/database/index.cfm?fuseaction=search.detail&id=333#)

The initial reviews of the documents:

- Provided general information on the policies reviewed (presented in Table 4);
- Examined the areas of accessible information covered in the policies (presented in Table 5).



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Following the i-access conference the selected policies were reviewed in order to identify areas of overlap with:

- The agreed guiding principles for recommendations (presented in Table 6);
- The seven key areas for recommendations identified within the i-access project (presented in Table 7).

As a final task, the policy documents were cross-checked to see if there were any issues that were not covered in the key areas of the recommendations.



#### 4.1 General information on the policies reviewed

The table below describes the status, level of applicability, effective date and reference to the UNCRPD (2006) for each of the reviewed policy documents. The UNCRPD is the only legally binding policy for the countries that have signed and ratified the Convention and Optional Protocol (a list of countries is available at <http://www.un.org/disabilities/countries.asp?navid=12&pid=166>).

The UNCRPD and Tunis Commitment are applicable on an international level, while the rest of the documents are specific to Europe. All documents refer to the UNCRPD, the only exception being the Memorandum of Understanding on Digital Access for Persons with Disabilities, which is still in the process of being written.

	UNCRPD	WSIS – Tunis Commitment	Digital Agenda for Europe	Digital Agenda Action 63 & 65	Memorandum of Understanding on Digital Access for Persons with disabilities	Council of the European Union Conclusions on Accessible Information Society	Standardisation Mandate 376
<b>Status</b>	Legislation once ratified	Guidelines	Council Resolution and Action Plan	Council Resolution and Action Plan	Council Resolution and Action Plan	Commission Conclusions	Standard
<b>Level of applicability</b>	International	International	European	European	European	European	European
<b>Effective from</b>	2006	2005	2010	2012	2012	2009	2005
<b>Reference to CRPD</b>	-	✓	✓	✓		✓	

**Table 4: General information on the policies reviewed**

The UNCRPD seems to be the most influential of policies in relation to accessibility as it is legally binding to its signatories (including the European Union) and promotes attention to accessibility in both European and national level policies.



## 4.2 Areas of accessible information

The following table illustrates which types of information are covered in the policy documents. The UNCRPD as well as the Tunis Commitment cover web, electronic documents, print material, audio, video and any form of communication and information, while the digital agenda and its separate actions are more specific focusing on public services, digital TV, emergency and mobile services. The Standardisation Mandate 376 refers to ICT products and services in general in their relevance for procurement, but it does not specifically mention print or electronic material or other media forms.

Criteria	UNCRPD (2006)	WSIS – Tunis Commitment	Digital Agenda for Europe	Digital Agenda Action 63 & 65	Memorandum of Understanding on Digital Access for Persons with disabilities	Council of the European Union Conclusions on Accessible Information Society	Standardisation Mandate 376
<b>Web</b>	✓		For public websites which enable full participation in public life (Action 64)	✓		✓	✓
<b>Electronic documents</b>	✓			Digital material (books and other publications)			
<b>Print material</b>	✓						
<b>Audio</b>	✓						
<b>Video</b>	✓						
<b>Other</b>	Any form of communication or information	Information in general	Digital TV and emergency service (Action 67)			Public services, Digital TV, Emergency services, mobile services, etc.	ICT products and services in general

**Table 5: Types of accessible information covered in the reviewed policies**

On the European level there is no one policy that refers to all types of information specifically, instead various aspects of accessibility policy are covered in varying policy sectors.



### 4.3 Guiding principles for promoting accessible information

The four guiding principles agreed by the i-access project experts were mapped against the policies reviewed:

1. Rights principle: access to information as a fundamental right;
2. Structural principle: technology not to be considered an end in itself;
3. All-Inclusive principle: including all people with all forms of disabilities and/or special educational needs;
4. Synergy principle: accessibility benefits all users.

Criteria	UNCRPD	WSIS – Tunis Commitment	Digital Agenda for Europe	Digital Agenda Action 63 & 65	Memorandum of Understanding on Digital Access for Persons with disabilities	Council of the European Union Conclusions on Accessible Information Society	Standardisation Mandate 376
<b>Rights principle</b>	✓	✓	✓	✓ Main focus of Action 63			✓
<b>Structural principle</b>	✓	✓	Integrating people with disabilities in society (AAL, increased employability)				
<b>All-Inclusive principle</b>	✓	✓				✓ Design for All	✓ Design for All
<b>Synergy principle</b>	✓	✓					✓

**Table 6: Guiding principles for promoting accessible information within the reviewed policies**

The principles agreed by policy makers and practitioners alike, are all covered under the UNCRPD and the Tunis Commitment.

Within European policy the principles are spread across various policies.



#### 4.4 Recommendations for promoting accessible information for lifelong learning

The seven areas for recommendations agreed by the i-access project experts were also mapped against the policies reviewed:

Criteria	UNCRPD	WSIS - Tunis Commitment	Digital Agenda for Europe	Digital Agenda 63 & 65	Memorandum of Understanding on Digital Access for Persons with disabilities	Council of the European Union Conclusions on Accessible Information Society	Standardisation Mandate 376
Raising awareness of rights issues	✓					✓	
Multi-stakeholder approach	✓	✓	For educators and ICT practitioners regarding e-skills, but no focus on disabilities			✓	
Accessibility in education for professionals in LL	✓	'capacity building at all levels is needed'					
Accessibility in education of ICT and media professionals	'...training for stakeholders on accessibility issues'	'capacity building at all levels is needed'				✓	✓
Procurement						✓	✓
Promotion of research	✓	✓	Promoting ICT research in general				✓
Monitoring compliance to policy	✓	✓	Benchmarking e-accessibility;			✓	✓

Table 7: Content areas for promoting accessible information within the reviewed policies



Cross referencing the seven key areas for recommendations with the UNCRPD, shows that all areas agreed in the i-access project are covered, with the exception of the issue of procurement. The Tunis Commitment does not cover raising awareness, or procurement issues.

