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# **Accessibility to ICT Products and services by Disabled and Elderly People**

**Towards a framework for further development of  
EU legislation or other co-ordination measures on  
eAccessibility**

November 2008

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## Executive Summary

'eAccessibility' concerns the design and supply of Information and Communication Technology (ICT) products and services with particular regard to ensuring that they can be used by people with disabilities and others (e.g. many older people) for whom the technical features of ICTs can pose barriers to their usage. The full spectrum of ICTs needs to be eAccessible if everyone is to have equal opportunities for participation in everyday social and economic life in the Information Society. This includes ICT products (such as computers, telephones and the wide range of other ICT devices now part of everyday life), ICT-based network services (such as telephony and TV), the many web-based and phone-based services that are in everyday use today (such as online government and shopping, call centres and so on) and other ICT-based modes of service delivery (such as self-service terminals like ATMs and ticket machines).

The European Commission's Communication on eAccessibility in 2005<sup>1</sup> identified a lack of progress in the achievement of eAccessibility in Europe and pointed to a variety of problems, including insufficient attention to eAccessibility by industry, inconsistent implementation of existing EU-level measures and growing fragmentation across the Member States, as well as lack of supports (such as eAccessibility certification and labelling) for consumers. This has significant negative personal consequences for those affected as well as for European competitiveness and the internal market.

This report presents the results of a study to examine what legislative or other options could be considered at EU-level in order to better support the achievement of a more effective, coordinated and complete approach to eAccessibility across the Member States. It includes:

- an overview analysis of the current legislative situation at EU-level and across the Member States
- identification and discussion of some specific approaches from the Member States and third countries that provide pointers to how gaps could be filled and existing measures could be strengthened
- an elaboration of a framework for possible next steps in the development and implementation of EU legislation or other coordination measures in the eAccessibility domain.

Although the Communication on eAccessibility in 2005 recognised that both legislative and non-legislative measures have roles to play in the further development of the EU approach to eAccessibility, the main focus of the analysis in this report is on the legislative dimension. Some consideration is also given to the role that non-legislative coordination mechanisms, such as the Open Method of Coordination (OMC), could play.

As regards options in the legislative field, the Communication on eAccessibility in 2005 pointed to a possible need to consider both reinforcement of existing EU measures and introduction of new measures. In line with this, one aspect of the analysis in this report focuses on options for strengthening, reinforcing and/or better leveraging the existing EU measures. The other aspect focuses on options for introducing new legislation to better cover the full spectrum of ICTs and sectors that are concerned, including the possible role of new individual pieces of sectoral legislation and/or more cross-cutting horizontal legislation.

### Limited coverage of the current EU and Member State eAccessibility 'acquis'

The existing EU eAccessibility 'acquis' is limited both in terms of the breadth of its reach across the ICT domain and in terms of the depth of its treatment of those aspects that it does

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<sup>1</sup> Communication from the Commission on eAccessibility. COM(2005) 425

reach. Current proposals that are of particular relevance (in the proposed revisions to the electronic communications regulatory framework and in the proposed introduction of an 'equal treatment' directive covering goods and services) would add to the current 'acquis' but only to a limited extent. The existing situation across the Member States mirrors that at EU level to a large degree, with the main focus to date being on fixed telephony services, TV broadcast services and public website accessibility. There is considerable divergence across the Member States, including wide divergence in the eAccessibility provisions implemented in the context of national transpositions of relevant EU directives. Overall, the current coverage of the eAccessibility field in Europe is a lot more restricted than in key reference countries such as the US and Australia.

### **Examples of how gaps could be filled**

Even if most countries tend to focus in the main on public websites, fixed voice telephony and TV broadcast services, it is nevertheless possible to find examples of legislation and regulations addressing a range of other ICT sectors as well. In the telecommunications field, examples are presented covering mobile telephony services, internet telephony, and the telephone equipment sector. In the TV field, there are examples covering TV equipment and also new features of digital TV such as electronic programme guides. Business websites are also covered in some countries, mainly through indirect approaches based on anti-discrimination legislation. In a few countries, also, either hard law or soft law measures have been implemented to address accessibility of self-service terminals such as ATMs. A variety of horizontal approaches to eAccessibility can also be found, including dedicated eAccessibility legislation and wider equality/anti-discrimination legislation that includes eAccessibility within its scope.

### **Examples of strong approaches in the more commonly addressed fields**

Although most countries have some legislative or other measures in place that address eAccessibility in the public website, fixed telephony and TV services fields, there is wide variation in the nature and strength of such measures across countries. In many cases the existing measures could be strengthened and/or better leveraged and the report presents examples of strong approaches in some countries that can be learned from by others. Apart from measures directly addressing the specific sectors, all Member States have (or should have) implemented measures in the fields of public procurement and employment equality, in line with the EU Directives in these fields. In principle, these also have an important relevance for eAccessibility but, again, there is wide variation across the Member States in the strength of the measures that have been implemented. The report therefore also presents strong examples of approaches in these fields.

### **Towards a framework for further EU measures on eAccessibility**

eAccessibility has come to have a high priority on the EU policy agenda, with recognition of its importance not just for the social objectives of the Union but also for its competitiveness and internal market objectives. However, the stock-taking and analysis presented in this report shows that there is a clear need for further development of concrete measures at EU level in order to meet these objectives. To support this, a framework is developed to help in decision-making on how the EU 'acquis' in the eAccessibility field might be further developed in an orderly and timely manner.

A number of key challenges and issues are identified that need to be taken into account in developing an optimal EU approach. These include development of a modernised approach that overcomes legacy and jurisdictional barriers to an effective approach; and construction of legislative and other coordination efforts in a manner that takes account of the realities of the current legislative landscape across the Member States and beyond.

### Key requirements

The key objectives of a coordinated European approach would include:

- better coverage of and impacts on ICT sectors already addressed
- extending coverage to other ICT sectors
- ensuring coverage of the full eAccessibility 'supply chain' (including 'end-to-end' accessibility, and coverage of both the producer and deployer sectors)
- effectively dealing with a moving target of sectors, technologies and applications
- ensuring consistency of requirements across countries and measures.

### Elements of an overall framework

The framework identifies some of the main components that could be included in a more complete and effective approach to eAccessibility. These include:

- a combination of 'top-down' and 'bottom-up' legislation
- an approach that first established the basic legislation, followed by detailed rule-making
- a combination of vertical and horizontal approaches
- effective use of public procurement
- appropriate usage of soft law, with linkage to hard law
- establishment of points of reference (including standards and codes of practice)
- a range of other public measures (public assistive technology services, financial supports for users/consumers, tax-breaks or other incentives for industry).

### Concrete possibilities and priorities

Finally, the report identifies some concrete possibilities and priorities for EU-driven coordination efforts.

One part of this focuses on specific sectoral themes that could be prioritised. For each theme identified, suggestions are given for possible measures that could be taken to support a coordinated European approach and existing examples are identified that can provide guidance on how such new measures could be modelled.

Another part focuses on possible horizontal perspectives and approaches that could be envisaged. These include co-ordination of eAccessibility requirements across sectors and instruments; cross-cutting measures for 'end-to-end' delivery of eAccessibility; cross-cutting measures for 'overlapping' sectors; horizontal measures across sectors/technologies to fill 'white spaces'; and 'softer' horizontal measures to clarify the territory and issues. Of particular interest may be the envisaging of possibilities for creative crafting of wide-reaching measures, such as Directives on 'eAccessibility of services of general interest' and on 'General eAccessibility of ICT products'.

Finally, possible approaches for an effective overall European rule-making and implementation mechanism in the eAccessibility field are discussed. It is suggested that there may be merit in considering the implementation of a dedicated eAccessibility regulatory mechanism for the EU, involving establishment of an entity that would engage in the process of identifying priorities and/or ongoing regulatory activities following the introduction of EU-level legislation.

## 1 Introduction

'eAccessibility' concerns the design and supply of Information and Communication Technology (ICT) products and services with particular regard to ensuring that they can be used by people with disabilities and others (e.g. many older people) for whom the technical features of ICTs can pose barriers to their usage. The European Commission's Communication on eAccessibility in 2005<sup>2</sup> identified a lack of progress in the achievement of eAccessibility in Europe and pointed to a variety of problems, including insufficient attention to eAccessibility by industry, inconsistent implementation of existing EU-level measures and growing fragmentation across the Member States, as well as lack of supports (such as eAccessibility certification and labelling) for consumers. This has significant negative personal consequences for those affected as well as for European competitiveness and the internal market.

This report presents the results of a study to examine what legislative or other options could be considered at EU-level in order to better support the achievement of a more effective, coordinated and complete approach to eAccessibility across the Member States<sup>3</sup>.

### 1.1 A multi-sectoral field

The full spectrum of ICTs needs to be eAccessible if everyone is to have equal opportunities for participation in everyday social and economic life in the Information Society. This includes ICT products (such as computers, telephones and the wide range of other ICT devices now part of everyday life), ICT-based network services (such as telephony and TV), the many web-based and phone-based services that are in everyday use today (such as online government and shopping, call centres and so on) and other ICT-based modes of service delivery (such as self-service terminals like ATMs and ticket machines).

The ICT product and service industries have a crucial role to play by ensuring that their products and services comply with accepted eAccessibility requirements. The many other sectors (public services, employers, banks, retailers, travel agents and so on) that deploy ICTs for use by their staff and/or customers also have a central role to play, for example, by requiring eAccessibility features in the ICT products or services that they buy-in (e.g. computers and communications technologies for the workforce; self-service terminals for customers) and in the ICT-based services that they develop themselves (e.g. customer-facing websites).

Finally, the 'assistive technology' sector<sup>4</sup> also has an important role to play by providing specialist solutions that work with ICT products and services to provide accessibility. Although mainstreaming as much eAccessibility as possible in the standard products and services used by everyone should be the main objective, there will always be a need for special solutions to meet particularly challenging needs. Important assistive technologies include augmentative devices, such as hearing aids; software that translates information from one medium to another, such as text-to-speech; and alternative input devices for those who cannot use a keyboard or mouse. Interoperability of mainstream ICTs with assistive technologies is therefore an important requirement.

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<sup>2</sup> Communication from the Commission on eAccessibility. COM(2005) 425

<sup>3</sup> Study on "Accessibility of ICT products and services by disabled and elderly people", SMART 2007/056, February-October 2008. See also the other report on "Evidence-based analysis for a possible coordinated European approach to web accessibility"

<sup>4</sup> 'Assistive technologies' are specially-designed hardware and/or software to be used with mainstream products and services to support eAccessibility for people with disabilities

Developing an effective and appropriate EU-level approach to cover this wide-ranging spectrum of ICT product, service and deployer sectors is a challenging task. The starting point is a situation today where EU legislative or other co-ordination measures that explicitly address eAccessibility issues reach only a very limited number of sectors (fixed telephony, TV, public websites and digital copyright exemptions), and even then often not in a very direct or concrete manner. There are also a number of more general cross-sectoral measures in other fields (public procurement, employment equality) that also have relevance for co-ordination of aspects of the Member States' approaches to eAccessibility, although these are not yet being leveraged to any appreciable extent.

## **1.2 Different possible approaches**

Although it is recognised that both legislative and non-legislative measures have roles to play in the further development of the EU approach to eAccessibility<sup>5</sup>, the main focus of the analysis in this report is on the legislative dimension. Some consideration is also given to the role that non-legislative coordination mechanisms, such as the Open Method of Coordination<sup>6</sup> (OMC), could play.

As regards options in the legislative field, the Communication on eAccessibility in 2005 pointed to a possible need to consider both reinforcement of existing EU measures and introduction of new measures. In line with this, one aspect of the analysis in this report focuses on options for strengthening, reinforcing and/or better leveraging the existing EU measures. The other aspect focuses on options for introducing new legislation to better cover the full spectrum of ICTs and sectors that are concerned, including the possible role of new individual pieces of sectoral legislation and/or more cross-cutting horizontal legislation.

## **1.3 Structure of the report**

Chapter 2 presents an overview analysis of the current legislative situation in Europe with a view to identifying key gaps and issues that need to be addressed. Chapters 3 and 4 then identify and discuss some specific approaches from the Member States and third countries that may provide pointers to how these gaps and issues could be addressed at EU level. The focus in Chapter 3 is on examples of legislation addressing sectors not currently covered by EU measures and in Chapter 4 on good examples of legislation in the fields that are currently covered at EU level to at least some degree. The final Chapter draws on the analyses in the other Chapters in a discussion of possible next steps in the development and implementation of EU legislation or other coordination measures in the eAccessibility domain.

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<sup>5</sup> Communication from the Commission on eAccessibility. COM(2005) 425

<sup>6</sup> The open method of coordination or OMC is a intergovernmental means of governance in the European Union, based on the voluntary cooperation of its Member States.



## 2 Main current EU and Member State measures

This Chapter presents an overall examination of the main current EU and Member State legislative or other important policy measures in relation to eAccessibility, as well as the main proposals for additional EU measures that are currently on the table.

### 2.1 Current EU legislation and other co-ordination measures

There is not yet any eAccessibility-specific legislation at EU-level. Nevertheless, there are a number of pieces of sectoral legislation that, whilst not mainly oriented towards eAccessibility issues, do explicitly include some eAccessibility-related provisions. The main legislative measures that impose or could impose direct eAccessibility obligations address the telecommunications and broadcast TV sectors. In addition, there is legislation on digital copyright that provides exemptions to general protections for copyright owners in order to facilitate access for people with disabilities. There have also been non-legislative coordination measures focusing on public website accessibility.

In addition to these measures addressing particular sectors, there is also legislation in the public procurement and employment equality fields which, implicitly although not explicitly, include eAccessibility issues within their scope.

#### 2.1.1 Telecommunications

##### Electronic Communications Regulatory Framework

There are some provisions for disabled users in the Directives of the EU's Electronic Communications Regulatory Framework<sup>7</sup>. These currently relate only to fixed telephony services, and do not cover mobile telephony or telephone equipment.

The Framework Directive requires that national regulatory authorities promote equal choice, price and quality, and access to universal service for all users, including disabled users. The Universal Service Directive addresses a number of themes of relevance for eAccessibility of fixed telephony services, such as specific measures to ensure access and affordability for all, where appropriate; access to operator and directory services; access to emergency calls; availability/access to public payphones; and special tariffing.

However, there is a lack of clarity in the current Directives as regards what should be interpreted as obligatory (or minimum) provisions for people with disabilities (which should be implemented in every Member State) and what is to be left to the discretion of the national regulators to determine in the light of national circumstances. As examined in more detail in Section 2.2, this has not been helpful in ensuring a coordinated approach across the Member States in the implementation of eAccessibility provisions in national legislation and regulations. The need for clarification and reinforcement of the EU legislation has been recognised and proposals in this regard have been published.

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<sup>7</sup> Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services. ("Universal Service Directive"); Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services. ("Framework Directive")

## **Radio & Telecommunications Terminal Equipment (R&TTE) Directive**

In the field of telecommunications equipment there are some (latent) EU-level provisions on eAccessibility in the Radio and Telecommunications Terminal Equipment (R&TTE) Directive<sup>8</sup>.

The Preamble states (paragraph 15) "*Whereas telecommunications are important to the well-being and employment of people with disabilities who represent a substantial and growing proportion of the population of Europe; whereas radio equipment and telecommunications terminal equipment should therefore in appropriate cases be designed in such a way that disabled people may use it without or with only minimal adaptation*" and (paragraph 19) "*Whereas it should therefore be possible to identify and add specific essential requirements on user privacy, features for users with a disability, features for emergency services and/or features for avoidance of fraud*".

Article 3.3 states that the Commission, having submitted its proposals to the relevant comitology process (TCAM) and/or the Council "*may decide that apparatus within certain equipment classes or apparatus of certain types shall be so constructed that....(f) it supports certain features in order to facilitate its use by users with a disability*". This gives important powers of initiative to the Commission in relation to the introduction of accessibility requirements for telecommunications equipment, if these are deemed to be needed.

To date, these powers have not yet been invoked and stakeholders have pointed to the absence of eAccessibility regulations on the telecommunications equipment sector as an important gap in the EU eAccessibility acquis in the telecommunications field. The proposals for revision and strengthening of the eAccessibility provisions within the electronic communications regulatory framework include extension of the remit to include equipment. However, such an extension would presumably only directly concern provision of accessible equipment by telecommunications service providers and would not reach directly to equipment manufacturers.

The R&TTE Directive are currently being revised.

## **Proposed changes in the telecoms regulatory framework**

Recently, a number of proposed revisions to the various Directives in the Electronic Communications Regulatory Framework have been published, some of which are intended to reinforce and improve the existing provisions in relation to e-accessibility.

### Framework Directive<sup>9</sup>

The legal basis for accessibility provisions for disabled people is linked to fundamental rights and to the requirement to take into account needs of people with disabilities in drawing up internal market measures:

*"In line with the objectives of the European Charter on fundamental rights and the United Nations Convention on the Rights of Persons with Disabilities, the regulatory framework should ensure that all users, including disabled end-users, the elderly, and users with*

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<sup>8</sup> Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity

<sup>9</sup> Proposal for a Directive amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and services, and 2002/20/EC on the authorisation of electronic communications networks and services. COM(2007) 697 final. Brussels, 13.11.2007

*special needs, have easy access to affordable high quality services. Declaration 22 annexed to the final Act of Amsterdam provides that the institutions of the community shall take account of the needs of persons with a disability in drawing up measures under Article 95 of the Treaty." (Preamble, paragraph 15).*

Main proposals relating to eAccessibility:

- 'certain aspects of' terminal equipment now brought within the scope of the Directive (Article 1, para 1) (this is in line with changes proposed for the universal service directive to improve e-accessibility for disabled users)
- In the 'policy objectives and regulatory principles', needs of elderly users and those with special social needs given specific reference (in addition to disabled users) (Article 8)
- In order to promote the free flow of information, media pluralism and cultural diversity, Member States shall encourage (through appropriate use of standards and/or specifications to be listed by the Commission in the Official Journal)...."*providers of digital TV services and equipment to cooperate in the provision of interoperable services for disabled end-users" (Article 18 (c))*
- Commission may issue a recommendation or decision aimed at the achievement of a more harmonised or coordinated approach on "*consumer issues, including accessibility to electronic communications services and equipment by disabled end-users" (Article 19.4 (a))*

It is also noted in the preamble that the Commission's powers to adopt technical implementation measures also can include tariffing issues:

*"..To allow citizens of the Member States, including travellers and disabled users, to be able to reach certain services by using the same recognisable numbers at similar prices in all the Member States, the powers of the Commission to adopt technical implementing measures should also cover, where necessary, the applicable tariff principle or mechanism" (Preamble, paragraph 29).*

Importantly, scope to impose licensing conditions on accessibility for disabled users is also explicitly included:

*"The conditions that may be attached to authorisations should cover specific conditions governing accessibility for users with disabilities and the need of public authorities to communicate with the general public before, during and after major disasters (Preamble, paragraph 57)*

### Universal service and users' rights directive<sup>10</sup>

One of the main aims is to strengthen and improve consumer protection and user rights in the electronic communications sector though, inter alia, "*...facilitating access to and use of e-communications, including emergency services, for disabled users..*". It is stated that one of the objectives of the reform is the "*reinforcement of provisions for users with disabilities in order to obtain an inclusive information society" (Preamble, paragraph 3).*

The main proposals are:

- replace the *possibility* for Member States to take specific measures for disabled users with an explicit *obligation* to do so (Article 7)
- extend the NRA's powers to request operators to publish information for end-users on the quality of their services to also include equivalent access for disabled end-users (Article 22)

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<sup>10</sup> Proposal for a Directive amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on consumer protection cooperation. COM(2007) 698 final. Brussels 13.11.2007

- impose an obligation on the Member States to ensure that disabled end-users are able to access emergency services with a view to achieving fully inclusive electronic communications (Article 26); also the possibility for the Commission to adopt technical implementing measures in this regard is introduced
- provide for a Community mechanism to implement accessibility requirements for electronic communication services and equipment in order to ensure that disabled users have equivalent access to electronic communications services enjoyed by other end-users (Article 33). also, require Member States to report yearly on the measures taken and the progress towards eAccessibility

In addition, Article 9 includes people with disabilities within the scope of any special tariff options that may be introduced by Member States.

One important aspect of the proposals is the explicit inclusion of accessibility of terminal equipment within the scope of the Directive, without prejudice to the provisions of the R&TTE Directive.

### Authorisation Directive<sup>11</sup>

The main proposal of relevance concerns an extension of the powers of national regulatory authorities (NRAs), allowing them to attach specific conditions to general authorisations to ensure accessibility for users with disabilities (in accordance with Article 7 of the universal service directive (Point A.8, Annex)

### Market Authority<sup>12</sup>

As part of its proposed General informational and advisory functions, the Authority would have a role to provide an annual report on the development of the electronics communications sector (offer and penetration of new services, development of competition, review of national regulatory situation, remedies applied, information on appeals procedures, etc.). *In addition it would monitor and report on interoperability and e-accessibility in Europe, with the ability to issue recommendations on measures to be taken at national level to better meet, in particular, the needs of disabled or elderly citizens.*

The legal basis would derive from Article 95 of the European Treaty. In relation to subsidiarity, the proposal states that in the present regulatory framework, the authorisation of services is handled at Member State level and considerable discretion is given to the 27 NRAs, with a limited oversight and coordination role for the Commission. As a result, the internal market is still a patchwork of 27 different regulatory systems. This hinders the development of crossborder services and operators are confronted with different or diverging operating conditions in similar circumstances. In practice, several regulatory issues dealt with by national regulators are common across the EU (e.g. regulatory treatment of new services, aspects of regulatory accounting, numbering issues, *the functioning of equipment and services for disabled users travelling in the EU*, etc).

As regards tasks of the Authority relating to strengthening the internal market, one specific article (Article 22 on Electronic Accessibility) states:

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<sup>11</sup> Proposal for a Directive amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and services, and 2002/20/EC on the authorisation of electronic communications networks and services. COM(2007) 697 final. Brussels, 13.11.2007

<sup>12</sup> Proposal for a Regulation of the European Parliament and of the Council of 13 November 2007 establishing the European Electronic Communications Market Authority. COM(2007) 699 final. 13.11.2007

1. *The Authority shall, at the request of the Commission advise the Commission and Member States on improving the interoperability of, access to, and use of electronic communications services and terminal equipment, and in particular cross-border interoperability issues. It shall establish a group consisting of representatives from Member States, associations of undertakings in the electronic communications industry, associations of end-users and associations representing disabled end-users. The group shall also look at the particular needs of disabled end-users and the elderly.*

2. *The Authority shall publish an annual report on the measures taken to improve accessibility to electronic communications services and equipment by disabled endusers, based on information provided by the Member States and information received by the Authority pursuant to Article 33(3) of Directive 2002/22/EC (Universal Service Directive). The report shall identify measures that could be taken at Community or at national level to improve accessibility. Where appropriate, the Authority may issue recommendations on measures that could be taken at national level.*

More generally it is proposed that the Authority would act as a focal point for treating eAccessibility issues at EU level.

### **2.1.2 TV services**

The new Audiovisual Media Services Directive (AVMSD), amending the Television Without Frontiers Directive (TVWF), includes accessibility within its scope<sup>13</sup>.

The Preamble text (paragraph 64) recognises that "*the right of persons with a disability and the elderly to participate and be integrated in the social and cultural life of the Community is inextricably linked to the provision of accessible audiovisual media services. The means to achieve accessibility should include, but need not be limited to, sign language, subtitling, audio-description and easily understandable menu navigation*". In addition, it includes a clause (Article 3c) stating that "*Member States shall encourage media service providers under their jurisdiction to ensure that their services are gradually made accessible to people with a visual or hearing disability*".

The accessibility provisions in principle apply both to providers of traditional broadcast TV services (for simultaneous viewing of programmes on the basis of a programme schedule) and "on-demand audiovisual media services" (for the viewing of programmes at the moment chosen by the user on their individual request from a catalogue of programmes). It is too early to gauge what the co-ordinating impacts of this will be on eAccessibility in the TV broadcast area in Europe. However, it has been commented that the provisions in the Directive do not seem to require the imposition of mandatory obligations nor do they establish specific targets or indicate any sense of urgency for action<sup>14</sup>.

### **2.1.3 Copyright exemptions**

There are no direct obligations on producers and suppliers of digital content (e.g. eBooks) to ensure accessibility for people with disabilities. However, the EU digital copyright directive allows Member States to make exceptions to copyright rules and protections in order to

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<sup>13</sup> Directive 2007/65/EC of the European Parliament and of the Council of 11 December 2007 amending Council Directive 89/552/EEC on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities

<sup>14</sup> MeAC - Measuring Progress of eAccessibility in Europe Assessment of the Status of eAccessibility in Europe (Main Report)

facilitate accessibility for disabled people.<sup>15</sup> It contains an exception to the reproduction right and the communication to the public right for the benefit of people with a disability.

The Preamble states (paragraph 34) that "*Member States should be given the option of providing for certain exceptions or limitations for cases such as educational and scientific purposes, for the benefit of public institutions such as libraries and archives, for purposes of news reporting, for quotations, for use by people with disabilities, for public security uses and for uses in administrative and judicial proceedings*". and (paragraph 43) "*It is in any case important for the Member States to adopt all necessary measures to facilitate access to works by persons suffering from a disability which constitutes an obstacle to the use of the works themselves, and to pay particular attention to accessible formats*". The specific clause of relevance (Article 3b) states Member States may provide for exceptions or limitations to the rights provided for [in Articles 2 and 3 dealing with rights of authors/owners] in "*.....uses, for the benefit of people with a disability, which are directly related to the disability and of a non-commercial nature, to the extent required by the specific disability*".

The Commission has recently issued a Green Paper<sup>16</sup> on "Copyright in the Knowledge Economy" that addresses, amongst other issues, the provisions for eAccessibility for disabled people in the Copyright Directive. This notes that although all Member States seem to have implemented the exceptions in some manner, there is considerable variation across countries in the disabilities that are covered and in whether there is a requirement for some payment of compensation to the right-holders for the use of works under the exception. The Green Paper outlines various possibilities for improvement of the coverage of eAccessibility and invites commentary by the stakeholders concerned.

#### **2.1.4 Public Procurement**

The revised EU Public Procurement Directives of 2004<sup>17</sup> include clauses encouraging insertion of accessibility and design-for-all requirements in public procurements.

The preambles (paragraph 29 of Directive 2004/18/EC and paragraph 42 of Directive 2004/17/EC) state that "*Contracting authorities should, whenever possible, lay down technical specifications so as to take into account accessibility criteria for people with disabilities or design for all users.*" The specific Articles on technical specifications (Article 23, Paragraph 1 of Directive 2004/18/EC and Article 34, Paragraph 1 of Directive 2004/17/EC) state that: "*Whenever possible [these] technical specifications should be defined so as to take into account accessibility criteria for people with disabilities or design for all users.*" An earlier clarifying Communication from the European Commission provided a variety of examples of how such eAccessibility criteria might be addressed in practice<sup>18</sup>.

However, as will be outlined in more detail in section 2.2.1, the available evidence suggests that the intent of the Directives on accessibility has not been fully recognised and/or implemented in most Member States to date.

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<sup>15</sup> Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society

<sup>16</sup> Green Paper: Copyright in the Knowledge Economy. COM(2008) 466/3

<sup>17</sup> Directive 2004/18/EC of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts; Directive 2004/17/EC of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors.

<sup>18</sup> Interpretative Communication of the Commission on the Community law applicable to public procurement and the possibilities for integrating social considerations into public procurement. COM (2001) 566 Final; 15.10.2001.

### 2.1.5 Equality / anti-discrimination

Currently the main EU provisions of relevance only cover the employment field. However, the proposed 'equal treatment' Directive would extend coverage to goods and services as well.

#### Employment Equality

The 'Employment Equality' Directive<sup>19</sup> includes a requirement that employers make reasonable accommodations to ensure equality of access to employment for people with disabilities unless such measures would impose a disproportionate burden on the employer. Although no specific reference to ICT accessibility is made, the Preamble mentions adaptation to equipment as an example of appropriate measures that may need to be taken. The Directive also states that the burden on employers is not to be considered disproportionate when it is sufficiently remedied by measures existing within the framework of the disability policy of the Member State concerned. Although not made explicit in the text, this provides a linkage to public supports in relation to eAccessibility, for example, through assistive technology service delivery systems.

The available evidence suggests that the potential of the Directive to positively influence levels of eAccessibility is not yet being realised to any appreciable extent<sup>20</sup>. There has not been much impact to date in terms of visibility of and attention to eAccessibility in the employment context in the Member States, probably at least in part due to the fact that this is not directly emphasised in the current text. In addition, the link in the Directives between reasonable requirements and available public supports for employers is not being made in most Member States in relation to public supports for assistive technologies for employers/employees.

#### Proposed 'Equal Treatment' directive

The proposal for a Directive on *implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation*<sup>21</sup> has the potential to introduce EU-wide protections against discrimination in relation to access to goods and services provided to the public, including eAccessibility issues. This would extend the current protections that exist in the employment domain.

The Directive does not explicitly mention eAccessibility in defining its scope. However Article 3 (1) (d); 'Access to and supply of goods and services' can be interpreted to include eAccessibility although this is not made explicit.

The current draft of the proposed Directive (Article 4) includes a requirement to provide non-discriminatory access 'by anticipation' and, in addition, where needed in particular cases, to make 'reasonable accommodations' for people with disabilities. The 'anticipatory accommodation' requirement is a new feature that may have particular potential for leveraging in relation to eAccessibility.

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<sup>19</sup> Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation

<sup>20</sup> MeAC - Measuring Progress of eAccessibility in Europe Assessment of the Status of eAccessibility in Europe (Main Report)

<sup>21</sup> Proposal for a Council Directive on implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation. COM(2008) 426 final, Brussels, 2.7.2008

## 2.1.6 Other co-ordination oriented measures

Apart from the legislative measures describe above, there are also a number of other co-ordination oriented measures in place at EU-level.

### Accessibility of public websites

Accessibility of public websites has had high EU-level policy visibility and attention for over five years now<sup>22</sup>. More recently, the Commission Communication on eAccessibility in 2005<sup>23</sup> again drew attention to the importance of EU-level policies in this field and the Ministerial Declaration on eInclusion at Riga in 2006 set as one of its priorities the promotion of inclusive eGovernment by ensuring accessibility of all public web sites by 2010.<sup>24</sup> However, the available evidence to date suggests that the tangible achievements in this context have been very modest as indicated both by the very low proportion of public websites across Europe as a whole that are accessible and by the wide divergence across the Member States that are beginning to become apparent.<sup>25</sup>

The EU approach to co-ordination of Member State activities has to date been mainly through OMC-type processes, first through eEurope and continued through i2010. The possible strengthening of the EU approach is currently on the agenda, either through the introduction of legislation or through the reinforcement of non-legislative co-ordination measures.

### Public procurement standards and toolkit

The Communication on eAccessibility in 2005 highlighted public procurement as an important approach for the EU and Member States. Since then, a Mandate has been given to the EU Standards Organisations to prepare standards and a toolkit to support public procurers (and suppliers) in Europe to address eAccessibility requirements<sup>26</sup>. There has also been a Ministerial commitment given in 2006 to fully leverage this approach as part of the eInclusion efforts of the EU.<sup>27</sup>

## 2.1.7 Overall coverage of EU legislation and other co-ordination measures

The following Table provides an overview of the extent to which the current EU 'acquis' of legislative or other co-ordination measures on eAccessibility provides direct coverage of the spectrum of ICT sectors of relevance. It can be seen that only a very limited subset of the entire spectrum of important ICT products and services are currently covered to even a limited degree, with very many 'white spaces'.

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<sup>22</sup> COM (2001) 529 Communication from the Commission eEurope 2002: Accessibility of Public Web Sites and their Content; Council Resolution on "eAccessibility" - improving the access of people with disabilities to the Knowledge Based Society, 2-3 December, 2002, 14892/02; European Parliament Resolution on eEurope 2002: Accessibility of Public Web Sites and their Content (2002), 0325

<sup>23</sup> Communication from the Commission on eAccessibility. COM(2005) 425

<sup>24</sup> Ministerial Declaration Approved Unanimously on 11 June 2006, Riga, Latvia ([http://ec.europa.eu/information\\_society/events/ict\\_riga\\_2006/doc/declaration\\_riga.pdf](http://ec.europa.eu/information_society/events/ict_riga_2006/doc/declaration_riga.pdf).)

<sup>25</sup> UK Cabinet Office (2005) eAccessibility of public sector services in the European Union; MeAC - Measuring progress of eAccessibility in Europe. (Main Report), 2007

<sup>26</sup> Standardization Mandate 376 to the European Standards Organizations in support of European Accessibility Requirements for Public Procurement of Products and Services in the ICT domain. M 376 - EN; Brussels, 7th December 2005.

<sup>27</sup> Ministerial Declaration Approved Unanimously on 11 June 2006, Riga, Latvia ([http://ec.europa.eu/information\\_society/events/ict\\_riga\\_2006/doc/declaration\\_riga.pdf](http://ec.europa.eu/information_society/events/ict_riga_2006/doc/declaration_riga.pdf).)



### Direct coverage of the eAccessibility field in current EU vertical/sectoral legislation or other coordination measures

Sector		Legislation	OMC
<i>Web</i>	Public websites		✓
	Other websites		
<i>Telecoms</i>	Fixed telephony services	✓	
	Mobile telephony services		
	Telecoms equipment	(✓)	
<i>TV</i>	TV services	✓	
	TV equipment		
<i>Other ICTs</i>	Computer HW & SW		
	Self-service terminals		
	Digital content	(✓)	
	Other ICTs / consumer electronics		
<i>Assistive Technology</i>	Public assistive technology services		
	Assistive technology manufacturers		

As regards websites, there is no existing EU legislation and the main EU-level activity has been the OMC-type approach through the eEurope initiative. In the telecommunications field there are the current (very limited) provisions in relation to fixed voice telephony services and the not yet activated possibility for regulation of the telecommunications equipment sector. Mobile telephony services are not yet covered. In the TV field some fairly weak encouraging statements have been included in the new audiovisual directive; these apply to the TV services sector and there are currently no legislative or other coordination measures addressing TV equipment accessibility. Self-service terminals are currently not directly covered in any EU eAccessibility related measures nor are any other ICTs or consumer electronic sectors. Only digital content is specifically addressed in any way, and then only in terms of the exemptions to copyright rules for people with disabilities. There is currently no EU-level legislative or other co-ordination measures that address either public assistive technology services or the assistive technology manufacturing sector.

## 2.2 Member State and third country legislation

This section looks at eAccessibility-related legislation across the EU Member States and selected third countries (Australia and the United States). Section 2.2.1 presents an overview of the sectoral coverage of existing legislation and section 2.2.2 looks at the extent to which there is convergence or divergence across the Member States in their legislation addressing the sectors that are currently covered in EU sectoral (telecommunications services, TV services) and more general cross-cutting legislation (public procurement and employment equality), as well as through OMC-type measures (public websites).

It should be noted that completely accurate classification of countries is sometimes difficult because the available information is vague or incomplete. For this reason, the listings of countries with particular measures in place should be taken as being indicative rather than absolute and should be interpreted/used in this manner. Nevertheless, the overall patterns that are indicated can be taken to be quite robust and sufficiently reliable for guidance of overall EU policy.