The Digital Agenda for Europe does not specifically cover accessible information for lifelong learning. However, as the work on Actions 63 and 65 of the digital agenda are still in progress there is the possibility that this could be covered within these actions.

On the European level, procurement is clearly covered by the Standardisation Mandate 376. The current review and update of this mandate may also lead to some interesting developments as the second phase 'will identify a set of functional accessibility requirements for public procurement, and then develop an on-line toolkit through which public procurers can access these requirements in a structured way as part of the normal procurement process.' (<http://www.mandate376.eu/>)

Although the Conclusions on an Accessible Information Society (2009) do not refer to the guiding principles for the recommendations to support accessible information provision, the suggested key areas are touched upon, with the exception of the training of professionals in lifelong learning.

As an additional step within the review of policy, the project also reviewed the content of the policy documents to analyse if there were issues within accessible information provision covered in these documents, but are not part of the agreed project recommendations.

The focus of accessibility policy in Europe is often on public services such as ATMs, telephone and digital TV. These areas of accessibility were not specifically included in recommendations for accessible information provision. Nevertheless it is recognised that interactive digital TV as well as mobile technology may become more relevant in the near future for both formal and informal learning.

The relevance of accessibility for jobs and for the economy is often directly referred to in accessibility policy. However, this is not necessarily so for education policy. The *Key Competences for Lifelong Learning: European Reference Framework* and *New Skills for New Jobs Communication* acknowledges digital competence as one of the key competences for the future information society, yet accessibility is not mentioned at all.

Increasingly, attention is given to the elderly in current accessibility policy. Although, the i-access project has not considered this group in particular, there is no age limit to lifelong learning and as such learners of all ages are implicitly included through the All-Inclusive principle.

Within international policy in particular, the stated priority focus for accessibility of information in many countries is often on the building of a reliable infrastructure for ICT. This issue was not touched upon within the i-access project, as the participating countries have not explicitly raised this as an issue. Nevertheless, it needs to be recognised that, even within Europe, work on accessibility is at very different stages.

This fact was highlighted by the students within the Young Views on Inclusive Education event (a Hearing at the European Parliament for students with and without special educational needs from across Europe organised by the Agency), some geographical areas within Europe are still coping with the difficulty of making school buildings physically accessible and do not have resources for assistive technology (<http://www.european-agency.org/agency-projects/european-hearing-2011/results-files/results>).



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Accessible information provision for lifelong learning is a very broad concept as it includes all forms of information or communication as well as learning in all possible settings. This of course is covered through policies within numerous sectors including education, economy, public procurement, ICT, media, etc. Therefore cross-sector issues can impact on single sector policies and the aim of inter-connected cross-sectoral policies must be pursued.

If these policies are based on agreed guiding principles and cover agreed content areas, then synergies supporting the implementation and up-take of these policies at international, European and national level as well as across sectors can be achieved.



## 5. RECOMMENDATIONS TO SUPPORT ACCESSIBLE INFORMATION PROVISION

One of the main concerns of the i-access project has been that the i-access recommendations should 'not re-invent the wheel' by repeating existing information, but rather synthesise it, or refer to it where appropriate. The resulting information should also be appropriate to the target group it is aimed at – that is policy makers whose work impacts upon lifelong learning opportunities across Europe.

A further concern has been to stress the fact that although the information may seem limited only to learners with disabilities or special educational needs, the recommendations developed within the i-access project are relevant for all learners within today's information society: what benefits learners with disabilities or special educational needs will most often benefit all learners.

Accessible information provision for lifelong learning is an extensive field to cover. Policy recommendations that ultimately support the work of organisations acting as information providers for lifelong learning must be based on common principles and encompass work at the European, national and organisational levels.

All seven areas of recommendations presented here therefore consider issues of applicability to three possible policy levels: the European, national and organisational.

In the sections below, each area of recommendation is outlined, followed by a description of issues relating to implementation on the three different levels.

### **5.1. Raising awareness about accessible information for lifelong learning as a rights issue.**

Policy makers, organisations and professionals in lifelong learning, ICT specialists, people with disabilities and/or special educational needs and their families and support networks should be made aware of learners' rights to accessible information provision.

It is vital for the implementation of policy, that the issues related to i-access are understood by all stakeholders involved in providing information for lifelong learning.

The aim of awareness raising activities should be to achieve adherence to accessibility policy through a moral lever – a change of attitude – where accessibility is not seen as an add-on, but an integral part of all information provision.

Changing stakeholders' attitude to and raising awareness of the importance of accessible information provision as a rights issue can be achieved ...

*... at the European level by:*

- fostering attitudinal changes, with a move away from a focus on specific disabilities towards a more inclusive perspective.

*... at the national level by:*

- the implementation of campaigns to raise awareness of the right to accessible information towards people with disabilities and support organisations.