## 2.2.1 Sectors covered

It can be seen that the pattern of sectoral coverage across the Member States closely mirrors that at the EU level, with by far the most commonly covered sectors being fixed telephony services, TV broadcasting and public websites. All of the other sectors are mainly white spaces, with just a few examples of legislation addressing any of these to be found across the Member States. These examples are examined in more detail in Chapter 3. Looking at the third countries, it is noteworthy that both Australia and the United States, and particularly the latter, have a much wider sectoral coverage than is typically the case in the majority of the EU Member States.

### Coverage of the eAccessibility field in direct sectoral legislation or other specific policy measures

	Web (=indirect via anti-discrimination legislation)		Telecommunications (= information provision only)			TV		Other ICTs (=indirect via anti-discrimination legislation)		
	Public websites	Business websites	Fixed telephony services	Mobile telephony services	Equipment	Broadcast services	Equipment	Computer HW and SW	Self-service terminals	Other ICTs / consumer electronics
AT	✓	(✓)	✓	✓		✓				
BE	✓		✓			✓				
CY	?		✓			✓				
CZ	✓		✓			✓				
DE	✓	(✓)	✓			✓				
DK	✓		✓			✓				
EE	✓		?			✓				
EL	?		✓			✓				
ES	✓		✓	✓	?	✓				?
FI	✓		✓			✓				
FR	✓		✓			✓				
HU	✓		✓			✓				
IE	✓	?	✓			✓				
IT	✓		✓			✓				
LT	✓		✓			✓				
LU	?		✓			?				
LV	?		✓			✓				
MT	✓	(✓)	✓			?			?	
NL	✓		?			✓				
PL	?		✓			✓				
PT	✓		✓			✓			?	
SE	✓	?	✓			✓				
SI	✓		✓			✓				
SK	✓		✓			✓				
UK	✓	(✓)	✓	✓	?	✓	?		?	
AU	✓	(✓)	✓	✓	(✓)	✓			(✓)	
US	✓	(✓)	✓	✓	✓	✓	✓		(✓)	

Apart from direct sectoral legislation almost all Member States have implemented the revised EU public procurement directives (which, as already discussed earlier, encourage inclusion of accessibility requirements in all relevant public procurements, including procurement of ICTs) and the employment equality directive (which includes provision of suitable workplace equipment within the scope of reasonable accommodations that should be made to avoid discrimination against people with disabilities in the workplace).

Apart from this, in the absence of any EU legislation to date, a number of Member States have implemented anti-discrimination legislation in the field of goods and services which, in some cases, have been interpreted in practice to include accessibility of business websites. These examples are discussed in more detail in Chapter 3.

More generally, almost all Member States have some assistive technology legislation and/or public service provision in place in order to help people with disabilities acquire the assistive technologies that they need. Also, all Member States appear to have implemented the EU digital copyright directive, with its provisions for exemptions for people with disabilities.

## **2.2.2 Divergence in the most widely implemented sectoral and other legislation**

Although most Member States have some legislation or other policy measures addressing eAccessibility in the fields covered by EU legislation or OMC measures (public websites, fixed telephony, TV services and digital copyright), as well as in the other fields of relevance (public procurement and employment equality), there is considerable divergence in the actual provisions that have been implemented. This section looks in some detail at the nature and scale of this divergence in each area.

### **Public websites**

The web accessibility theme is on the policy agenda in almost all Member States, although with considerable divergence in the scope and nature of legislation and/or other forms of intervention which have been put in place<sup>28</sup>. In terms of actual achievement of accessibility of public websites, results have generally not been impressive to date. European-wide surveys have found that just a small minority of websites pass accepted international accessibility standards, although countries with more well-developed policies (strong laws/regulations and strong supporting implementation actions) show better results than others<sup>29</sup>. However, the MeAC benchmarking study rated only five Member States as being strong on both dimensions.

Some Member States have legislation in place that directly addresses accessibility of public web sites, e.g. in the framework of eGovernment or disability laws. In a few, the main relevant legislation addresses this matter in a more indirect manner, e.g. in terms of equality legislation that has been invoked in relation to web accessibility. Others have addressed web accessibility through interventional approaches of various types, e.g. ministerial resolutions, national action plans, strategic policy frameworks, codes of practice and the like. In countries that have implemented hard law to address web accessibility legal enforcement mechanisms vary in terms of scope and strength. Explicit imposition of concrete sanctions is only referred to in a few cases.

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<sup>28</sup> Details on legislative and other measures implemented across the Member States can be found in: Comparative Analysis of Web Accessibility Legislation, 29th May 2008. The report was prepared in support of a [consultation workshop on web-accessibility and e-accessibility held by the European Commission DG Information Society and Media in Brussels on 10th June 2008](#)

<sup>29</sup> MeAC - Measuring Progress of eAccessibility in Europe Assessment of the Status of eAccessibility in Europe (Main Report), 2007

Regardless of whether legislation or other interventional measures have been adopted, implementation mechanisms vary a lot. Explicit time frames by which accessibility standards are to be implemented by the parties addressed have been specified only in some countries. In these cases the stipulated timeframes range from 2005 to 2011. In some countries, a staged approach has been adopted, setting out different time frames for web sites that are to be newly launched and for those that already existed at the time when accessibility related obligations were imposed, or in terms of different levels of accessibility that are to be achieved at different points in time. There is also variation in the scope of coverage of legislation or other measures, for example, in the levels of governance that are reached (national, regional, local) and in the types of public entities that are covered (all, government sites, specified priority sites, etc.).

The extent to which follow-up or other supporting measures are in place also varies widely. In most countries web accessibility guidelines or standards have been developed, sometimes in conjunction with awareness-raising and capacity building measures. Although the Web Content Accessibility Guidelines (WCAG 1.0) developed by the W3C consortium<sup>30</sup> constitute a key reference point, national guidelines are not necessarily a one-to-one translation of these. Sometimes further guidelines or standards have been drawn upon, e.g. guidelines available from national NGOs or other bodies of expertise. In some cases national guidelines also draw upon the guidelines developed by the US Department of Justice, in the framework of the Section 508 of the Rehabilitation Act.

In some countries web-accessibility certification / labelling schemes can be found. In most cases the implementation of such schemes is driven more by the initiative of disability organisations or commercial parties, rather than by dedicated government policies. Only in three countries does a certification scheme seem to be directly linked to official web accessibility policy.

In general, regular monitoring of outcomes of public intervention in the field of web accessibility has remained an exception up to now. Apart from once-off studies that have been conducted in many countries, more ongoing benchmarking efforts seem to be implemented only in a minority of countries, and annual benchmarking in just three of these. In all cases, the monitoring approaches vary a lot in terms of scope (e.g. number and types of sites sampled) and methods applied (e.g. self-assessment vs. assessment by external parties).

### **Telecommunications services**

The level of development of legislative/regulatory measures on accessible telecommunications varies widely across the Member States, with the MeAC policy benchmarking exercise rating just 8 countries (DK, ES, IE, IT, MT, PT, SE, UK) as having relatively well developed legislation/policy in this field and the remaining 17 being less well developed<sup>31</sup>. The results of the benchmarking survey also found that there was considerable divergence in the actual accessibility situation in the telecommunications field across the Member States, with better results being achieved in countries with better developed legislative and related policy measures. However, the overall accessibility situation across Europe as a whole compared quite unfavourably with that in key reference countries (AU, CA, US).

In Europe, most (but not all) countries do have some specific reference to addressing needs of disabled people in telecommunications services law / regulations. In most countries the

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<sup>30</sup> <http://www.w3.org/TR/WCAG10/>

<sup>31</sup> MeAC - Measuring Progress of eAccessibility in Europe Assessment of the Status of eAccessibility in Europe (Main Report), 2007

approach, at least in principle, is through imposing obligations on one or more telecommunications operators. Often, however, a general statement of requirements in the relevant laws has not yet actually been implemented as a specific obligation on any named operators. In a few countries a different approach is taken (e.g. in Sweden the approach is through public procurement of the required services, in Finland the state lottery fund pays for a number of the provisions).

Overall, approaches in most Member States are typically not very coherent or complete - they are generally not underpinned by a clear statement of a requirement for equivalent access for disabled users (in terms of functionality, costs and choice) as for other users, supported by specification and implementation of the concrete provisions that must be made to ensure this.

In some countries the provisions are very general or vague but the majority do make some reference to at least one or more concrete themes. However, as shown in the results of the MeAC study, there is wide variability across the Member States as regards the specific themes covered. Accessibility of payphones is the most frequently occurring theme, being mentioned in the laws/regulations of about two-thirds of the Member States; wheelchair access is the most commonly mentioned in this regard, but sometimes also text telephones, handset volume, provisions for visually impaired and so on.

Just under one-half of Member States mention accessibility of directory services in their laws/regulations and a similar number mention accessible emergency numbers. Two-in-five address provision/pricing of accessible/special terminal equipment in their telecoms laws / regulations; social sector supports are also available in a number of countries (through assistive technology services). Just over one-quarter of countries address equivalent tariffs as a general principle (e.g. to ensure that text telephone users do not have greater costs than voice telephone users because their calls take longer)<sup>32</sup>, and a number of others address the tariff issue in relation to ensuring that disabled users do not have higher costs because they must call directory enquiries as they cannot use a paper directory. Only one-in-five countries seem to explicitly require text telephone relay services in their telecoms laws / regulations.

## **TV services**

The strength of legislative/regulatory measures relating to broadcast TV services also varies widely across the Member States, with the MeAC policy benchmarking exercise rating just 6 countries (ES, IE, NL, PT, SE, UK) as having relatively well developed legislation/policy and the remaining 19 being rated as less well developed<sup>33</sup>. Again, the results of the benchmarking survey found that there was considerable divergence in the actual accessibility situation in the broadcast TV field across the Member States, with better results being achieved in countries with better developed legislative and related policy measures. However, the overall accessibility situation across Europe as a whole compared quite unfavourably with that in key reference countries (AU, CA, US).

In Europe, the majority (but not all) of Member States have some level of policy addressing accessibility of *public* TV broadcasts, typically referring to the main public broadcaster. Sometimes this is not specifically enshrined in legislation/regulations but taken up as (an assumed) public broadcaster responsibility. In fewer than one-half of countries the

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<sup>32</sup> Laws/regulations in the telecommunications area and/or from the social sector in some countries also address more general affordability of basic telecommunications for low income disabled and other users (e.g. subsidised line rental and/or tariffs - 'social tariffs'), but this is not the focus here as it is not directly linked to accessibility, per se

<sup>33</sup> MeAC - Measuring Progress of eAccessibility in Europe Assessment of the Status of eAccessibility in Europe (Main Report), 2007

legislation/policies on accessibility also address commercial broadcasters and, where they do, the requirements are often very limited or loosely stated.

Captioning (subtitling) for viewers with hearing impairments is the most common theme addressed, being found in more than eighty per cent of countries. However, the extent to which there are defined targets in percentages / hours of programming, and the level of such requirements, varies considerably. Provision of some signing of programming is also a common requirement, although only a few countries have specified targets in terms of the type / amount of programming to be covered. Less than one-third of countries give any direct attention in their policies to audio description for people with visual impairments and, where such provisions are addressed, they are often very limited and/or provided on a voluntary basis as part of the public broadcaster role. Only a few countries have specified targets in terms of percentage / hours of programming.

### **Public procurement**

The strength of legislative/regulatory measures relating to accessibility in public procurement also varies widely across the Member States, with the MeAC policy benchmarking exercise rating just 6 countries (FR, IE, IT, MT, SE, UK) as having relatively well developed legislation/policy and the remaining 19 being rated as less well developed<sup>34</sup>. The situation across Europe as a whole compares unfavourably with comparison countries such as the US and Canada. More generally, the available evidence suggests considerable variability in the ways that the accessibility provisions of the revised European public procurement directives have been transposed into national law in the Member States, with a widespread lack of strong implementation of the relevant provisions.

As regards the text of the transpositions a survey of public procurement policy officials conducted by the MeAC study found that somewhat more than one-half of respondents considered that their country has transposed the relevant accessibility clauses through more-or-less verbatim inclusion of the relevant text and that the coverage of accessibility / design-for-all-users in their national transpositions was thus of about the same strength as that intended in the Directives. In a few of these cases, however, it is not clear that even the basic intent of the revised Directives in relation to accessibility has in fact been incorporated into the mainstream national public procurement law linked to the Directives. In addition, it seems that small (but possibly important) wording differences may be quite common, and some of these might be considered to be significant deviations from the intention of the Directives although not recognised as such in the relevant Member States (e.g. "where necessary" instead of "whenever possible"; "may" instead of "should" etc.). One-in-three countries reported that the wording / approach to the accessibility issue in their transposition was a deviation from that of the revised Directives. Some of these felt that their approach was stronger than the intent of the Directive in relation to accessibility and others felt that their approach was weaker.

As regards implications of the national legislation for procurement practices, the most frequently reported situations were either that the legislation encouraged inclusion of accessibility requirements in ICT procurements but this was not mandatory, or a somewhat weaker situation where the inclusion of eAccessibility requirements was allowed but not specifically encouraged.

In general, there is again the impression of considerable ambiguity in the interpretation of the "whenever possible" proviso in the Directives, with this sometimes being viewed as amounting to a mandatory requirement but more commonly being seen as stating that whilst inclusion of accessibility is a positive thing, discretion is left to the contracting authority as

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<sup>34</sup> ibidem

regards necessity / appropriateness / feasibility on a case-by-case basis. In some countries it seems that this may be (incorrectly) interpreted as "where necessary", such as only in procurements specifically for disabled people.

### **Employment equality**

The available evidence also shows that the eAccessibility dimension of the EU employment equality directive is generally not well developed in the national transpositions and related actions by Member States, with the MeAC policy benchmarking rating only 3 Member States (UK, SE and MT) as strong in this regard<sup>35</sup>. Overall, the situation across Europe as a whole compares unfavorably with that in comparison countries such as the US. Most (but not all) Member States have introduced a clear requirement for employers to make 'reasonable accommodations' but eAccessibility is not yet explicitly visible in this context in most countries. In addition, most countries have not yet made a direct linkage between employment equality law and public assistive technology service provisions. More generally, it seems that few cases on eAccessibility-related grounds have yet been taken.

### **Digital copyright**

As noted earlier, the Commission's Green Paper on "Copyright in the Knowledge Economy"<sup>36</sup> notes that although all Member States seem to have implemented the exceptions for people with disabilities in some manner, there is considerable variation across countries in the disabilities that are covered and in whether there is a requirement for some payment of compensation to the rightholders for the use of works under the exception.

## **2.3 Summary and conclusions**

The existing EU eAccessibility 'acquis' is limited both in terms of the breadth of its reach across the ICT domain and in terms of the depth of its treatment of those aspects that it does reach. Current proposals that are of particular relevance (in the proposed revisions to the electronic communications regulatory framework and in the proposed introduction of an 'equal treatment' directive covering goods and services) would add to the current 'acquis' but only to a limited extent. The telecommunications proposals would give better coverage of eAccessibility in that field, although the provisions would still be limited to fixed voice telephony services. In this context, the proposal for establishment of an Authority with responsibilities that would include eAccessibility issues is of particular interest. In principle, this could provide a model that could be extended to a wider EU approach to eAccessibility. The proposals regarding equal treatment in relation to 'goods and services' would introduce anti-discrimination provisions that could be interpreted to cover eAccessibility in various ways although there are no direct pointers to ICTs or eAccessibility issues included in the current draft.

The existing situation across the Member States mirrors that at EU level to a large degree, with the main focus to date being on fixed telephony services, TV broadcast services and public website accessibility. There is considerable divergence across the Member States, including wide divergence in the eAccessibility provisions implemented in the context of national transpositions of relevant EU directives.

Overall, the current coverage of the eAccessibility field in Europe is a lot more restricted than in key reference countries such as the US and Australia.

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<sup>35</sup> ibidem

<sup>36</sup> Green Paper: Copyright in the Knowledge Economy. COM(2008) 466/3

## 3 Filling sectoral gaps: guidance from existing approaches

As discussed in the previous chapter, the current EU 'acquis' of legislative or other co-ordination measures on eAccessibility covers a limited subset of the entire spectrum of important ICT products and services. This Chapter presents examples of national approaches that may provide guidance for the development of possible EU-level measures to cover some of the current 'white spaces'.

### 3.1 Telecommunications

As outlined in Chapter 2, EU legislation in the telecommunications field currently only covers fixed voice telephony. This section looks at examples of coverage of other aspects of telecommunications, including mobile telephony services, internet telephony and telecommunications equipment.

#### 3.1.1 Mobile telephony services

There are relatively few examples of legislation or regulations addressing eAccessibility of mobile telephony services across the Member States or in third countries, and those that do exist vary widely in focus and approach. More generally, 'social tariffs' for mobile telephony are addressed in some countries, either in policy or in voluntary provisions by operators. In addition, in some Member States mobile operators have taken voluntary initiatives to address aspects of accessibility of mobile services. In the following, legislative examples are provided from three European countries and two non-EU countries.

##### **Example 1: United Kingdom**

In the UK, the equality legislation makes direct reference to the telecommunications sector and includes mobile operators within its scope, and some provisions within the mainstream telecommunications legislation apply to both fixed and mobile operators; these have been a stimulus for mobile industry initiatives on accessibility.

General Condition 15 of the *General Conditions of Entitlement* of the Communications Act (2003)<sup>37</sup> apparently apply to mobile operators as well as fixed operators, although the types of requirement / wording seems more oriented towards traditional obligations on fixed operators. A Mobile Industry Code of practice (*Mobile Industry Good Practice Guide for Service Delivery for Disabled and Elderly Customers in the UK*)<sup>38</sup> outlines what could be considered to be good practice by mobile operators, including a range of eAccessibility provisions in relation to mobile services and equipment.

The Disability Discrimination Act (1995)<sup>39</sup> includes mobile operators within its scope, although the main focus of industry response to date (as indicated in their Code of Practice) has been in relation to 'customer service' issues rather than eAccessibility of mobile services or equipment. Overall, there seems to be a lack of clarity regarding the precise extent and nature of coverage of mobile operators under the Communications Act and DDA.

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<sup>37</sup> Communications Act (2003)

<sup>38</sup> Mobile Industry Good Practice Guide for Service Delivery for Disabled and Elderly Customers in the UK, July 2003. See also a leaflet complementing this guide available at : <http://www.ofcom.org.uk/static/archive/Oftel/consumer/for/initiatives/mobileneeds/docs/gpccustomerguide0703.pdf>

<sup>39</sup> Disability Discrimination Act (1995)



### **Example 2: Spain**

In Spain, a Decree<sup>40</sup> linked to the disability equality legislation<sup>41</sup> has been issued which sets out that the Government will, through the Centre for Personal Autonomy and Technical Assistance, “promote the existence of a sufficient supply and technologically updated special mobile terminals adapted to different types of disabilities.” Although this is a legislative provision it does not appear to speak directly to either the mobile operator or the mobile phone manufacturing sectors.

### **Example 3: Austria**

In Austria, recent regulations<sup>42</sup> have implemented a requirement to provide personalised price information through voice messaging for blind or visually impaired users (if requested) for purposes of international roaming.

### **Example 4: United States of America**

In the US there are a number of legislative and regulatory provisions that relate to mobile telephony.

Section 255 of the Telecommunications Act of 1996<sup>43</sup> requires telecommunications equipment manufacturers and service providers to make their products and services accessible to people with disabilities, if 'readily achievable'. Where access is not readily achievable, the Act requires manufacturers and service providers to make their devices and services compatible with equipment commonly used by people with disabilities, if readily achievable. Section 255 does not apply to what the FCC calls "information services", such as e-mail, the Internet, web sites, and so on, but there are two exceptions. When the FCC adopted rules to implement Section 255 in July 1999, it decided that two information services - voicemail and interactive menu services - were so critical to making telecommunications accessible that they should be included with the scope of the implementation rules.

Guidelines were prepared to outline the types of accessibility requirements covered by the Act<sup>44</sup>. These requirements apply across the telecommunications sector, including the mobile operator and equipment sectors.

There is also the Hearing Aid Compatibility Act of 1988<sup>45</sup> which applies to both fixed and mobile handsets. In regard to mobile services and equipment, rules by the regulator (FCC) to meet the goals of the Hearing Aid Compatibility Act impose obligations on both manufacturers and operators in relation both to radio frequency (RF) interference reduction and inductive coupling capability with hearing aids operating in telecoil mode. The performance levels set forth in ANSI C63.19 (a technical standard established by the American National Standards Institute (ANSI)) are the applicable standard for compatibility of digital wireless phones with hearing aids. The so-called 'M' rating specifies performance in terms of interference and the 'T' rating in terms of inductive coupling.

Rules have been established requiring mobile operators to offer at least a minimum number of compatible mobile phones, and also that such phones must be appropriately labelled and include detailed product information. The rules have been modified and updated over time, in consultation with both the wireless industry and the deaf and hard of hearing community. The latest modifications were published in February 2008.<sup>46</sup>

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<sup>40</sup> Royal Decree 1494/2007 of November 12th,

<sup>41</sup> 51/2003 Act on Equal Opportunities, Non-Discrimination and Universal Accessibility of People with Disabilities

<sup>42</sup> Artikel 6 Absatz 1 Unterabsatz 4 der Verordnung (EG) Nr. 717/2007 über das Roaming in öffentlichen Mobilfunknetzen in der Gemeinschaft (ABL. Nr. L 171 v. 29.6.2007, S. 32)

<sup>43</sup> <http://www.fcc.gov/telecom.html>

<sup>44</sup> <http://www.access-board.gov/telecomm/rule.htm>

<sup>45</sup> [http://www.fcc.gov/Bureaus/Common\\_Carrier/FAQ/faq\\_hac.html](http://www.fcc.gov/Bureaus/Common_Carrier/FAQ/faq_hac.html)

<sup>46</sup> [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-08-68A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-68A1.doc)

The FCC allows a “de minimis” exception to its requirements for service providers offering a small number of handsets. Under this exception:

- Wireless service providers that offer two or fewer digital wireless handsets in the U.S. for a particular air interface need not offer hearing aid-compatible handsets.
- Wireless service providers that offer three digital wireless handsets in the U.S. for a particular air interface must offer at least one hearing aid-compatible handset model.

### **Key elements of the FCC rules for mobile operators**

#### Supply of hearing aid compatible models

##### *Interference reduction*

- Beginning June 6, 2008, each nationwide wireless service provider (Verizon Wireless, AT&T Mobility, Sprint Nextel, and T-Mobile) must meet at least an M3 rating for 50 percent or eight of the handset models it offers to consumers, whichever is less, per digital air interface. For service providers that do not meet the 50 percent threshold, the minimum number of compatible models required will increase to nine on February 15, 2009, and ten on February 15, 2010.
- Beginning September 7, 2008, each non-nationwide wireless service provider must meet at least an M3 rating for 50 percent or eight of the handset models it offers to consumers, whichever is less, per digital air interface. For service providers that do not meet the 50 percent threshold, the minimum number of compatible models required, will increase to nine on May 15, 2009, and ten on May 15, 2010. Until September 7, 2008, these service providers must offer at least two M3-rated handset models per digital air interface.

##### *Inductive coupling*

- Beginning June 6, 2008, each nationwide wireless service provider (Verizon Wireless, AT&T Mobility, Sprint Nextel, and T-Mobile) must meet at least a T3 rating for one third or three of the handset models it offers to consumers, whichever is less, per digital air interface. For service providers that do not meet the one third threshold, the minimum number of compatible models required will increase to five on February 15, 2009, seven on February 15, 2010, and ten on February 15, 2011.
- Beginning September 7, 2008, each non-nationwide wireless service provider must meet at least a T3 rating for one third or three of the handset models it offers to consumers, whichever is less, per digital air interface. For service providers that do not meet the one third threshold, the minimum number of compatible models required will increase to five on May 15, 2009, seven on May 15, 2010, and ten on May 15, 2011. Until September 7, 2008, these service providers must offer at least two T3-rated handset models per digital air interface.

#### Continued availability of a variety of different hearing aid-compatible handset models

- Service providers must offer customers a range of hearing aid-compatible handsets with differing levels of functionality (e.g., operating capabilities, features offered, prices).

#### Information to consumers

- Packages containing hearing aid-compatible handsets must be explicitly labeled and must include detailed information in the package or product manual.
- Service providers must offer a means for consumers to test hearing aid-compatible handsets in their owned or operated retail stores.
- Beginning January 15, 2009, service providers must post information on hearing aid compatibility on their websites

#### Complaints

- Consumers may file complaints with the FCC

#### Monitoring

- To assist the FCC in monitoring the implementation of the requirements, and to provide information to the public, service providers must file annual reports on the status of their compliance with the requirements

### **Example 5: Australia**

In Australia there are requirements in relation to provision of information about accessibility of handsets offered by the mobile operators. The main provision is through an industry code on *Information on Accessibility Features for Telephone Equipment* developed by the representative body for the communications industries (Communications Alliance) and registered on 12 October 2006 by the national Regulator - Australian Communications and Media Authority (ACMA)<sup>47</sup>. It specifies obligations on standard telephone equipment suppliers to provide information on the characteristics of their equipment that would benefit people with a disability and older people, which are codified in *Operational Matrices for Reporting on Accessibility Features for Telephone Equipment*<sup>48</sup>. It also requires that information provided by suppliers is clear and comprehensible to assist in identifying equipment that will meet an individual's communications needs. Mobile phones are included within the scope of the code.

This regulatory mechanism is one where bodies and associations that represent sections of the telecommunications and other related industries may develop industry codes and submit them to ACMA for registration. A code cannot be registered unless ACMA is satisfied that the code meets criteria set out in legislation. Compliance with industry codes is voluntary. Once a code is registered, ACMA has the power to direct industry participants, where necessary, to comply with a code. Failure to comply with an ACMA direction may result in civil penalties being imposed by the Federal Court. If no industry code is in place in a particular area of the industry, or if an industry code is inadequate, ACMA can make an industry standard. Compliance with ACMA industry standards is mandatory.

### **Learning Points**

Overall, as already noted above, there appear to only be a small number of examples from the Member States of direct legislation or regulations addressing accessibility of mobile telephony services. In some cases the scope of more general telecommunications accessibility legislation explicitly extends to cover mobile telephony as well, but is not always well tailored to specific issues relating to mobile telephony accessibility.

When compared with Europe, legislative approaches taken in the third countries, in particular the one taken in the US, can be considered strong in terms of imposing direct requirements on both equipment manufacturers and mobile operators, while giving consumers a legal standing to challenge market behaviour (e.g. through the complaints mechanism administered by the FCC in the US).

#### **3.1.2 Internet telephony (VoIP)**

Increasingly, services using VoIP (Voice-over-Internet Protocol) are changing the way voice telephony services are delivered and can often be a cheaper option than traditional PSTN services. Such services use VoIP technology to provide voice calls using fixed or wireless broadband connected to PC with a handset or headset, a Personal Digital Assistant (PDA, a handheld computer), a mobile phone handset or a fixed phone handset with an analogue

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<sup>47</sup> ACIF C625:2005: [http://internet.aca.gov.au/webwr/telcomm/industry\\_codes/codes/c625\\_2005\(1\).pdf](http://internet.aca.gov.au/webwr/telcomm/industry_codes/codes/c625_2005(1).pdf)

<sup>48</sup> ACIF G627:2005: <http://www.commsalliance.com.au/documents/guidelines/g627>

telephone adapter (ATA) or router. There appear to have so far been only a few examples of eAccessibility issues in relation to VoIP being addressed in regulation or legislation.

### **Example 6: USA**

In 2007, the Federal Communications Commission (FCC) introduced some obligations on providers of “interconnected” VoIP services – VoIP services that allow users generally to make calls to and receive calls from the regular telephone network<sup>49</sup>. Interconnected VoIP providers must comply with the Commission’s Telecommunications Relay Services (TRS) requirements, including contributing to the TRS Fund used to support the provision of telecommunications services to persons with speech or hearing disabilities, and offering 711 abbreviated dialing for access to relay services (US TRS obligations more generally are described in more detail later in section 4.2). Interconnected VoIP providers and equipment manufacturers also must ensure that, consistent with Section 255 of the Telecommunications Act, their services are available to and usable by individuals with disabilities, if such access is readily achievable.<sup>50</sup>

### **Example 7: UK**

In Europe, the regulator in the UK, OFCOM, launched a consultation process in 2006 on the regulation of VoIP services to which disability advocates responded.<sup>51</sup> Following subsequent consultations, a statement and publication of a statutory notification under section 48(1) of the Communications Act 2003 modifying General Condition 4 sets out that from 8<sup>th</sup> September 2008 certain VoIP services must, amongst other things, comply with obligations concerning “special measures for end-users with disabilities”<sup>52</sup>

## **Learning points**

A key focus of the examples from the US and UK has concerned ensuring that VoIP users with eAccessibility needs have access to particular services, such as text telephone relay and emergency numbers. In the US, in addition, a broader perspective seems to be adopted with VoIP service providers and equipment manufacturers falling within the scope of the more general eAccessibility obligations on the telecommunications sector.

### **3.1.3 Telecommunications equipment**

None of the Member States appear to have laws that directly address eAccessibility issues for the telecommunications equipment sector, with the exception of the UK and ES which do make some reference to this theme in their legislation. Internationally, only the US appears to have direct hard law in this field. In Australia the mandatory industry code discussed above (Example 5) imposes accessibility information provision requirements on the equipment industry although not substantive obligations to make their equipment accessible.

### **Example 8: United Kingdom**

In the UK, legislation imposes an obligation on the regulator (Ofcom) in relation to the development of 'domestic electronic communications apparatus' (which can be interpreted to include telecommunications equipment as well as digital TV equipment) that is easy to use,

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<sup>49</sup> <http://www.fcc.gov/cgb/consumerfacts/voip.html>

<sup>50</sup> For more information, see FCC, Report & Order, FCC 07-110 (June 15, 2007), [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-07-110A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-110A1.doc)

<sup>51</sup> <http://www.ofcom.org.uk/consult/condocs/voipregulation/responses/rmib.pdf> and <http://legacyreports.spectrumaudit.org.uk/consult/condocs/voipregulation/responses/rmid.pdf>

<sup>52</sup> Regulation of VoIP Services: Access to the Emergency Services  
<http://www.ofcom.org.uk/consult/condocs/voip/voipstatement/>

affordable for the widest possible range of individuals, including people with disabilities<sup>53</sup>. However, it seems that Ofcom's role in this is to encourage others and not about direct imposition of obligations on manufacturers.<sup>54</sup>

### **Example 9: Spain**

In Spain, as mentioned earlier, a Decree<sup>55</sup> linked to the disability equality legislation<sup>56</sup> has been issued which sets out that the Government will, through the Centre for Personal Autonomy and Technical Assistance, "promote the existence of a sufficient supply and technologically updated special mobile terminals adapted to different types of disabilities." Although this is a legislative provision it does not appear to speak directly to either the mobile operator or the mobile phone manufacturing sectors.

### **Example 10: United States of America**

Two pieces of US legislation impose direct accessibility obligations on telecommunications equipment manufacturers - Section 255 of the Telecommunications Act of 1996 and the Hearing Aid Compatibility Act (1988).

#### **Section 255**

As already described in the section above on mobile telephony services, Section 255 of the Telecommunications Act of 1996<sup>57</sup> requires telecommunications equipment manufacturers to make their products accessible to people with disabilities, if 'readily achievable'. Where access is not readily achievable, the Act requires manufacturers to make their devices compatible with equipment commonly used by people with disabilities, if readily achievable. Guidelines were prepared to outline the types of accessibility requirements covered by the Act<sup>58</sup>. These requirements apply across the telecommunications sector, including the fixed and mobile equipment sectors.

The regulatory approach acknowledges that what is "readily achievable" will be different for each manufacturer based on the costs of making products accessible or compatible and their resources. It is intended that the interpretation of this is in line with similar provisions under the Americans with Disabilities (ADA) anti-discrimination legislation.

The Federal Communications Commission is responsible for rules and policies to enforce the law<sup>59</sup>. Telecommunications products covered include:

- wired and wireless telecommunication devices, such as telephones (including pay phones and cellular phones), pagers, and fax machines
- other products that have a telecommunication service capability, such as computers with modems
- equipment that carriers use to provide services, such as a phone company's switching equipment.

The possible functions of a product are key in determining coverage. If a product can provide telecommunication services, then that portion is covered

Manufacturers and service providers must evaluate the accessibility, usability, and compatibility of their equipment and services as early and consistently as possible throughout their design, development and manufacture. In addition, companies must review their products for accessibility at every "natural opportunity," including when they re-design products, upgrade

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<sup>53</sup> Communications Act, 2003; section 10.

<sup>54</sup> <http://www.ofcomconsumerpanel.org.uk/files/advice/P3.pdf>

<sup>55</sup> Royal Decree 1494/2007 of November 12th,

<sup>56</sup> 51/2003 Act on Equal Opportunities, Non-Discrimination and Universal Accessibility of People with Disabilities

<sup>57</sup> <http://www.fcc.gov/telecom.html>

<sup>58</sup> <http://www.access-board.gov/telecomm/rule.htm>

<sup>59</sup> <http://www.fcc.gov/cgb/consumerfacts/section255.html>

services, or significantly change the way they group together product and service packages. Cosmetic changes that do not change the product's actual design, such as changes in the color, make, model name, or designation of a product, may not trigger the need to re-evaluate access.

Features that can be incorporated into the design of products or services with very little or no difficulty or expense must be put in each and every product. In some, but not all, products and services, incorporating access features may be readily achievable. In these instances, companies have the flexibility to distribute access features across product or service lines, so long as the companies implement all features that are readily achievable

The FCC is charged with enforcing Section 255, but it only acts when a consumer files a complaint. It seems that relatively few complaints may have been lodged to date and disability advocates are continuing efforts to educate people with disabilities about their rights and what they should expect under the law<sup>60</sup>. One complaint of relevance that appears to have had concrete impacts is described in the Box below.

#### Complaint against mobile operator and equipment manufacturer (under section 255)<sup>61</sup>

In February 2003, a complaint was filed with the Federal Communications Commission (FCC) by a person with a visual impairment contending that two named mobile phone companies had violated Section 255 by failing to make their wireless telephones and services accessible to people with visual disabilities.

Both parties eventually entered into settlement agreements. The resulting settlements, which were confidential, committed both cell phone companies to take steps to address accessibility. For example, one company disclosed that they intend to introduce a moderately priced wireless handset with new accessibility features to address some of the concerns raised by the complainant. The company apparently also has taken steps to provide people with disabilities easier access to user information such as bills, manuals, and product information in accessible formats; to modify its Web site to be more user friendly for blind and low vision customers; and to modify employee training on disability issues. In addition, the company is assessing more advanced speech output capabilities for mobile handsets carried on its network with a view toward incorporating these capabilities in future models.

Similarly, the other company disclosed that they would also make a number of significant improvements, including those listed above. For example, one mobile handset series was expected to provide a more accessible keypad and audible announcement of certain visually displaying information, such as dialed and incoming phone numbers, battery power and roaming status.

### **Hearing Aid Compatibility Act (HAC)**

The Hearing Aid Compatibility Act of 1988 (HAC Act) is codified at Title 47 U.S. Code §610<sup>62</sup>. It seeks to promote reasonable access to telephone services by persons with hearing disabilities. All telephones manufactured or imported for domestic use since 1989 must be compatible with hearing aids. Cellular phones were originally exempt, but now are not. The FCC has the authority to revoke or limit exemptions to the HAC Act (as exhibited in the case of cellular phones).