*... at the organisational level by:*

- the implementation of campaigns to raise awareness of the possibilities to provide accessible information towards ICT developers,
- the implementation of campaigns to raise awareness of the potentials of accessible information towards LLL professionals,



- facilitating exchanges between different groups of stakeholders,
- making accessibility an integral part of organisational policy,
- fostering exchange of information on accessibility in all areas of the organisation,
- sharing news on progress in becoming a fully accessible organisation amongst staff as well as with other organisations.

Raising awareness and sensitising all stakeholders may also support a bottom-up approach to achieving accessible information provision in the long-term. Knowledge on the right to information may act as an empowering factor for learners with disabilities and/or special educational needs.

### **5.2 A multi-stakeholder approach based upon co-operation and information exchange should be taken.**

Highly specific policies focused upon single interest group issues alone cannot achieve the provision of accessible information for lifelong learning. Policies must be developed and then implemented based upon the principle of a multi-stakeholder approach.

This is an issue spanning both educational and ICT policy; international, European and national policies; involving policy makers, ICT specialists, education professionals, plain language specialists, support organisations and special interest groups. In some areas there is an overlap of policy and in some areas there are gaps. For example, education professionals should be educated in the use of ICT for education and ICT specialists must have knowledge of disabilities and/or special educational needs connected to the use of ICT in general.

The examples of practice shared during the conference show how multi-stakeholder approaches can support the implementation of accessibility policy. Sharing experiences and knowledge at an international level is strongly supported by the experts of the i-access conference - the common basis and shared language for international co-operation is the UNCRPD and other internationally binding standards and guidelines.

A multi-stakeholder approach and based on co-operation and information exchange can be achieved ...

*... at the European level by:*

- supporting exchanges across international contexts, using multi-stakeholder approaches,
- fostering the development of meaningful approaches to involve policy makers, ICT specialists, education professionals, support organisations and special interest groups.

*... at the national level by:*

- organising conferences and workshops to share examples of practice among different stakeholders,
- establishing platforms for exchange among stakeholders and the dissemination of information on innovative practice.

*... at the organisational level by:*

- supporting all staff with accessible information that identifies, responds to and meets their needs,
- developing procedures to involve all stakeholders in the processes of accessible information provision.

### **5.3 Issues around accessible information provision should be covered in the education of all professionals involved in lifelong learning.**

ICT can contribute to effective access to learning opportunities only if all professionals in lifelong learning are educated in the use of ICT as a tool to enable equal opportunities in education.

ICT is not just a tool to enable equal opportunities in lifelong learning, but ICT has the potential of changing how people learn and are taught in general. Accessibility policy requires a specific focus on educators as its successful implementation depends on educators having knowledge of:

- how to use ICT in general,
- how to use ICT and assistive technology to support students with disabilities and/or special educational needs in particular,
- ICT to develop new teaching and learning strategies,
- where to find resources on accessible use of ICT and assistive technology.

Crucially, educators in lifelong learning must also be committed to using ICT as a tool for inclusive education (UNESCO et al, 2011).

A set of basic competences on ICT and accessibility (to include using plain language) should be provided within initial training and this should be the basis for long-term continuous professional development.

The results of the i-access project echo the outcomes of the Teacher Education for Inclusion project: knowledge, skills and the positive attitudes towards learners with diverse needs is a necessity for all educators, not just those working in specialist settings (European Agency for Development in Special Needs Education, 2011b).

Covering issues around accessible information provision in the education of lifelong learning professionals can be achieved ...

*... at the European level by:*

- developing a core curriculum of key competences in this area to be considered in education training programmes across European countries.

*... at the national level by:*

- ensuring accessibility issues are covered within compulsory education programmes for professionals working in lifelong learning,
- providing funding to make accessible high-quality applications and educational software available in national languages.

*... at the organisational level by:*

- providing continuous professional development opportunities that ensure the accessibility and ICT knowledge of education professionals is up-to-date,
- nominating experts to be key contacts for all issues relevant to accessible information provision in lifelong learning organisations,
- encouraging and supporting professionals to develop new teaching approaches that fully utilise the potential of accessible ICT.



#### **5.4 Issues around accessible information provision should be covered in the education of ICT and media professionals.**

Educating media and ICT specialists on the impact of disabilities and/or special educational needs on people using ICT, it is possible to develop more accessible technology from design to production and avoid later work to make the finished product more accessible.

A lack of basic education and training regarding the basic principles of accessibility is not unique to the initial and continuing professional developments of educators for lifelong learning. The initial training of media and ICT professionals often does not include issues relating to accessibility and this may lead to accessibility solutions being seen as an 'add-on' instead of an integral part of ICT solutions in actual practice.

Therefore media professionals (journalists, broadcasters, publishers) and ICT specialists (web designers, programmers, usability engineers, user experience designers, etc.) must be made aware of accessibility issues relating to the technology they are using early in their training. This would include knowledge of:

- disabilities and/or special educational needs,
- human-computer interaction strategies / alternatives for users with disabilities and / or special educational needs,
- plain language as a key factor of accessibility,
- accessibility policy and
- assistive technology solutions.

Covering issues around accessible information provision in the education of media and ICT professionals can be achieved ...

*... at the European level by:*

- developing a core curriculum of key competences in this area to be considered in education training programmes across European countries.

*... at the national level by:*

- ensuring accessibility issues are covered within compulsory education of professionals working in the media, as well as ICT related fields e.g. web design, user interaction design, interface programming,
- establishing national resource centres to support such training,
- involving education professionals in the review of media and ICT curricula to ensure that learning issues are taken into consideration.