The HAC Act generally requires that the Federal Communications Commission (FCC) ensure that telephones manufactured or imported for use in the United States after August 1989, and all "essential" telephones, are hearing aid-compatible. "Essential" telephones are defined as "coin-operated telephones, telephones provided for emergency use, and other telephones

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<sup>60</sup> The American Federation of the Blind has for instance designed an online form to help individuals file a Section 255 complaint with the Federal Communications Commission (FCC). ( <http://www.afb.org/255complaint.asp>)

<sup>61</sup> <http://www.csun.edu/cod/conf/2005/proceedings/2406.htm>

<sup>62</sup> [http://www.fcc.gov/Bureaus/Common\\_Carrier/FAQ/faq\\_hac.html](http://www.fcc.gov/Bureaus/Common_Carrier/FAQ/faq_hac.html)

frequently needed for use by persons using such hearing aids.” “Essential” phones might include workplace phones, phones in confined settings (like hospitals and nursing homes), and phones in hotel and motel rooms. Secure phones, approved by the U.S. Government to transmit classified or sensitive conversations, and phones used with public mobile and private radio services, are exempt from the HAC Act.

FCC rules require that phones subject to the HAC Act: (1) produce a magnetic field of sufficient strength and quality to permit coupling with hearing aids that contain telecoils; and (2) provide an adequate range of volume. FCC rules also establish technical parameters to ensure that telephones are compatible with hearing aids.

FCC rules also require generally that telephones allow volume to be increased to accommodate individuals with hearing disabilities whether or not they use hearing aids. Telephones allowing high volume levels must automatically reset to a lower volume each time the handset is returned to an on-hook condition. Telephone equipment manufacturers may request a waiver permitting high volume telephones to remain at the high volume setting under certain conditions.

Telephone manufacturers are required to clearly label their telephones and the telephone packaging containing hearing aid compatible handsets. They must also make information available in the package or product manual, and require service providers to make the performance ratings of hearing aid compatible telephones available.

The standard for compatibility of digital wireless phones with hearing aids is set forth in American National Standard Institute (ANSI) standard C63.19. It contains two sets of standards: an “M” rating (originally a “U” rating) from one to four for reduced radio frequency (RF) interference to enable acoustic coupling with hearing aids that do not operate in telecoil mode, and a “T” rating (originally a “UT” rating) from one to four to enable inductive coupling with hearing aids operating in telecoil mode. In addition to rating wireless phones, the ANSI standard also provides a methodology for rating hearing aids from M1 to M4, with M1 being the least immune to RF interference and M4 the most immune.

#### Key elements of the FCC rules for mobile handset manufacturers

##### Supply of hearing aid compatible models

###### *Interference reduction*

- Beginning June 6, 2008, each handset manufacturer must meet at least an M3 rating for one third of the handset models that it offers to service providers per digital air interface. If one third of the manufacturer’s handset models works out to a fraction, the manufacturer may round the result down.

###### *Inductive coupling*

- Each handset manufacturer must offer to service providers at least two T3-rated handset models per digital air interface. In addition, manufacturers must ensure that 20 percent of their handset models per air interface meet at least a T3 rating beginning February 15, 2009, 25 percent beginning February 15, 2010, and one third beginning February 15, 2011. If these percentages work out to a fraction, the manufacturer may round the result down; however, any manufacturer offering four or more handset models over a digital air interface must offer at least two that meet a T3 or higher rating.

##### Refresh requirements

- Handset manufacturers must ensure that a certain percentage of their hearing aid-compatible handset models are newly issued that year.

##### Information to consumers

- Packages containing hearing aid-compatible handsets must be explicitly labeled and must include detailed information in the package or product manual
- Beginning January 15, 2009, manufacturers must post information on hearing aid compatibility on their websites

#### Complaints

- Consumers may file complaints with the FCC

#### Monitoring

- To assist the FCC in monitoring the implementation of the requirements, and to provide information to the public, manufacturers must file annual reports on the status of their compliance with the requirements

To ensure that sufficient hearing aid-compatible digital wireless phones complying with the ANSI standard are available, the FCC in 2003 and 2008 set benchmark dates by which digital wireless handset manufacturers and service providers had to gradually increase the number of hearing aid-compatible digital wireless phones available to consumers. These numbers are minimum requirements.

The FCC allows a “de minimis” exception to its requirements for handset manufacturers offering a small number of hearing aid-compatible handsets. Under this exception:

- Mobile handset manufacturers that offer two or fewer digital wireless handsets in the U.S. for a particular air interface need not offer hearing aid-compatible handsets.
- Mobile handset manufacturers that offer three digital wireless handsets in the U.S. for a particular air interface must offer at least one hearing aid-compatible handset model.

Beginning on January 15, 2009, manufacturers and service providers will be required to post information about their hearing aid-compatible handset offerings on their Web sites.

### **Example 11: Australia**

The industry code on *Information on Accessibility Features for Telephone Equipment*<sup>63</sup> already discussed in relation to mobile operators also applies to manufacturers of fixed and mobile telephones. It places obligations on standard telephone equipment suppliers to provide information on the characteristics of their equipment that would benefit people with a disability and older people, which are codified in *Operational Matrices for Reporting on Accessibility Features for Telephone Equipment*<sup>64</sup>. It also requires that information provided by suppliers is clear and comprehensible to assist in identifying equipment that will meet an individual's communications needs.

### **Learning points**

Currently the main example of direct eAccessibility obligations on the telecommunications equipment industry comes from the US and the European examples to date appear to be more indirect. The US example shows that extension of direct regulatory reach to the equipment sector is certainly possible. Another interesting feature of the US approach is the 'horizontal' coverage of some equipment accessibility issues (e.g. in relation to hearing aid compatibility) across the equipment manufacturer, telecoms service provider and deployer sectors.

More generally, both the US and Australia have requirements in relation to the provision of accessibility information in conjunction with telecoms equipment.

## **3.2 Television**

As discussed earlier in this report (Chapter 2.1.2), European-level regulatory activity has up to now focused on TV services, and then only in terms of the fairly weak encouraging statements that have been included in the new audiovisual directive. However, some

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<sup>63</sup> ACIF C625:2005: [http://internet.aca.gov.au/webwr/telcomm/industry\\_codes/codes/c625\\_2005\(1\).pdf](http://internet.aca.gov.au/webwr/telcomm/industry_codes/codes/c625_2005(1).pdf)

<sup>64</sup> ACIF G627:2005: <http://www.commsalliance.com.au/documents/guidelines/g627>



examples of legislation or regulation addressing eAccessibility of television equipment and new services linked to digital TV can be found.

### 3.2.1 TV equipment

In comparison to the broadcast services area, very few countries have laws/regulations that directly address accessibility of end-user TV equipment. In fact, only one EU country seems to make direct reference to this in legislation and only one non-European country appears to have addressed this through hard law.

#### **Example 12: United Kingdom**

In the UK, legislation imposes an obligation on the regulator (Ofcom) in relation to the development of 'domestic electronic communications apparatus' (which can be interpreted to include digital TV equipment as well as telecommunications equipment) that is easy to use, affordable for the widest possible range of individuals, including people with disabilities<sup>65</sup>. However, it seems that Ofcom's role in this is to encourage others and not about direct imposition of obligations on manufacturers.<sup>66</sup>

#### **Example 13: United States of America**

In the US, the Television Decoder Circuitry Act (1990) imposes obligations on manufacturers or importers of TV sets to ensure that they have built-in caption decoding features<sup>67</sup>. The Act requires that television receivers with picture screens 13 inches or larger contain built-in decoder circuitry designed to display closed captioned television transmissions. The Act also requires the FCC to ensure that closed captioning services continue to be available to consumers as new technology is developed.

In 1991, the FCC amended its rules to include standards for the display of closed captioned text on analog television receivers. The development of digital broadcasting required updating of the rules and in 2000 the FCC incorporated sections of industry standard EIA-708-B, "Digital Television (DTV) Closed Captioning" into its rules. The standard provides instructions for the encoding, delivery, and display of closed captioning information for digital television systems. The Commission said that it would require manufacturers to include compliant DTV closed captioning decoder circuitry in DTV devices by July 1, 2002. Devices covered under the rules include DTV sets with integrated "widescreen" displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens.

The Report and Order contains provisions that will allow viewers to choose and alter the color, size, and font of their captioning and to choose between multiple streams of captioning, such as "easy reader" or alternate language captioning. The Commission said that requiring decoders to be able to respond to these various features is necessary to ensure that closed captioning will be accessible for the greatest number of persons who are deaf and hard of hearing.

The Order also requires that cable providers and other multichannel video programming distributors transmit captions in a format that will be understandable to the decoder circuitry in digital television receivers.

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<sup>65</sup> Communications Act, 2003; section 10.

<sup>66</sup> <http://www.ofcomconsumerpanel.org.uk/files/advice/P3.pdf>

<sup>67</sup> Television Decoder Circuitry Act (1990) and updated regulator's (FCC) rules;  
[http://www.fcc.gov/Bureaus/Mass\\_Media/News\\_Releases/2000/nrmm0031.html](http://www.fcc.gov/Bureaus/Mass_Media/News_Releases/2000/nrmm0031.html)

## Learning points

Overall, very few instances can be identified where any eAccessibility aspect TV equipment has been addressed. Again, however, the US provides an example of how direct legislation can be introduced to impose accessibility obligations on TV equipment manufacturers. In the US, the legislation imposes obligations on manufactures to build caption decoding features into TV sets and to ensure availability of captioning services as new technology arises. It also addressed standards for the display of closed captioned text on analogue and digital television receivers and imposes obligations on cable providers and other multi channel video programming distributors to ensure interoperability of the caption services they provide with digital receiver equipment.

### 3.2.2 New services/features associated with digital TV

The introduction of digital TV introduces both new opportunities (e.g. in principle it should be easier and cheaper to implement accessibility features such as captions and audio description) and new challenges that are connected to the availability of entirely new service features (e.g. accessibility barriers that can be presented by electronic programme guides).

Although in a number of Member States there is some exploratory activity in relation to eAccessibility requirements that emerge from new (digital) TV services, there seem to be few examples of direct imposition of eAccessibility obligations in relation to new service features such as electronic programme guides. One example, from the UK, is presented below.

#### **Example 14: United Kingdom**

In response to a legislative requirement under the Communications Act<sup>68</sup>, the communications regulator (Ofcom) has published a *Code of practice on Electronic Programme Guides*<sup>69</sup> that sets out the practices to be followed by EPG providers. Section 310(3) of the Act requires that Ofcom's EPG code obliges EPG providers to incorporate such features in their EPGs as are appropriate to enable, so far as practicable, people with disabilities affecting their sight or hearing to use the EPGs for the same purposes as people without such disabilities. EPGs are also to provide information about assistance in relation to programmes (e.g. how to navigate radio and television listings, and how to operate television access services such as subtitling, signing and audio description), as well as facilities for making use of that assistance. The requirements that EPG providers should meet in order to comply with the Code are outlined in the Box overleaf.

## Learning points

The example from the UK shows how accessibility of electronic programme guides (EPGs) has been addressed in a concrete manner. It covers both accessibility of the EPG in itself and also usage of EPGs to provide accessibility information more generally. In addition, it takes a forward-looking perspective to encourage appropriate eAccessibility efforts by providers as EPGs evolve in the future.

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<sup>68</sup> Communications Act (2003), section 310

<sup>69</sup> <http://www.ofcom.org.uk/tv/ifi/codes/EPGcode/>

## **Code of Practice for EPG Providers**

### General principles

EPG providers are required to:

- make such adjustments to their EPGs as are practicable to secure that they can be used by people with disabilities affecting their sight or hearing for all the same purposes as they are used by other people; and
- promote awareness of the scope of EPGs to provide information about programmes with access services, in conjunction with broadcasters and representatives of people with disabilities affecting their sight or hearing.

Ofcom expects EPG providers to consult disability groups about the way they meet their obligations under the code, which are set out below.

### Adjustments to EPGs to facilitate their use by disabled people

At present, there is limited scope to reconfigure EPGs so as to facilitate their use by people with disabilities affecting their sight or hearing. In particular, much of the functionality of EPGs is dependent upon set top box hardware and software, as well as the data made available by broadcasters. However, Ofcom expects the needs of people with disabilities affecting their sight or hearing to be an integral part of planning for the future development of EPGs. To this end, Ofcom expects EPG providers to work with disability groups, broadcasters and set top box manufacturers on ways of improving usability.

EPG providers are required to produce by 30 November 2004, and thereafter annually a statement of the steps they have taken and plan to take to facilitate the use of their EPGs by disabled people. Ofcom will assess the adequacy of these statements in the light of the particular circumstances of each EPG.

EPG providers will need to have regard to their obligations under the Disability Discrimination Act 1995 to make reasonable adjustments in the provision of facilities and the delivery of services so as to make these accessible to disabled people, and should seek their own advice on this.

### Provision of information

EPG providers will be required to ensure that information included in relation to television programmes indicates which programmes are accompanied by television access services. A corresponding provision has been included in the Code on Television Access Services requiring broadcasters to make such information available to EPG providers. Where practicable, programme information in the EPG should indicate by means of standard abbreviations the nature of the access service provided. Where applicable, the programme synopsis in the EPG should indicate which programmes are accompanied by television access services, using the following upper-case letters - subtitling (S), signing (SL) and audio description (AD). Where practicable, these abbreviations should be explained in an appropriate part of the EPG. If non-standard terms are used in any part of the EPG, and removal or replacement by the standard abbreviations would require software or hardware updates, this should be done at the next reasonable opportunity.

EPG providers should provide on an easily accessible part of their EPGs (where practicable) or alternatively in other accessible ways (e.g. on websites or interactive services) information for people with disabilities on: how to use the EPG; how to use the access services accompanying the programmes; what options exist for customising the appearance of the EPG to make it easier to use; what additional sources of help and information are available in other places (e.g. on websites, or from telephone / textphone helplines), whether from the EPG operator, or television service providers.

### Promotion of awareness

EPG providers are required to work with broadcasters, platform providers and disability groups to publicise the information and facilities available on EPGs to assist disabled people. This should include information targeted at publications used by disabled people, and periodic publicity featured prominently on EPGs.

### 3.3 Business websites

As described in Chapter 2, EU-level policy intervention has so far focused mainly on public web sites. Also, at the level of the Members States there appear to be no examples of direct legislative obligations for eAccessibility of business websites. However, in a few countries there is some direct mention of business websites in accessibility legislation, even if not imposing direct obligations. Examples presented here come from Italy and Germany.

In addition, in some European and other countries, anti-discrimination legislation has been interpreted to cover business websites and has led to some positive actions. Examples of general anti-discrimination legislation from AU, MT and AT are briefly introduced below and presented in more detail in section 3.7. However, reliance on indirect legislation can sometimes be problematic, as indicated in the example below from the US.

#### **Example 13: Italy**

In Italy, the so called 'Stanca law' is the main accessibility legislation<sup>70</sup> and, inter alia, imposes eAccessibility related obligation on public web sites owners. In addition, the law includes statements (Article 6) encouraging non-public web site owners to comply with the requirements imposed on public web sites owners, but without imposing mandatory requirements on them. Private parties maintaining a web site are enabled to participate in an eAccessibility related certification scheme set out in the law.

#### **Example 14: Germany**

In Germany, accessibility legislation entitled 'Barrierefreie Informationstechnik-Verordnung' (BITV) of July 2002<sup>71</sup> stipulates the right of registered disability organisations to call upon private sector companies or relevant umbrella organisations to enter into structured negotiations with the aim to generate a so-called "target agreement" ("Zielvereinbarungen") that defines technical measures to be undertaken by the private company to implement the BITV. Key elements that have to be addressed include:

- specification of the parties concluding the "target agreement" and of its scope and duration,
- specification of minimum requirements on how relevant offerings are to be changed so that they are accessible to disabled people and
- a deadline or time plan by when the minimum requirements must be fulfilled.

All "target agreements" that are under negotiation or have been concluded under the BITV are to be published on a dedicated web site. Overall, 12 target agreements are reported at the moment. Of these, two instances explicitly address web accessibility. The agreements are concluded on a case by case basis and agreed targets may vary accordingly. Since its introduction in 2002, this interventional instrument does not seem to have been used to a large extent to force private organisations into negotiations. The registered disability organisations seem to lack resources and expertise to enforce wider implementation of web accessibility with help of this instrument. The government has announced support to the process.

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<sup>70</sup> "STANCA law" - "Disposizioni per favorire l'accesso dei soggetti disabili agli strumenti informatici", pubblicato sulla Gazzetta Ufficiale n. 13 del 17 gennaio 2004.

<sup>71</sup> [http://www.bmgs.bund.de/download/gesetze/behinderung/bitv\\_ver.htm](http://www.bmgs.bund.de/download/gesetze/behinderung/bitv_ver.htm)

### **Example 15: Anti-discrimination legislation - Australia, Austria, Malta**

Anti-discrimination legislation in Australia<sup>72</sup>, Austria<sup>73</sup> and Malta<sup>74</sup> has been invoked in relation non-governmental websites. In Australia, there was the well-known case against the Sydney Olympics websites; and in Austria and Malta some cases and/or negotiations have been launched in relation to various business websites.

### **Example 16: Anti-discrimination legislation - United States of America**

In the United States, courts have ruled both positively and negatively on the ADA's<sup>75</sup> applicability to business websites.

The Southern District of Florida held in *Access Now, Inc. v. Southwest Airlines* that the airline's website was not a "place of public accommodation" under the ADA and thus dismissed plaintiff's complaint with prejudice. The court found the website did not fit into the definitional paradigm because it was not a concrete place of public accommodation or facility and therefore there was no authority to expand the explicit rights enumerated in the ADA.