*... at the organisational level by:*

- providing on-going professional development opportunities and hands-on experiences,
- implementing incentive structures to encourage a high level of professionalism in implementing accessible information policy.

## **5.5. Accessibility should be a guiding principle for procurement of all goods and services.**

Goods or services should not be purchased from organisations that do not fully account for accessibility issues.

There are European directives that require the inclusion of accessibility requirements as award criteria in all public procurement. At the European level, the Commission expects to bring out a proposal in early 2013 on the European Accessibility Act, a Legislative Initiative to improve accessibility of goods and services in the Internal Market. This Act is expected to affect public authorities that procure goods and services, as well as manufacturers and service providers. Although the education sector is not mentioned specifically, the European Accessibility Act may have an impact on publically funded education. Currently, it is not clear if this will be a legislative or non-legislative Act. However, in the Roadmap it is acknowledged that 'Current soft measures at EU level seem insufficient as accessibility problems persist and new products and services continue to emerge with new accessibility problems'. The document continues: 'The recommendations should refer to these, highlighting that in all areas of public procurement aspects of accessibility must be considered.' (European Commission, 2011, p.3).

With regards to procurement it is important that:

- procurement policy is legally binding,
- clear and attainable accessibility requirements based on accepted standards are available and stated in all requests for tenders,
- bidders for contracts of educational materials (e.g. text books for schools) are required to provide versions in accessible formats in addition to the 'usual' versions.

National authorities have the legislative power to ensure accessibility of information and should be encouraged to full use of this.

Accessibility as an integral part of the procurement of all goods and services can be achieved ...

*... at the European level by:*

- ensuring procurement policies make accessible information provision legally binding,
- defining the measures to which any bidder needs to conform,
- encouraging proactive approaches towards product development following a universal design approach, which result in more cost solutions than those produced in order to accommodate accessibility issues during post development phase as 'add-ons'.

*... at the national level by:*

- defining the basic accessibility standards a bidder needs to successfully meet in, e.g. software interaction, content, manuals, support hotline, online documentation etc.,
- including the accessibility of products in any definition relating to cost effectiveness and 'best value for money'.

*... at the organisational level by:*

- developing the business case for accessible products to inform senior managers in lifelong learning organisations of the necessity to take accessibility into consideration in the procurement process,



- considering any decision to choose or recommend a textbook or other learning material as procurement,
- ensuring that the accessibility of learning material is agreed during contract negotiations.

### **5.6 Research should be promoted in order to develop an evidence base for future policy design, implementation and evaluation.**

Long-term research efforts in this area should inform policy-making, monitoring and evaluation but – more importantly – should aim to identify areas for future development and work.

A clear conclusion of the i-access project work is that there needs to be more systematic and long-term collaboration and research focusing upon accessible information for lifelong learning, involving the input of different groups of stakeholders.

User participation especially of people with disabilities and/or special educational needs has proven in various scenarios to be extremely beneficial; these learners are often very knowledgeable about the use of ICT in learning environments and can make their particular needs clearly known.

The promotion of research and developing an evidence base for future policy design, implementation and evaluation can be achieved ...

*... at the European level by:*

- supporting long-term research that meets the needs of policy makers,
- engaging in 'blue skies research activities' that anticipate future developments in ICT as an input for policy making,
- embed the issue of accessibility within all research,
- establishing a platform for research based discussions and exchanges of evidence.

*... at the national level by:*

- collecting evidence on the impact of international, European and national policies to develop a knowledge base in the field,
- making funds available for developing accessibility tools within national contexts, as existing tools might not be culturally sensitive, or in the right language(s),
- establishing clear information exchange mechanisms between researchers and policy makers.

*... at the organisational level by:*

- collecting data on the impact, effects and outcomes of accessibility policy implementation that can inform national or European level policy making.

### **5.7 Compliance to policy should be systematically monitored.**

Monitoring of compliance can only be encouraged at present, but should be extended. Compliance with accessibility policy is monitored on an international level for signatories of the UNCRPD, however, currently not all countries provide these annual reports. In the long term, monitoring of compliance to accessibility policy should be mandatory at the national level.



There is a need to collect systematic quantitative and qualitative data, which should also involve the end users of accessible information provision. However, monitoring progress must not be limited to numerical benchmarking, but should include the possibility of collecting good practice examples, which could serve as role models for other countries and organisations.

At the European level the 'Monitoring eAccessibility in Europe' is a study of a consortium for the European Commission, DG Information Society and Media, Unit H.3 'ICT for inclusion'. Data on the educational environment from a selection of EU member countries has been collected since 2010 and includes accessibility of electronic books, e-learning platforms, information within e-learning platforms.

Accessible information provision within organisations must be seen as an iterative, developmental process, where making an organisation accessible is not seen as an endpoint to be reached, but is continuously re-analysed and worked on.

Monitoring of compliance to policy can be achieved ...

*... at the European level by:*

- sharing good practice examples of monitoring compliance to policy.

*... at the national level by:*

- identifying practical measures that support monitoring of compliance,
- involving all relevant stakeholders in the definition of compliance criteria.

*... at the organisational level by:*

- conducting periodic reviews to map stakeholders' accessibility requirements against the organisation's current information accessibility activities.