However the 2007 decision of the federal district court for the Northern District of California, concluded that Title III "applies to the services of a place of public accommodation, not services in a place of public accommodation." Following this and the subsequent certification of a California class (for purposes of the California Unruh Act and ADA Title III), and a national class (for purposes of Title III), Target and the National Federation of the Blind (NFB) reached a settlement agreement in August 2008. The settlement, in part, requires Target to make its website accessible subject to the standards/criteria of the NFB Nonvisual Accessibility Certification program and monitoring by NFB, without admitting liability. These standards draw from the Section 508 and W3C standard but focus primarily on nonvisual accessibility.<sup>76</sup>

No one standard emerges as a uniform rule; however, the ADA does appear to apply when there is a nexus between the website and a business with a physical location. That is, the website may be considered part of a public accommodation when it is not merely an online business, but rather a business with a clear physical existence.<sup>77</sup>

## **Learning points**

In general, business web sites have so far remained largely unaddressed by any direct eAccessibility related legislation. Non-specific anti-discrimination legislation seems to be the main legislative approach that reaches business web sites, and then only in a relatively small number of countries to date. Some examples from Member States show that this approach can be successful on a case-by-case basis, although the example from the US shows that reliance on such an approach can sometimes be problematic. More generally, such an approach typically leads to case-by-case impacts and is not generally the most effective way to bring about more systemic change.

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<sup>72</sup> Disability Discrimination Act (1992)

<sup>73</sup> Bundesgesetz über die Gleichstellung von Menschen mit Behinderungen (BGStG), 2005

<sup>74</sup> Equal Opportunities Act (EOA) of 2000

<sup>75</sup> The Americans with Disabilities Act (ADA) of 1990 guarantees equal opportunity for individuals with disabilities in public accommodation, employment, transportation, state and local government services, and telecommunications. Guidance from the Department of Justice suggests that government websites should be accessible, but notes that making a website accessible is not specifically required by law in cases where equivalent access to a program can be provided in some other way. That means, an inaccessible website is not in itself illegal. It appears to be the case, de facto, that agencies tend to assume that web pages should be accessible, but it is unclear to what extent specific actions are taken in this regard.

<sup>76</sup> Class Settlement Agreement and Release, NFB v. Target Corp., No. C 06-01802 MHP (August 28, 2008), [http://www.nfbtargetlawsuit.com/final\\_settlement.htm](http://www.nfbtargetlawsuit.com/final_settlement.htm)

<sup>77</sup> Peter Blanck, A Flat Cyber World; and Access to it By People with Disabilities, *Assistive Technology Journal*, 18(1) (2008).

### 3.4 Self-service terminals

In Europe the only direct policy interventions on self-service terminal accessibility in the Member States seem so far to have comprised non-legislative measures such as action plans. In a few EU countries some attention seems to have been given to ATM accessibility in the framework of general anti-discrimination legislation, albeit without imposing any direct obligation on manufacturers and/or deployers of such machines.

Outside the European Union, notably in the US, equality legislation explicitly includes automated teller machines (ATMs) within its scope and has implemented specific guidelines/standards for this. The topic has also been given some policy and industry attention in Australia and in Canada in terms of developing voluntary technical standards.

#### **Example 17: Portugal**

Pursuant to disability-related legislation adopted in 2004<sup>78</sup> and setting out a general legal basis for a system of rehabilitation and participation of people with disability, a National Plan for the Promotion of Accessibility (PNPA) 2007-2015 was adopted in 2006. Inter alia, the action plan includes a commitment (Action 2.5 c) to ensure that automatic teller machine (ATM) interfaces, information kiosks, systems of selling transportation tickets, as well as public Internet spaces can be accessed by people with disabilities, notably persons with vision and hearing impairments as well as wheel-chair users. This measure is expected to be executed during 24 months, starting in February 2007.

#### **Example 18: United States of America**

The Americans with Disabilities Act (ADA) adopted in 1990 is the landmark civil rights law in the United States protecting persons with disabilities from discrimination in employment, public services, and by private businesses. In summary the law guarantees equal opportunities for individuals with disabilities in public accommodations, employment, transportation, State and local government services, and telecommunications. Technical guidelines<sup>79</sup> developed by the US Access Board specify access requirements for a wide range of facilities in the public and private sectors covered by the law.

The Board's guidelines detail how accessibility is to be achieved in new construction and alterations and provide specifications for various building elements and spaces, including entrances, ramps, parking, restrooms, telephones, ATMs, alerting systems among others. In general, they contain two types of requirements for accessibility, so-called 'scoping' and 'technical' requirements.

As regards ATMs, the scoping requirements (section 220) stipulate that where automatic teller machines or self-service fare vending, collection, or adjustment machines are provided, at least one of each type provided at each location shall comply with the technical requirements set specified in the guideline (section 707). If a bank provides both interior and exterior ATMs, each such installation is considered a separate location. Accessible ATMs, including those with speech and those that are within reach of people who use wheelchairs, must provide all the functions provided to customers at that location at all times. For example, it is unacceptable for the accessible ATM only to provide cash withdrawals while inaccessible ATMs also sell theater tickets.

The technical requirements specified in the guidelines (section 707) address a wide range of user requirements which are related to different types of impairments, including provision of speech output. If an ATM provides additional functions such as dispensing coupons, selling theatre tickets, or providing copies of monthly statements, all such functions must be available to customers using speech output.

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<sup>78</sup> Law 38/2004 of the 18th August 2004

<sup>79</sup> ADA and ABA Accessibility Guidelines for Buildings and Facilities published in the Federal Register July 23, 2004 and amended August 5, 2005.

Interactive transaction machines (ITMs), other than ATMs, are not covered by the guidelines. However, for entities covered by the ADA, the Department of Justice regulations that implement the ADA provide additional guidance regarding the relationship between these requirements and elements that are not directly addressed by these requirements. Federal procurement law requires that ITMs purchased by the Federal government comply with standards issued by the Access Board under Section 508 of the Rehabilitation Act of 1973, as amended (section 707).

There seems to have been a strong positive impact as talking ATMs, accessible for people with visual impairments, are now commonly available across the United States.<sup>80</sup> Such an impact is also suggested by the fact that relevant law cases have emerged. For instance, the National Federation for the Blind reached a settlement with ATM operators in the state of Massachusetts in the case of Commonwealth of Massachusetts v. E\*Trade Access, Inc<sup>81</sup>. Similarly, case was taken in New Jersey<sup>82</sup>

### **Example 19: Australia**

The Australian Human Rights Commission (HREOC), formally entitled Human Rights and Equal Opportunity Commission, was established in 1986 by an act of the federal Parliament. The Commission is an independent statutory organisation and reports to the federal Parliament through the Attorney-General. On the initiative of the latter, HREOC was asked to investigate the implications for older Australians and Australians with a disability of new technologies in e-commerce and the provision of government and other services. One of the outcomes of this was the setting-up of a joint forum involving the Australian Bankers' Association and HREOC to find avenues to improve accessibility in the banking industry. This activity resulted in the publication of a set of industry standard<sup>83</sup> in 2000 that aim at improving accessibility of electronic banking services in general. Under the sponsorship of the ABA, representatives from the banks, other financial institutions, community groups and retailers have developed Industry Standards for:

- Electronic Funds Transfer at the Point of Sale (EFTPOS);
- Automated Telephone Banking;
- Internet Banking;
- Automatic Teller Machines (ATMs).

For accessibility of ATMs, the Standard specifies requirements, guidelines, recommendations and suggestions for the design, manufacture, installation and configuration of wall-mounted, stand-alone and enclosed ATMs and for ATM sites. Certain requirements also apply to drive-through ATM sites. Levels of performance required to make such facilities usable by people with a range of access needs are specified. The Standard also specifies strategies that can be employed to meet users' requirements, and contains recommendations applicable to other parties who provide provisioning and support services to financial institutions. Many of the recommendations relate to the physical facilities of the ATM, but others extend to server-side back end processes and software modifications that would be necessary to provide specific levels of functionality.

The standards listed above have been released for voluntary adoption by members of the Australian Bankers' Association and other financial institutions. As stated in section 7 of the standard on ATMs, it does not have the force of law, and adopting the standard does not guarantee fulfilment of legal responsibilities under the Commonwealth Disability Discrimination Act 1992 (DDA), nor does it remove from any institution their obligation to comply with the requirements of that Act or any other relevant legislation.

Against this background, the Standard on accessible ATMs has been developed in consultation with interested parties with the objective of describing best practice in accessibility consistent

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<sup>80</sup> Information Access in the Financial Industry: Talking ATMs, Accessible Formats, and Web Accessibility (Bridges to Better Advocacy, March 24-26, 2004 Conference), [http://www.nls.org/conf2004/information\\_access.htm](http://www.nls.org/conf2004/information_access.htm)

<sup>81</sup> <http://tndisability.org/news/2007/08/21/test/>

<sup>82</sup> Marcovecchio v. Commerce Bancorp, Inc., 2005 U.S. Dist. LEXIS 912 (D. N.J.).

<sup>83</sup> <http://www.bankers.asn.au/ArticleDocuments/ATM%20Standard.htm>

with the DDA. An organisation choosing to adopt the Standard may therefore have some confidence that they are implementing requirements which have evolved from community consultation with interested parties, and that adoption of the Standard will carry some weight as a defence against a complaint lodged under the DDA. Also, a financial institution may seek protection from complaint under the DDA during implementation of the Industry Standard by lodging a temporary exemption application with HREOC on the basis of its commitment. Where a financial institution commits to implementing the Industry Standard through an action plan, any individual or group may monitor implementation.

### **Example 20: Canada**

The Canadian Standards Association has issued a national standard<sup>84</sup> for barrier-free automated banking machines in 2007. It describes technical requirements that are applicable to the design and manufacturing of wall-mounted and stand-alone ABMs and to ABM sites but excludes drive-through ABMs. In particular it addresses physical accessibility, multiple modalities of output (visual and audio) and multiple modalities of input (visual and tactile identifiable keys).

In addition, a second national standard<sup>85</sup> has been released with a focus on specifying minimum accessibility and usability requirements for self-service interactive devices which are intended for public use in general. It specifies requirements for making both electronic and mechanical self-service interactive devices accessible to people with a range of physical, sensory, and cognitive disabilities. Banking machines (ABMs) which are covered by the previous standard are not addressed, as well as websites and web applications that are beyond the control of the service provider and accessed from public devices. This standard has been developed to fulfil an expressed need for a national technical Standard covering a broad range of interactive devices.

Both standards have been developed for voluntary adoption by relevant parties and make no reference to any legislation.

## **Learning Points**

As mentioned above, legal intervention concerning accessibility of self-service terminals has largely focused on ATMs rather than on self-service terminals in a wider sense (e.g. self-contained ticket machines). One approach has been through imposing a positive duty on the ATM deployer sector in the framework of general anti-discrimination legislation (in terms of technical guidelines). Another approach has involved proactive (anticipatory) development of voluntary industry standards with a view to describing best practice potentially consistent with anti-discrimination legislation, even if the latter is not necessarily explicitly invoked in this regard.

## **3.5 Computer hardware/software**

There seem to be no clear examples of direct legislation / regulations imposing accessibility obligations on the computer hardware or software industries in any of the Member States or other countries. To date, public procurement is the main vehicle for encouraging eAccessibility in these sectors and this approach is addressed in more detail later in this report. Policies in relation to assistive technology are also important and this approach is also briefly discussed in the following section.

## **3.6 Assistive technology**

In almost all European Member States some kind of public assistive technology delivery scheme is available, although the scope of focus and the range of actual technologies

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<sup>84</sup> CAN/CSA-B651.1-01 (R2007) available at: <http://www.csa-intl.org/onlinestore/GetCatalogItemDetails.asp?mat=2011990>

<sup>85</sup> CAN/CSA-B651.2-07 available at: <http://www.csa-intl.org/onlinestore/GetCatalogItemDetails.asp?mat=2017784>



provided seems to vary considerably from country to country.<sup>86</sup> An example of a fairly comprehensive approach is illustrated in the case of Denmark below.

### **Example 21: Denmark**

In Denmark, the Social Services Act from 2002<sup>87</sup> stipulates rules for the provision of assistive devices. Responsibilities are shared between municipalities and counties. There is no complete list of the assistive devices that can be provided, or a list of products considered to be assistive devices. However, amendment of the law in June 1998 resulted in a distinction between three groups of technologies: general equipment, consumer goods of particular value to users with disabilities, and assistive devices<sup>88</sup>.

General equipment includes products which anyone requiring them can acquire, such as ordinary beds, TVs, mattresses, chairs, telephones, etc. No grants are given for these. Consumer goods are products manufactured and sold widely in anticipation of ordinary use among the general populace, but which are of special value to people with disabilities (e.g. computers for people unable to talk). 50 per cent grants are awarded for these types of assistive devices, which then become the property of the user. Finally, there is the specific assistive devices category, comprising products manufactured with a view to helping to alleviate the effects of physical or mental disability.

In order to support employment among people with disabilities the public employment service provides various services and devices<sup>89</sup>. The service operates in a rather non-bureaucratic manner. There are no predefined lists of equipment that are provided, and the provision scheme is in principle open to any kind of technology, provided it fits the intended purpose.

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

Apart from legislation that regulates particular ICTs sectors, there are also some examples of cross-sectoral and/or non-sector-specific approaches that have emerged in some Member States. These are cross-cutting in the sense that they, explicitly or implicitly, covering a number of ICT sectors within a single policy framework or measure.

One set of examples concern laws that make specific reference to ICTs and/or eAccessibility and the others concern laws on disability (equality) themes where the ICT/eAccessibility dimension is more implicit than explicit.

### **3.7.1 eAccessibility an explicit focus**

Non-sectoral legislation that explicitly addresses eAccessibility matters can be found in some European countries. In the US, a number of laws have been implemented that cut across different ICT domains.

### **Example 22: Spain**

In Spain, the Law on Equal Opportunities, Non-Discrimination and Universal Accessibility of People with Disabilities (LINDOAU)<sup>90</sup> covers a range of technologies, products and services related to the information society and social communications media. While LINDOAU is addressed to public authorities and civil society and has an almost universal scope, its

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<sup>86</sup> DG Employment and Social Affairs (2003) Access to Assistive Technology in the European Union

<sup>87</sup> Bekendtgørelse af lov om social service. Lovbekendtgørelse nr. 755 of September 9th, 2002

<sup>88</sup> [http://www.nsh.se/download/Provision\\_Assistive\\_Technology.pdf](http://www.nsh.se/download/Provision_Assistive_Technology.pdf)

<sup>89</sup> Lov om om kompensation til handicappede i erhverv

<sup>90</sup> Law 51/2003, the Law on Equal Opportunities, Non-Discrimination and Universal Accessibility for Persons with Disability (LIONDAU) Official Link: [www.boe.es/boe/dias/2003/12/03/pdfs/A43187-43195.pdf](http://www.boe.es/boe/dias/2003/12/03/pdfs/A43187-43195.pdf)

implementation requires the adoption of subsidiary Royal Decrees<sup>91</sup> in different fields (article 3). These include: Telecommunications and the Information Society; Urban Public Spaces, infrastructure and buildings; Transportation; Goods and services open to the public; and relations with public administrations.

Two key definitions in the act concern 'universal accessibility' and the concept of 'design for all'. Universal accessibility is defined (Article 2) as a "condition to be met by goods, services, products, processes, environments, objects, instruments, tools and devices so that they can be understood, used and practiced by all people in a secure, comfortable and autonomous manner". 'Design for all' is defined as "any activity by humans that conceives or projects from its origin any service, environment, process, instrument, good, product, device, tool or object that can be used by every person".

The act identifies ICT's as a priority in the context of accessibility and provides a time scale for expected achievement of acceptable standards. This is two years to achieve basic accessibility, four to six years in respect of new products and services and eight to ten years where there is a requirement for reasonable adjustments.

The National Disability Council was established at a later date under article 15 of LIONDAU<sup>92</sup>, with its main function being the promotion of equality of opportunities and non discrimination of persons with disabilities. For this purpose the NDC created under its competence, a Specialized Permanent Office, with a brief to provide a variety of functions including: provision of legal advice and support to victims of discrimination on the ground of disability; study and analysis of complaints of discrimination on the ground of disability; propose measures to prevent situations of discrimination; produce an annual report on the status of equality of opportunities, non-discrimination and universal accessibility of persons with disabilities; and cooperate with judicial and administrative bodies in all relevant disability related matters.

A Royal Decree<sup>93</sup> expands on earlier legislation<sup>94</sup> and includes within its scope telecoms, information society and media. The requirement to meet basic levels of accessibility is developed in a number of fields, including mobile phones, public websites, ICT hardware, Digital TV, Media and covers TV audio visual content and Electronic Signature. In respect of ICTs, hardware used by public administrators is required to be accessible in accordance with the prescribed norms; UNE 139801:2003 and UNE 139802:2003.

Under the direct mandate of LINDAU an act on infringements and penalties has been enacted<sup>95</sup> potentially allowing penalties for breaches of the legislation in respect of accessibility. It proposes administrative sanctions and does not preclude criminal liability. Financial penalties fall into three levels of liability which can attract pecuniary fines from 300 euro to 1,000,000 euro.

Further an act on the recognition of Spanish sign language<sup>96</sup> has been adopted in 2007. The act establishes a set of provisions for both the use of Spanish sign language (article 14) and the use of oral support communication measures (article 23).

Beyond this, a national action plan on accessibility plan<sup>97</sup> has been created as a follow-on from LIONDAU, designed in order to support accessibility related provisions made in the framework law. One of the Plan's five general objectives is the "promotion of accessibility in new technologies". More specific objectives are: develop, as a top priority, accessibility in the area of new technologies; promote applied research in relation to the improvement of accessibility and design for all as standard for new developments; provide evidence on the economic and social viability of design for all in all the different applied areas.