## CONCLUSIONS

The results of all i-access project activities – the policy review, country survey, the conference and also the reflection on existing resources – show that, in reality, there is not a lack of policy regarding accessible information, nor is there a lack of ICT solutions to support such policy. Based on the findings of the i-access survey and conference, it can be argued that the main barriers to implementing existing policy centre upon:

- The need for cross-sectoral policies based upon a universal design, all inclusive principle that have clear and unequivocal directives relating to accessible information provision;
- Policy implementation strategies based upon multi-stakeholder involvement and geared towards capacity building in organisations in terms of investments, education of professionals and continuous organisational self-review;
- Evaluation and monitoring of compliance to policy that ensures the rights of people with disabilities and/or special educational needs to accessible information are met.

The guiding principles and subsequent recommendations presented in this report present strategies and approaches that go some way to addressing these policy issues.

The work within the i-access project has been developed at the European level, but the guiding principles as well as the recommendations agreed by the i-access project experts are clearly in alignment with the UNCRPD (2006), as well as other international policy documents and directives. It is therefore hoped that this document can be an inspiration for debates and exchanges in other regions; in particular this document may be useful stimulus material for different discussions within communities of practice.

The guiding principles and recommendations presented in this report should be considered as a core framework that can be developed and built upon in different country and regional contexts. These guiding principles and recommendations are not necessarily complete and would benefit from additional, context specific input.

The focus of next steps in work related to developing accessible information provision would be to build on the seven recommendations by developing them into guidelines targeted at practitioners who have the responsibility for implementing policy within lifelong learning organisations. The current i-access project activities could serve as a useful basis for more extensive, longer-term work examining the development of new, or the adaptation of existing, guidelines for accessible information provision for lifelong learning.

## ANNEX – RESOURCE LIST

This list is only a selection of material available to promote accessible information. This was a post-conference activity conducted as a result of the conference discussions and debates. The list is presented according to the target audience of the resource in question.

Target Audience	Source	Description	Link to source
Developers	W3C/WAI	ATAG: 'Authoring tools are software and services that people use to produce Web pages and Web content. ... The Authoring Tool Accessibility Guidelines (ATAG) documents define how authoring tools should help Web developers produce Web content that is accessible and conforms to the Web Content Accessibility Guidelines. The ATAG documents also explain how to make authoring tools accessible so that people with disabilities can use the tools.' Source: ( <a href="http://www.w3.org/WAI/intro/atag">http://www.w3.org/WAI/intro/atag</a> )	<a href="http://www.w3.org/WAI/intro/atag">http://www.w3.org/WAI/intro/atag</a>
Developers	W3C/WAI	UAAG: User Agent Accessibility Guidelines documents explain how to make user agents (Web browsers, media players and assistive technologies, which are software that some people with disabilities use in interacting with computers) accessible to people with disabilities, particularly to increase accessibility to Web content.	<a href="http://www.w3.org/WAI/intro/uaag">http://www.w3.org/WAI/intro/uaag</a>
Developers	W3C/WAI	'Evaluating Websites for Accessibility is a multi-page resource suite that outlines different approaches for evaluating websites for accessibility. While it does not provide checkpoint-by-checkpoint testing techniques, it does provide general procedures and tips for evaluation in different situations, from evaluation during website development to on-going monitoring of existing sites. The approaches in these pages are intended to supplement other content management and quality assurance procedures.' Source: <a href="http://www.w3.org/WAI/eval/Overview.html">http://www.w3.org/WAI/eval/Overview.html</a>	<a href="http://www.w3.org/WAI/eval/Overview.html">http://www.w3.org/WAI/eval/Overview.html</a>
Developers and Content developers	W3C/WAI	Guidelines and Techniques for providing an accessible web	<a href="http://www.w3.org/WAI/guid-tech.html">http://www.w3.org/WAI/guid-tech.html</a>
Developers and End Users	Adobe	Adobe Accessibility Blog featuring news and developments regarding accessibility for Adobe products.	<a href="http://blogs.adobe.com/accessibility/">http://blogs.adobe.com/accessibility/</a>
Developers and IT professionals	Microsoft	Training series including general information on accessibility, accessible web and other applications, latest development in accessibility.	<a href="http://msdn.microsoft.com/en-us/windows/bb735024.aspx">http://msdn.microsoft.com/en-us/windows/bb735024.aspx</a>