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<sup>91</sup> Under Spanish Constitutional System, the Act "Ley" is enacted by the Legislative Power, but subsidiary legislation "Decreto" is enacted by the Executive Power. For the purpose of this work that subsidiary legislation will be defined as "regulation".

<sup>92</sup> REAL DECRETO 1417/2006,

<sup>93</sup> REAL DECRETO 1494/2007

<sup>94</sup> Act 51/2003

<sup>95</sup> Act 49/2007

<sup>96</sup> Act 27/2007

<sup>97</sup> Plan on National Accessibility 2004-2012

### **Example 23: France**

In France the Law for Equal Rights and Opportunities, Participation and Citizenship of People with Disabilities<sup>98</sup> provides a general framework concerning the inclusion of people with disabilities in society. The law creates obligations to provide equal treatment and opportunities to people with disabilities at work, in accessing on-line services and in the provision of telecommunications services. It addresses accessibility in various areas - employment, public services, telecoms and broadcasting, and various private services. There are clear obligations imposed for accessibility of online public services.

It provides (Article 3) that the State, collectives, public bodies and private persons responsible for public services shall ensure that people with disabilities can access ICT technologies at work. This article is a section of a law regulating electronic administration in France, more generally. Thus, it concerns all public and private organisations working on behalf of public services. It implements the EU employment equality directive (Article 24). The law refers to equality of treatment for employees with disability in general and it doesn't refer to specific forms of ICT applications and instruments. Special equipment is included within reasonable accommodations that employers are obliged to make, and could also be interpreted to require accessibility of ICTs and online services in the workplace.

Moreover, the law directly addresses the accessibility of public digital communication services and it creates a new obligation on public sector service providers in France (Article 47). Public digital communication services (public Web sites in particular, but also phone and TV services) must be accessible to people with disabilities according to international standards. However, the law does not specify the services that are concerned in more detail nor does it refer to specific standards.

A subsequent decree is to state the rules, methodology, delays (not more than 3 years) and penalties. This decree should also specify measures concerning training courses for the civil servants in charge of these public services. The decree has not been published yet, however. Several versions have been circulated and submitted to the Constitutional Council (Conseil Constitutionnel), but were apparently rejected. It is not clear when Article 47 will begin to have effects. After the decree has been published there might be an order making its application mandatory.

The law also provides that a national centre for processing phone calls from persons with hearing impairments is to be established (Article 72). Through this centre persons with auditory impairments are to be enabled to access emergency communications services, such as calling fire services, police, medical assistance, etc. A decree is being prepared for the creation of this centre.

Further it is provided (Article 74) that those television channels whose annual audience is over 2.5% of the overall television audience in France must provide fully accessible programmes by 2010. Up to now there has been no regulation relating to subtitling, sign language interpretation or to audio description. In general, the law refers to public on-line services whatever communication medium is used. Thus, it should apply to Digital TV as well. Nevertheless, it is unclear whether and if so in what way subsequent decrees will address this aspect.

### **Example 24: Austria**

The Austrian law on equal opportunities of people with disabilities<sup>99</sup> was amended in 2006. It regulates anti-discrimination in relation to different parts of daily and working life. This explicitly includes technical devices and information technology<sup>100</sup>. In particular, the law applies to all areas of federal government (including, for instance, governmental websites which also fall under the Austrian E-Government law) and to the access to public goods and services in all areas falling under the regulatory competencies of the federal government. The latter includes private consumer transactions (e.g. buying products from an online shop) but also public goods

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<sup>98</sup> Law n° 2005-102 of 11 February 2005

<sup>99</sup> Bundesgesetz über die Gleichstellung von Menschen mit Behinderungen (BGStG), 2005

<sup>100</sup> Cf. website on equal opportunities of people with disabilities of the Austrian ministry of social and consumer affairs, <http://www.gleichundgleich.gv.at/cms/gleich/thema.html?channel=CH0641>.

and services that are not related to transactions (e.g. information provision such as online train/bus/flight schedules, telephone hotlines, websites of private companies)<sup>101</sup>. This implies that the theoretical scope of the law in relation to eAccessibility is rather wide, covering many potential areas of discrimination in relation to the use of ICT. As regards web accessibility, the Web Content Accessibility Guidelines are mentioned explicitly as an applicable standard for web accessibility in the law's commentary<sup>102</sup>.

In case of potential discrimination against a person with disabilities the law calls first for an arbitration process, conducted by the federal social authority (Bundessozialamt). The authority acts as a mediator and will present a proposal for arbitration to the suitor and the defendant. This process seems to work comparatively well so that arbitration processes usually do not last longer than three months on average. In 2007, about 40% of all arbitrations led to an extrajudicial settlement, while 50% ended without settlement. In the latter case this was supposedly often due to agreements made between suitor and defendant outside the arbitration process<sup>103</sup>. This seems to be the solution preferred by many defendants in order to avoid both public notice and appearing in the official arbitration statistic.

There have been several arbitration processes concerning eAccessibility related matters. These concern provision of sub-titles and sign language by TV broadcasters, accessibility of government websites and of online banking websites. Further information on those arbitration cases and their outcomes are currently not available.

### **Example 25: Norway**

In Norway, new legislation with relevance to eAccessibility has been enacted in June 2008. The Discrimination and Accessibility Act<sup>104</sup> is framed as a disability specific non-discrimination law. The Act guarantees a right to accessibility to "the main solution as regards the physical conditions so that the mainstream functions of the enterprise can be used by as many people as possible", not a more general right to access to goods and services as such.

As regards eAccessibility requirements, the main provisions are in Articles 11 (Duty to universal design of information and communication) and Article 16 (Enforcement). Approximate English translations are provided in the Box below.

#### **Main eAccessibility-related provisions**

##### **§ 11 Duty to universal design of information- and communication**

Information and communication technology (ICT) refers to technology and systems of technology used to express, create, change, exchange, store, duplicate and publish information, or in other ways make information usable.

New ICT solutions that underpin the ordinary functions of the enterprise, and are main solutions with a user interface intended for the use of or made available for the general public, shall be subject to universal design from 1 July 2011 but not earlier than twelve months after there are standards or guidelines available on the content of the requirement. For existing ICT the requirement applies from 1 January 2021. The requirement does not apply to ICT solutions regulated by other legislation.

The administrative agency appointed pursuant to §16 may grant dispensation from the requirement pursuant to paragraph two if there are particularly weighty reasons.

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<sup>101</sup> Bundesministerium für Soziales und Konsumentenschutz, Gleichstellung - Orientierungshilfe zum Thema Behinderungen, Vienna 2007, p. 23-24. Available online at: [http://www.gleichundgleich.gv.at/cms/gleich/attachments/0/3/5/CH0725/CMS1157449320028/8gleichstellung-webfassung\\_2007.pdf](http://www.gleichundgleich.gv.at/cms/gleich/attachments/0/3/5/CH0725/CMS1157449320028/8gleichstellung-webfassung_2007.pdf) (in German only).

<sup>102</sup> <http://www.gleichundgleich.gv.at/cms/gleich/thema.html?channel=CH0673>.

<sup>103</sup> Bundessozialamt, Behindertengleichstellung - Bericht des Bundessozialamts 2006/2007. Available online at <http://www.gleichundgleich.gv.at/cms/gleich/attachments/8/2/5/CH0655/CMS1150787940837/bericht2006-2007.pdf> (in German only).

<sup>104</sup> Lov om forbud mot diskriminering på grunn av nedsatt funksjonsevne (diskriminerings- og tilgjengelighetsloven) [http://lovdata.no/cgi-wif/wifldles?doc=/usr/www/lovdata/all/nl-20080620-042.html&emne=diskriminering\\*&&](http://lovdata.no/cgi-wif/wifldles?doc=/usr/www/lovdata/all/nl-20080620-042.html&emne=diskriminering*&&)

The King shall issue regulations that provide more detailed provisions about the scope and content of the duty to universal design pursuant to this article.

#### § 16 Enforcement

(...)

The King will appoint the administrative agency which shall supervise that the requirements in § 11 are abided. The administrative agency may order correction against an enterprise that does not abide the requirements given in or pursuant to § 11, article two, and may impose compulsory fines to ensure enforcement of the injunction if the enterprise has failed to comply with the deadline for abiding the injunction.

The administrative agency may require the necessary information to accomplish its duties pursuant to the act, and require access to ICT solutions as mentioned in § 11. The same applies to the appeal body in appeals against decisions pursuant to paragraph two.

Appeals against the validity of the decision by administrative agency or the appeal body must be raised within three months after information about the decision has been received. The decision pursuant to paragraph two cannot be brought to court before the right to lodge a complaint has been used and the complaint has been decided.

The King may issue regulations on rules about compulsory fines pursuant to paragraph two, hence the size of the compulsory fine, duration and other provisions concerning stipulation and enforcement."

The law requires that ICT solutions that underpin the ordinary functions of the enterprise, and are main solutions with a user interface intended for the use of or made available for the general public, be subject to universal design. The new law does not apply to in-house ICT systems (thus public Internet services will be covered but not in-house Intranet services at the workplace).

It has not been proposed to make a legally binding duty of adaptation in those cases where universal design will not be sufficient to ensure accessibility.

In terms of scope, the vital factor is whether the solution has an ICT based interface to the end user as an operator and not whether it is independent or interacts with other systems. ICT that does not create an ICT based interface the user has to interact with to use the product is not covered by the law. In the law, Information and Communication Technology (ICT) has been defined as "technology and systems of technology used to express, create, change, exchange, store, duplicate and publish information, or in other ways make information usable".

When deciding whether a solution is a "main solution" the number of users will be critical. A solution that is used by many will more easily be considered a main solution than a solution few people use.

The requirement does not apply to ICT solutions regulated by other legislation or in cases where the scope of the ICT solution is accessibility to transport. Accessibility requirements to transport systems will be developed in administrative regulations to the existing sector legislation. In similar vein, ICT solutions in public buildings and the built environment will be covered by new provisions in the Planning and Building Act and not the Discrimination and Accessibility Act. More practically, this means that there will be different agencies and administrative routines for the enforcement.

For new ICTs the provisions will be enforced from 1 July 2011 (i.e., three years after the act was adopted) but not earlier than twelve months after there are standards or guidelines available on the content of the requirement. For existing ICTs the requirement applies from 1 January 2021 (i.e., 13 years after the act was adopted).

A study group appointed in 2008 by the Ministry of Government Administration and Reform argued that standardisation of universal design of ICT will require a description of the interface between universal design, accommodation for population groups and individuals (assistive technology and personal assistance). This will define the limits for the application of the law. The study group concluded that it was likely that already existing standards and guidelines nationally and internationally would be sufficient and that here was no need for the development of new ones. The main project of the study group will work on key aspects of the

implementation of the law, including development of proposals on ICT solutions to be covered by the law; development of proposals on sector responsibility for the covered ICT solutions; and evaluation and selection of standards and guidelines (functional standards, design standards and process (evaluation) standards).

### **Example 26: United States of America**

In the US, various pieces of legislation have been implemented in different legal contexts that have some degree of cross-cutting perspective in addressing eAccessibility.

The Americans with Disabilities Act makes direct reference to certain aspects of telecommunications. It imposes direct obligations in relation to the provision of text telephone relay services and also includes provisions in relation to the making available of text telephones in various locations. As mentioned earlier, it also includes specific reference to ATM accessibility within its scope. However, enactment of the Americans with Disabilities Act (ADA) in 1990 preceded the proliferation of ICT as we know it today and, consequently, the ADA makes no specific reference to the various ICTs that now need to be accessible or equally available to persons with disabilities. It has fallen upon federal executive agencies (i.e., EEOC, DOJ, FCC) charged with creating the regulations to implement and enforce the ADA, and federal courts hearing ADA cases, to determine whether, when, and to what extent the ADA applies to these technologies. As mentioned earlier, this has had positive and negative results in the case of web accessibility, for example.

Section 508 of the Rehabilitation Act (as amended in 1998) applies specifically to ICT and to the federal government.<sup>105</sup> In particular, § 508 requires that ICT used by federal employees with disabilities and that are “utilized to provide federal services to persons with disabilities, are accessible.” It does not apply to “military command, weaponry, intelligence, and cryptologic activities” and “equipment used only by service personnel for maintenance, repair, or similar purposes.”<sup>106</sup> As discussed in more detail in Chapter 4 in the section on public procurement, the standards developed to underpin the legislation cover a wide spectrum of ICTs, including software applications and operating systems; web-based intranet and internet information and systems; telecommunications products; video and multimedia products; self contained, closed products; desktop and portable computers.

More generally, public information, whether arising from federal, state, or local government, generally is required to be accessible in accord with § 508 and Title II of the ADA. Information provided online, on paper, over the telephone, on television or radio, or via others means must be meaningfully available to persons with disabilities in a manner equivalent to that available to persons without disabilities. Many states have chosen to implement and enforce their obligations under Title II of the ADA by adopting, in part, the § 508 accessibility requirements for ICT.<sup>107</sup>

### **Example 27: United Kingdom**

The Disability Discrimination Act (DDA) from 1995 and its Amendment Act from 2005 cover a wide scope including access to employment, education, goods and services, transport and housing. Part 3 of the Act deals with, inter alia, access to services including services that involve:

- access to and use of means of communication
- access to and use of information services

Redress mechanisms are provided, including support through the Disability Rights Commission (DRC), now the Commission for Equality and Human Rights (CEHR)<sup>108</sup>.

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<sup>105</sup> 29 U.S.C. § 794d (2000).

<sup>106</sup> 34 C.F.R. § 1194.3 (2007).

<sup>107</sup> Ga. Tech. Research Inst., State IT Database (Feb. 2006), available at <http://accessibility.gtri.gatech.edu/sitid/stateLawAtGlance.php>

<sup>108</sup> <http://www.equalityhumanrights.com/en/Pages/default.aspx>

The Code of Practice to Part 3 of the Act, developed to give guidance on implementation, specifically refers to telecommunications and broadcasting organisations as being service providers covered by the Act. The Code also gives examples of web sites and call centres as being services that providers should ensure are accessible.

Some cases relevant to eAccessibility have been filed under the act. One case was brought under Part 4 of the DDA in relation to special education needs, where a complaint was made on behalf of a dyspraxic child for the school's alleged failure to make a reasonable adjustment involving the use of a laptop computer<sup>109</sup>. Another case involved a complaint by a deaf customer against a mobile telephone company of having been treated unfavourably with regard to the provision of charges for text messaging in a mobile phone contract.<sup>110</sup>

The DDA also covers access to employment and amendments to the Act in 2004 implemented most of the provisions of the EU Employment Equality Directive (for details see section 4.5)

## Learning Points

Several countries have introduced equality or other legislation that explicitly addresses eAccessibility matters in a more cross-cutting manner. These vary in terms of scope and other legal characteristics. No uniform approach is apparent, and the various approaches present a variety of strengths and weaknesses. Elements of the different approaches might prove useful for extraction as models of good practice but no single approach yet seems to provide a comprehensive and effective horizontal approach.

### 3.7.2 Implicit coverage of eAccessibility

Although equality legislation sometimes may not necessarily make explicit reference to ICTs, it may nevertheless have impacts on eAccessibility.

#### **Example 28: Malta**

The Maltese Equal Opportunities Act (EOA) enacted in 2000 is inspired by the American Anti-Discrimination Act, the UK Disability Discrimination Act and the Australian Disability Discrimination Act. It covers six areas: education, employment, goods and services, access, insurance and accommodation. At present Information and Communications Technology (ICT) relates mostly to the first three areas, although not explicitly mentioned as such.

Despite the absence of a direct reference to ICTs in the legislation, the act appears to be having an impact on eAccessibility. The authority established under the legislation - the Equal Opportunities Compliance Unit within the National Commission Persons with Disabilities (KNPD) - has responded to complaints on eAccessibility issues by raising issues with providers and effecting mediation to achieve agreements for improved eAccessibility. For example, negotiations were conducted to increase the accessibility provisions by the public TV broadcaster for news and another popular TV programme. The Commission has also worked with private companies in the mobile phone and banking sectors, and is currently working with various organisations to ensure their websites are accessible as well as with a bank in relation to ATM accessibility. It has also been proactive in seeking to ensure that several Government websites are accessible..

Active involvement and engagement of NGOs in the implementation process seems to have been a factor in leveraging the legislation in relation to eAccessibility issues.

#### **Example 29: Australia**

The Australian Disability Discrimination Act (DDA) from 1992 imposes requirements for non-discrimination relating to disability in areas such as provision of goods and services, government services, employment and education, basically covering all areas of public life. The

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<sup>109</sup> [http://www.drc-gb.org/the\\_law/drc\\_legal\\_cases/impairment/sensory\\_impairment/mobile\\_phone\\_company\\_treat\\_dea.aspx](http://www.drc-gb.org/the_law/drc_legal_cases/impairment/sensory_impairment/mobile_phone_company_treat_dea.aspx)

<sup>110</sup> [http://www.drc-gb.org/the\\_law/drc\\_legal\\_cases/impairment/learning\\_difficulties/tribunal%e2%80%99s\\_failure\\_to\\_consider.aspx](http://www.drc-gb.org/the_law/drc_legal_cases/impairment/learning_difficulties/tribunal%e2%80%99s_failure_to_consider.aspx)

Australian Human Rights Commission<sup>111</sup> has responsibility for administering the law and has the authority to investigate and conciliate complaints of alleged discrimination and human rights breaches lodged under this and other equality laws.

Apart from mentioning telecommunications services as falling within the scope of the services covered, the legislation does not make any other explicit reference to ICTs. Nevertheless, it has been interpreted to cover websites, as illustrated in the well-know and landmark cases in relation to the Sydney Olympics website.

As regards telecommunications, the DDA was invoked in a case taken against the main operator in relation to provision of text telephones at the same price as other telephones. This led to explicit changes being made to the main telecommunications legislation/regulations.