Target Audience	Source	Description	Link to source
Educators	Microsoft	Guide for Educators: 'This guide provides: (1) An understanding of accessibility and how it impacts the classroom, (2) Definitions of impairment types, learning styles, and special education needs that can be addressed with computer accessibility solutions (3) Information on accessibility options and features built-into Microsoft products (4) Information on add-on assistive technologies to work with Microsoft products and (5) Resources for more information' (Source: <a href="http://www.microsoft.com/enable/education/">http://www.microsoft.com/enable/education/</a> )	<a href="http://www.microsoft.com/enable/education/">http://www.microsoft.com/enable/education/</a>
Educators and End Users	DAISY Consortium	Case studies, presentations and guidelines for using DAISY in education	<a href="http://www.daisy.org/education">http://www.daisy.org/education</a>
End Users	Microsoft	Descriptions and tutorials to make use of accessibility features already built into products	<a href="http://www.microsoft.com/enable/products/">http://www.microsoft.com/enable/products/</a>
End Users	Microsoft	Monthly newsletter providing information on accessibility options, compatibility of assistive technology and solutions that make the computer easier to use. Past newsletters can be downloaded.	<a href="http://www.microsoft.com/enable/news/subscribe/">http://www.microsoft.com/enable/news/subscribe/</a>
End Users	Adobe	Tutorial to create accessible PDF documents from Word	<a href="http://www.adobe.com/accessibility/products/acrobat/pdf/A9-accessible-pdf-from-word.pdf">http://www.adobe.com/accessibility/products/acrobat/pdf/A9-accessible-pdf-from-word.pdf</a>
End Users	Adobe	Tutorial to create accessible PDF documents for web pages	<a href="http://www.adobe.com/accessibility/products/indesign/overview.html">http://www.adobe.com/accessibility/products/indesign/overview.html</a>
End Users	Adobe	Adobe Accessibility Resource Center: provides information on accessibility and support for Adobe products. Includes case studies, examples and information for users with disabilities.	<a href="http://www.adobe.com/accessibility/">http://www.adobe.com/accessibility/</a>
End Users	DAISY Consortium	Information on DAISY	<a href="http://www.daisy.org/media-center">http://www.daisy.org/media-center</a>
End users and Developers	W3C/WAI	Educational resource on 'Designing for Inclusion' including general information on how people with disabilities use the web.	<a href="http://www.w3.org/WAI/users/Overview.html">http://www.w3.org/WAI/users/Overview.html</a>
Policy makers	Microsoft	Web resource created for the U.S. government to increase the accessibility of its information, including articles, case studies and solutions.	<a href="http://www.microsoft.com/industry/government/guides/OpenGovernment/default.aspx">http://www.microsoft.com/industry/government/guides/OpenGovernment/default.aspx</a>

Target Audience	Source	Description	Link to source
Policy makers	Microsoft	Accessibility Guides for Governments and Businesses 'These guides provide: (1) An understanding of accessibility and how it impacts organizations, (2) Definitions of impairment types and technology solutions for each type of impairment, (3) Guidance on choosing accessible technology solutions and (5) Resources for more information	<a href="http://www.microsoft.com/enable/business/">http://www.microsoft.com/enable/business/</a>
Policy Makers	G3ict & ITU	eAccessibility Policy Toolkit for Persons with Disabilities: includes policy guides, tools for policy makers and eAccessibility initiatives	<a href="http://www.e-accessibilitytoolkit.org/">http://www.e-accessibilitytoolkit.org/</a>
Policy makers	W3C/WAI	Policy and management resources for implementing web accessibility	<a href="http://www.w3.org/WAI/managing.html">http://www.w3.org/WAI/managing.html</a>
Policy makers	UNESCO	Including the Rights of Persons with Disabilities in United Nations Programming at Country Level is a publication that offers guidance on mainstreaming the rights for persons with disabilities.	<a href="http://www.undg.org/docs/12178/UNDG-Guidance-Note-and-Appendix-Book-for-web_final.pdf">http://www.undg.org/docs/12178/UNDG-Guidance-Note-and-Appendix-Book-for-web_final.pdf</a>
Policy makers	UNESCO	Resources on 'Access to Knowledge'	<a href="http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/access-for-people-with-disabilities/">http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/access-for-people-with-disabilities/</a>
Policy makers	G3ict	Publications and reports on Inclusive ICTS	<a href="http://g3ict.org/resource_center/publications_and_reports">http://g3ict.org/resource_center/publications_and_reports</a>
Web Content Developers	W3C/WAI	WCAG: 'The Web Content Accessibility Guidelines (WCAG) documents explain how to make Web content more accessible to people with disabilities.' Source: <a href="http://www.w3.org/WAI/intro/wcag">http://www.w3.org/WAI/intro/wcag</a>	<a href="http://www.w3.org/WAI/intro/wcag">http://www.w3.org/WAI/intro/wcag</a>



## GLOSSARY OF TERMS

### Preamble

Within the early project discussions it was agreed to collate a Glossary of Key Terms used in the project in order to have a shared language for all experts to use in relation to the work. Different sources for definitions have been used for this Glossary:

- Existing definitions that are already in use at the international level, in particular key terms defined within:
  - (1) UNESCO / Microsoft ICT competency framework for teachers (2011);
  - (2) UNESCO IITE / Agency ICTs in Education for People with Disabilities: Review of innovative practice (2011)'.
- Key literature quotations and citations;
- Operational definitions developed within the i-access project.

Before presenting the key terms however, it is important to be clear that in this report, the term *learners with disabilities and/or special educational needs* is used to refer to the potential target group of people who can benefit from more accessible information provision. This phrasing respects the terminology of both the UNCRPD (2006) and agreements reached with the Agency member countries as the term special educational needs often covers a broader range of learners with additional needs than those identified as having disabilities as defined under the UNCRPD.

### Key Terms

**Accessibility** – article 9 the UN Convention defines accessibility as: ‘To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas.’ (UN, 2006, p. 7) (2)

**Accessible information** – within the i-access project accessible information is understood as information provided in formats which allow every learner to access its content ‘on an equal basis with others’ (UN, 2006, p.9)

**Alternative/Augmentative Communication (ACC)** – extra ways of helping people who find it hard to communicate by speech or writing to communicate more easily. This can include signing and gesture (unaided systems) or books and special computers (aided systems). (International Society of Augmentative and Alternative Communication, Accessed 2 December, 2010 [http://www.isaac-online.org/en/aac/what\\_is.html](http://www.isaac-online.org/en/aac/what_is.html)) (2)

**Assistive technologies (ATs)** – ‘adaptive devices that enable people with special needs to access all manner of technical products and services. ATs cover a whole range of ICTs, from customised keyboards and speech recognition software to Braille computer displays and closed captioning systems for TV.’ ([http://ec.europa.eu/information\\_society/activities/einclusion/policy/accessibility/assist\\_tech/index\\_en.htm](http://ec.europa.eu/information_society/activities/einclusion/policy/accessibility/assist_tech/index_en.htm) Accessed 4 December, 2010) (2)

**Design for all** – a design approach to products and services, aiming to make them usable for as many people as possible. (2)



**Digital** – (as in digital content, digital devices, digital resources, digital technology) – essentially, another word for computers and computer technology. (Computers store and process information by converting it all to single-figure numbers – digits.) (1)

**Digital divide** – refers to ‘the gap between those who can benefit from digital technology and those who cannot.’ (<http://www.digitaldivide.org/digital-divide/digital-divide-defined/digital-divide-defined/> Accessed 1 February, 2011) (2)

**Digital literacy** – basic computer skills such as being able to do word-processing or go online (1)

Refers to ‘the skills required to achieve digital competence. It is underpinned by basic skills in ICT and the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet.’ (European Commission, 2008c, p. 4) (2)

**Digital Technology** – technology in which data is given numerical value. Computer based tools and products. (2)

**e-accessibility** – ‘overcoming the barriers and difficulties that people experience when trying to access goods and services based on ICTs.’ (European Commission (M376) 2005) (2)

**e-inclusion** – ‘both inclusive ICT and the use of ICT to achieve wider inclusion objectives. It focuses on participation of all individuals and communities in all aspects of the information society. e-Inclusion policy, therefore, aims at reducing gaps in ICT usage and promoting the use of ICT to overcome exclusion, and improve economic performance, employment opportunities, quality of life, social participation and cohesion.’ ([http://ec.europa.eu/information\\_society/activities/einclusion/index\\_en.htm](http://ec.europa.eu/information_society/activities/einclusion/index_en.htm) Accessed 2 December, 2010) (2)

**e-learning** – any forms of electronically supported learning and teaching. (2)

**Enabling Technologies** – within this project is considered as another term for assistive technology, which focuses more on creating opportunity than overcoming a deficit. However, it should be noted that within the European Commission the focus of ‘enabling technologies’ is different: [they] enable process, goods and service innovation throughout the economy and are of systemic relevance. (p. 2)

*Commission Staff Working Document accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: "Preparing for our future: Developing a common strategy for key enabling technologies in the EU", Current situation of key enabling technologies in Europe. Brussels, 30.09.2009) SEC (2009) 1257 final*

[http://ec.europa.eu/enterprise/sectors/ict/files/staff\\_working\\_document\\_sec512\\_key\\_enabling\\_technologies\\_en.pdf](http://ec.europa.eu/enterprise/sectors/ict/files/staff_working_document_sec512_key_enabling_technologies_en.pdf)

**e-skills** – (according to DG Enterprise and Industry) covers ICT practitioner skills; ICT user skills (to include digital literacy) and e-Business skills. (2)

**Equal opportunities** – is understood within the project to mean the same chances to take part in activities, access services, etc. with no barriers to education and equal life prospects for individuals. (2)

**Equity** – defining equity, the Commission of the European Communities (2006) states that it is: ‘... viewed as the extent to which individuals can take advantage of education and training, in terms of opportunities, access, treatment and outcomes’ (p. 2).



(Commission of the European Communities (2006) *Communication from the Commission to the Council and to the European Parliament. Efficiency and equity in European education and training systems*. Brussels, 8.9.2006 COM (2006) 481 final

[http://ec.europa.eu/education/policies/2010/doc/comm481\\_en.pdf](http://ec.europa.eu/education/policies/2010/doc/comm481_en.pdf))

The OECD (2007) links equity to fairness and states that personal and social circumstances should not be an obstacle to achieving educational potential.

(OECD (2007) *No more failures: Ten steps to equity in education*, OECD, Paris)

**Inclusion** – concerns issues of gender, ethnicity, class, social conditions, health and human rights encompassing universal involvement, access, participation and achievement (Ouane, A. 2008. *Creating education systems which offer opportunities for lifelong learning*. Paper presented at UNESCO International Conference on Education ‘Inclusive education: the way of the future’ 48th session. Geneva, 25–28 November 2008)

**Inclusive education** – the UNESCO (2008) definition states that inclusive education is: ‘an on-going process aimed at offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination’ (p. 3). UNESCO-IBE, 2008. Conclusions and recommendations of the 48<sup>th</sup> session of the International Conference on Education. Geneva, Switzerland. UNESCO IBE.ED/BIE/ CONFINTED 48/5

UNESCO (2009) provides this definition: ‘Inclusive education is a process of strengthening the capacity of the education system to reach out to all learners ... As an overall principle, it should guide all education policies and practices, starting from the fact that education is a basic human right and the foundation for a more just and equal society.’ (p. 8)

**Information** – within the i-access project the term ‘information’ is extended to information in any given format – print or electronic, audio or visual – and is also extended to communication and interaction to cover, for example, the possibility of contacting an organisation to get relevant information. The project focus is on information relevant for lifelong learning. However, the recommendations of the i-access project will be equally valuable for any form of information provision.

**Information Communication Technology (ICT)** – ‘consists of all technical means used to handle information and aid communication, including both computer and network hardware as well as necessary software. In other words, ICT consists of IT as well as telephony, broadcast media, and all types of audio and video processing and transmission.’ (<http://foldoc.org/Information+and+Communication+Technology> Accessed 2 December, 2010) (2)

Information and Communication Technology, which means computers, mobile phones, digital cameras, satellite navigations systems, electronic instruments and data recorders, radio, television, computer networks, satellite systems ... almost anything which handles and communicates information electronically. ICT includes both the hardware (the equipment) and the software (the computer programs in the equipment). (1)

**Information Society** – ‘a society in which the creation, distribution and treatment of information have become the most significant economic and cultural activities... The information Society is considered as a necessary previous step to build Knowledge Societies.’ (UNESCO/IFAP, 2009, p. 20–22) (2)

**Lifelong learning** – describes the possibility of all ‘individuals at all stages of their lives to pursue stimulating learning opportunities’ (EC, 2007, p.2)



**Special needs education** – the new ISCED definition currently being discussed (as of 2011/2012), defines special needs education as an:

‘Education designed to facilitate the learning of individuals who, for a wide variety of reasons, require additional support and adaptive pedagogical methods in order to participate and meet learning objectives in an educational programme. Reasons may include (but are not limited to) disadvantages in physical, behavioural, intellectual, emotional and social capacities. Educational programmes in special needs education may follow a similar curriculum as that offered in the parallel regular education system, however, they take individuals’ particular needs into account by providing specific resources (e.g. specially trained personnel, equipment, or space) and, if appropriate, modified educational content or learning objectives. These programmes can be offered for individual learners within already existing educational programmes, or be offered as a separate class in the same or separate educational institutions’ (p 83).

**Social exclusion** – the European Commission (2004) defines social exclusion as: ‘a process whereby certain individuals are pushed to the edge of society and prevented from participating fully by virtue of their poverty, or lack of basic competencies and lifelong learning opportunities, or as a result of discrimination. This distances them from job, income and education opportunities as well as social and community networks and activities. They have little access to power and decision-making bodies and thus often feel powerless and unable to take control over the decisions that affect their day to day lives.’ Social exclusion may result from ‘rootlessness’ and migration; rural exodus; dispersed families; disorganised urbanisation; rupture of traditional society and higher levels of education required to gain employment, amongst other things. (Acedo et al., 2008)

**Social inclusion** – a process which ensures that those at risk of poverty and social exclusion gain the opportunities and resources necessary to participate fully in economic, social and cultural life and to enjoy a standard of living and well-being that is considered normal in the society in which they live. It ensures that they have greater participation in decision-making which affects their lives and access to their fundamental rights (as defined in the Charter of the Fundamental Rights of the European Union).

**Technology** – often used as another word for ICT, although strictly speaking ‘technology’ can mean almost any type of tool or applied knowledge. For example, pencil and paper, slates, blackboards and whiteboards are all types of writing technology. (1)

**Universal Design** – the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design. ‘Universal Design’ shall not exclude assistive devices for particular groups of people with disabilities where this is needed. (UN, 2006)

**Web 2.0:** ‘web applications that facilitate interactive information sharing, interoperability, user-centred design, and collaboration on the World Wide Web. A Web 2.0 site gives its users the free choice to interact or collaborate with each other in a social media dialogue as creators of user-generated content in a virtual community, in contrast to websites where users (consumers) are limited to the passive viewing of content that was created for them. Examples of Web 2.0 include social-networking sites, blogs, wikis, video-sharing sites, hosted services, web applications ...’ ([http://en.wikipedia.org/wiki/Web\\_2.0](http://en.wikipedia.org/wiki/Web_2.0) Accessed 2 December, 2010). The term Web 2.0 is can be traced back to Tom O’Reilly and the O’Reilly Media Conference in 2004. (2)

**World Wide Web Consortium (W3C)** – ‘is an international community where Member organisations, a full-time staff, and the public work together to develop Web standards.



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Led by Web inventor Tim Berners-Lee and CEO Jeffrey Jaffe, W3C's mission is to lead the Web to its full potential.' (<http://www.w3.org/Consortium/> Accessed 2 December, 2010) (2)



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Access to information is a fundamental right of every learner, with or without disabilities and/or special educational needs. In a society that increasingly relies on ICT to communicate and share information and knowledge, it is essential that information is provided in a way that ensures every person has the opportunity of participating on an equal basis.

*Promoting Accessible Information for Lifelong Learning – Recommendations and findings of the i-access project* is a summary of the main findings of the one-year Accessible Information for Lifelong Learning (i-access) project, which was co-financed by a European Community Grant under the Lifelong Learning Transversal Programme, Key Activity 1: Policy Co-operation and Innovation.

The ultimate goal of the project has been to raise awareness of the issues surrounding accessible information provision for lifelong learning in order to facilitate positive developments. The collective results of the i-access project led to guiding principles and key areas for recommendations to support accessible information provision for lifelong learning agreed at the European level by the key stakeholders in the field. These recommendations are targeted at policy makers for lifelong learning as well as ICT, working at the European, national or lifelong learning organisational levels.

This report presents these guiding principles and key areas for recommendations, as well as an overview of the information sources collected and analysed throughout the project activities including: a review of European and international policy and recommendations on accessibility, a country survey on accessibility policy and implementation and project conference inputs and conclusions.

[www.european-agency.org/agency-projects/i-access](http://www.european-agency.org/agency-projects/i-access)