### **Learning points**

The examples show that even where equality legislation does not explicitly refer to ICTs and/or eAccessibility as such, it may reach eAccessibility issues to some degree. Generic factors that seem to act as facilitators include commitment of the legislator to encourage eAccessibility even without having direct reference to ICTs in the underlying law and active involvement of NGOs in oversight and enforcement mechanisms.

However, as mentioned in relation to business websites earlier, lack of specificity can present problems of interpretation when cases arise and, more generally, reliance on an anti-discrimination approach alone seems not the most effective way to go about achieving systemic change (whereby eAccessibility becomes generalised for all who need it rather than being addressed on a case-by-case basis). As will be discussed in Chapter 5, concepts such as a duty of 'anticipatory accommodation' can introduce a more systemic dimension in this type of legislation.

## **3.8 Summary and conclusions**

The many examples presented in this Chapter provide an important source of material to draw upon in the context of further development of the EU eAccessibility 'acquis'. They also show that there is a very diverse range of legislative approaches across the Member States and internationally. This diversity needs to be taken into account in the formulation of measures at the EU level.

Overall, it is clear that there is no simple, 'off-the-shelf' model approach that could be directly applied for purposes of EU-level legislation in the eAccessibility field. Nevertheless, various pointers are provided in relation to how different aspects of eAccessibility can and are being addressed, and these are taken up again in Chapter 5 of this report.

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<sup>111</sup> <http://www.hreoc.gov.au/about/legislation/index.html>



## 4 Sectors already addressed at EU level - good examples

As discussed earlier in this report, the current EU 'acquis' of legislative or other co-ordination measures on eAccessibility mainly addresses public web sites, the telecommunications domain, and the TV broadcasting arena, as well as indirectly through the public procurement and employment equality directives. This chapter focuses on analysing examples of national legislation that may provide pointers to a strengthening and/or better leveraging of EU-level measures in these fields.

### 4.1 Public web

Accessibility of public websites has had high EU-level policy visibility and attention for a number of years<sup>112</sup>, mainly through OMC-type processes. Despite the absence of any EU-level legislation, a number of Member States now have legislation in place in this field although, as noted in Chapter 2, there is considerable divergence in the nature of and extent of development of legislation and other policy-driven measures addressing accessibility of public websites.

In general, the main legislative approach in the Member States at present tends to be direct legislation addressing the public sector only. This may be through specific eAccessibility and/or disability legislation or part of wider eGovernment legislation. Some Member States also have non-discrimination legislation in place that may include web accessibility as a ground for complaint for people with disabilities (and sometimes the groups that represent them), with variability in terms of whether only public or public and commercial entities are included within the scope. The evidence from the MeAC benchmarking study shows that the countries with strong legislation in terms of clear obligations and follow-up mechanisms tend to achieve higher levels of public website accessibility.<sup>113</sup>

#### **Example 30: Italy**

The so-called 'Stanca' law (Law 4/2004) to promote the access of the disabled to information technologies<sup>114</sup> and two subsequent Decrees are the main measures addressing public website accessibility in Italy. The law is applicable to public administrations, economic public agencies, private firms that are licensees of public services, to regional municipal companies, public assistance and rehabilitation agencies, transport and telecommunication companies in which the State has a prevalent shareholding and ICT services contractors.

As regards e-accessibility of web sites, these parties are not allowed to draw up contracts for the implementation and modification of internet websites if they fail to respect the accessibility requirements provided for in a subsequent decree. Any stipulated contract failing to respect such requirements will be considered null and void. All existing contracts signed before the subsequent decree came into effect must adhere to the provisions relating to accessibility requirements of the same law in the event of the contract's extension, modification or renewal. Any extended, modified or renewed contract which fails to respect such requirements will be declared null and void, while upgrading to meet such requirements should be carried out no later than twelve months from the date the decree comes into force. Failure to comply with the

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<sup>112</sup> COM (2001) 529 Communication from the Commission eEurope 2002: Accessibility of Public Web Sites and their Content; Council Resolution on "eAccessibility" - improving the access of people with disabilities to the Knowledge Based Society, 2-3 December, 2002, 14892/02; EP Resolution on eEurope 2002: Accessibility of Public Web Sites and their Content (2002 (0325))

<sup>113</sup> Empirica, WRC, RNIB, RNID, eWORX (2007): MeAC - Measuring Progress of eAccessibility in Europe Assessment of the Status of eAccessibility in Europe (Main Report),

<sup>114</sup> "Disposizioni per favorire l'accesso dei soggetti disabili agli strumenti informatici", pubblicato sulla Gazzetta Ufficiale n. 13 del 17 gennaio 2004.

provisions of the present law implies both executive responsibility and disciplinary action, as well as possible criminal prosecution and civil liability provided for by the relevant current laws.

A presidential Decree issued on March 1st 2005 introduced enforcement regulations for the Law 4/2004. This effectively expands on the previous provision as well as introducing additional measures. Additionally there is provision for the allocation of a badge of accessibility to identify web sites which meet required standards. Private entities can apply for this badge or certification also where the required standards are met. A further Decree from July 8 2005 brought into force the technical rules of Law 4/2004. It is mainly made up of annexes which contain the technical Web accessibility requirements, the methodology for the evaluation of Web sites (apart from requirements for accessible hardware and software). The decree is to be periodically updated in order to comply with relevant European Union policies and any technological innovations that may have occurred.

It is worth noticing in this context that the foundation law stipulated that any enforcement rules and technical requirements to be specified in subsequent decrees were to be adopted subsequent to consultations with disabled associations which represent a cross-section of disabled people, associations of developers expert in the field of accessibility, and hardware and software suppliers. To ensure its effectiveness, the legislation provides that accessibility enforcement policies must be monitored and fostered at both national and local level. A public agency (CNIPA) has been tasked with monitoring and supporting the operation of the legislation. This body designed the rules of implementation of the law and provides a key support role by providing advice and guidance to concerned parties and monitoring accessibility on an ongoing basis.

### **Example 31: Austria**

In Austria, the E-Government Law of 2004 requires that web services of public administrations be designed and structured in such a way as to comply with international standards, including facilitating unhindered access for disabled persons. The law covers all public bodies at state, regional and municipality level, including schools, hospitals, etc. It stipulates that by 1st January 2008, all government / public administration websites should be accessible. Specifically, all sites providing information and transaction services should comply with international accessibility standards (WAI level A). Development of software applications for eGovernment and digital signatures must also comply with accessibility criteria.

To support the law's implementation the federal chancellery has established an oversight body "Platform digital Austria" with the aim to coordinate activities in the field of eGovernment across Federal Ministries. The platform addresses all aspects of the national eGovernment strategy. In relation to the accessibility theme, it is assumed that accessibility remains a "moving target" so that "flanking measures" will be required on an ongoing basis. In that context, a series of workshops has been carried out on web accessibility. The oversight body is also responsible for monitoring activities. The Federal Chancellery together with all Federal Ministries launched a survey in 2007 with a view to (a) generating an overview of the current state of affairs, (b) highlighting good practice, (c) raising awareness on the part of administrative bodies, (d) contributing to planning of further measures and (e) compiling an evidence base in the case of arbitration.

Although the Act itself does not envisage any sanctions for non-compliance, there may be some scope for redress stemming from its interaction with the Disabled Persons Equal Opportunities Act 2005 which, inter alia, deals with access to public services. If the public websites are not accessible after 1st January 2008, this could be interpreted as discrimination under the Equal Opportunities Act.

### **Example 32: United Kingdom**

The Disability Discrimination Act (1995, updated 2005) is the main legislative basis for website accessibility. The original Act contains provisions to prevent discrimination against disabled people by service providers and requires service providers to make reasonable adjustments in order to make services accessible to disabled people. The Code of Practice to part III of the Act gives the example of a website as a service that is covered by the Act.

The Disability Discrimination Act 2005, amending the 1995 Act, introduced a positive duty on the providers of public websites. This Disability Equality Duty (DED) applies to all public services. The Code of Practice to the Act for government departments gives examples of the procurement of new IT systems and the re-design of a department's website by external contractors as services to which the DED applies.

Cabinet Office Guidelines for UK Government Websites (non mandatory) have been available for a number of years, providing a best practice framework for guidance on the management of UK government websites. They included targets for public web sites of priority AA of version 1 of W3C guidelines. In 2007, a specific guidance document "Delivering inclusive websites: user-centred accessibility" was issued by the Cabinet Office's Central Office of Information (COI). This document sets out the minimum level of accessibility for Government websites and contains practical guidance on how to achieve this. It states that, in order to help fulfill the disability equality duty for web publishing and online service provision, Government website owners should adopt best practice in commissioning accessible websites, as set out in the *Publicly Available Specification - Guide to Good Practice in Commissioning Accessible websites* (PAS-78). This is a British standard developed to support public procurement to address web accessibility. It is "applicable to all public and private organizations that wish to observe good practice under the existing voluntary guidelines and the relevant legislation".

According to the COI guidelines, the minimum level of accessibility for all Government websites is Level Double-A of the W3C guidelines. Any new site approved by the Cabinet Sub-Committee on Public Engagement and the Delivery of Service must conform to these guidelines from the point of publication. Continuing standalone sites must achieve this level of accessibility by December 2009. Websites which fail to meet the mandated level of conformance may be subject to the withdrawal process for .gov.uk domain names, as set out in Naming and Registering Websites (TG101).

### **Example 33: Spain**

In Spain accessibility of public web sites is addressed in the framework of the Equality of Opportunities, Non-Discrimination and Universal Accessibility Act (LIONDAU) from 2003.<sup>115</sup>

The law stipulates (Article 5) that public administration websites and those receiving public funding shall become accessible to persons with disabilities according to a national standard (at a minimum complying with levels 1 and 2 set out in UNE 139803:2004). The regulation establishes that in order to receive any public funding, web sites have to comply with level 1 of the national accessibility standard. The above requirements are also applicable to websites owned by public educational centers as well as private centers that are fully, or partially, funded with public money. The deadline for complying with these requirements is 31<sup>st</sup> December 2008.

Article 6 of the law deals with the applicability of accessibility criteria to other websites and urges the government to take measures in order to raise awareness of other websites holders on the need to progressively comply with the standard set out by the law, in particular, those websites dealing with access to goods and services available to the public and those dealing with education, sanitary or social services.

A certification system is implemented (Article 7) for those Websites complying with the applicable standards. Also the law set out basic accessibility conditions in relation to electronic signatures (Article 8), reiterating the provisions laid down in the previous Electronic Signatures Act (59/2003).

### **Learning points**

As mentioned above, accessibility of public web sites is being addressed through a variety of forms of legislation, including dedicated disability and/or eAccessibility legislation, as part of wider eGovernment legislation or within the framework of legislation directed towards equality of people with disabilities in a more general sense. The examples show how strong direct obligations on relevant parties have been put in place, augmented with accompanying

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<sup>115</sup> Law 51/2003

measures of various kinds such as training/awareness, monitoring / reporting, technical guidelines / standards, and labelling schemes. Such approaches have been found to be associated with the achievement of higher levels of web accessibility in practice.<sup>116</sup>

## 4.2 Fixed telephony services

As noted in Chapter 2, there is considerable divergence across the Member States in the extent of development of legislation and regulations addressing accessibility of fixed telephony services. There is also some divergence in the legislative basis underpinning existing accessibility provisions - in some countries the telecommunications legislation linked to the transposition of the EU directives is the main place where accessibility issues are addressed; in other countries, other legislation also plays an important and even, sometimes, a dominant role. Legislation requiring accessibility of fixed telephony services is well developed in the third countries included in this analysis (AU, CA, US), again with a mix of situations as regards the legislative bases that underpin the provisions. The examples below provide illustrations of these different approaches.

### **Example 34: United Kingdom**

The Communications Act of 2003<sup>117</sup> imposes the following accessibility obligations in relation to fixed voice telephony services:

- funding of text relay service (Universal Service Provider only, by means of a specific universal service condition)
- access to text relay service and rebate scheme (all providers through the general conditions)
- certain requirements to make all public payphones accessible to customers with disabilities (all public payphone providers) - at least 75% of public payphones provided in the UK (50% of those provided in Hull) must be accessible by reasonable means to customers in wheelchairs; at least 70% of all public payphones must incorporate additional receiving amplification (note there is a distinction between public call booths and 'managed' payphones i.e. on private sites) - it is proposed to increase this and also restore a requirement for inductive coupling
- directory information free of charge and through connection (all providers)
- bills/contract provision in Braille / large print (all providers)

Access to emergency services (through the text relay service - Typetalk) is also required.

The Disability Discrimination Act (DDA) of 1995 specifically refers to communication and information services as being covered by the provisions and the Code of Practice to the Act refers to telecommunications and broadcasting organizations as being service providers covered by the Act. This appears to have been a stimulus for action by both the fixed and mobile operators although there seems to be a lack of clarity regarding the precise extent and nature of coverage of mobile operators under the Communications Act and DDA.

Direct obligations in relation to special equipment are not imposed on the telecommunications services sector. However, local authorities provide (or financially support the acquisition of) text telephones and other special telecoms equipment through assistive technology and/or other (social) services.

### **Example 35: Denmark**

Under the Universal Service Obligation (USO) special telecommunications services must be made available to certain defined groups of disabled persons<sup>118</sup>. TDC Solutions A/S was

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<sup>116</sup> Empirica, WRC, RNIB, RNID, eWORX (2007): MeAC - Measuring Progress of eAccessibility in Europe Assessment of the Status of eAccessibility in Europe (Main Report)

<sup>117</sup> [http://www.opsi.gov.uk/acts/acts2003/ukpga\\_20030021\\_en\\_1](http://www.opsi.gov.uk/acts/acts2003/ukpga_20030021_en_1)

appointed by the National IT and Telecom Agency as USO provider for the period 1 January 1998 to 31 December 2007.

USO services for disabled persons (Executive Order No. 1262 of 9 December 2005 on USO Services, sections 5 and 6) include the provision of:

- A PC-based text telephone service for deaf persons, persons with acquired deafness, deaf-blind persons as well as groups of persons with impaired speech or hearing. As part of the text telephone service, internet access shall be offered, and the communication centre of the text telephone service shall be open 24 hours. The USO terms stipulate that TDC shall make terminal equipment for the service available to entitled end-users. TDC is also responsible for repair and replacement of the terminal equipment. In addition, relatives of entitled end-users and other interested persons may purchase a special text telephone program and modem for their own PC from TDC to obtain access to the text telephone service.
- A nationwide directory enquiry service for numbers in the Danish numbering plan and automatic through-connection to the numbers in question at a reduced rate, for blind persons, deaf-blind persons, visually impaired persons, persons with reading disabilities, and certain groups of physically handicapped persons, who, via the service in question, may be compensated significantly for their disability.

Besides the USO regulation, requirements have been laid down in telecommunications legislation for all owners of telecommunications networks and providers of voice telephony services to ensure access to the public emergency service (112) and to the USO provider's text telephone service and the emergency call number of that service (Executive Order No. 368 of 20 June 2005 on Provision of Electronic Communications Networks and Services, section 3).

Furthermore, under the 2007 Act, the Minister of Science, Technology and Innovation is authorized to lay down rules for the establishment and operation of payphones, containing minimum requirements for providers of payphones, including rules to meet the special needs of disabled end-users. In the light of this, the Executive Order on Payphones (No. 710 of 25 July 1996 on Payphones) is being revised, partly for the purpose of specifying requirements for public payphones that will improve disabled persons' access to using such phones.

Very detailed requirements have been specified in relation to the two main USO provisions, those relating to text telephony and to directory service access, as outlined below.

The National IT and Telecom Agency has specified terms for TDC's handling of its universal service obligation and for service quality. For example, the accessibility of the communication centre should be 80%; the waiting time on queue to the centre should be 20 seconds on average; and a maximum of 5%, measured as a 24-hour average, may be released from the queue to the centre after 90 seconds due to time-out. Requirements have been set for the fault rate of equipment used for the text telephone service.

Subscription charges have been fixed at DK 357. In addition, the USO provider (TDC) is responsible for ensuring that calls from disabled persons to the text telephone service are charged at the USO provider's normal call rate for domestic telephony, and that calls via the communication centre are charged, as a maximum, at the USO provider's lowest call rate. Furthermore, the USO provider (TDC) must ensure that prices for calls from the USO provider's network in the USO area to disabled persons via the text telephone service are identical with the prices for calls from disabled persons to this service, see section 31(1), no. 2, of the Executive Order on USO Services.

Under section 31 of the Executive Order on USO Services, the USO provider (TDC) must ensure that calls from disabled persons to a nationwide directory enquiry service can be made free of charge up to a quarterly amount of at least DKK 55. Subsequently, calls should be charged at a level not exceeding 20% of the ordinary price up to a maximum quarterly amount of at least DK 1,255. Usage in excess of DK 1,255 is not subject to discount and is charged at the ordinary price for calls to the USO provider's (TDC) directory enquiry service.

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<sup>118</sup> Act on Competitive Conditions and Consumer Interests in the Telecommunications Market - Consolidated Act No.780 of 28 June 2007

### **Example 36: Ireland**

The European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations, 2003 are the regulations that transpose the EU Universal Service and Users' Rights Directive in Ireland. The specific references to disabled people are:

- Public payphones - Article 5(1): A designated undertaking shall ensure that public pay telephones are provided to meet the reasonable needs of end-users in terms of the geographical coverage, the number of telephones, the accessibility of such telephones to disabled users and the quality of services.
- Specific measures for disabled users - Article 6(1): The Regulator may with the consent of the Minister, specify obligations applicable to designated undertakings, designated for the purpose of ensuring that disabled end-users can enjoy access to and affordability of publicly available telephone services, including access to emergency services, directory inquiry services and directories, equivalent to that enjoyed by other end-users. Article 6(2): The Regulator may specify the terms and conditions to be complied with by designated undertakings for the purpose of ensuring that disabled end-users can take advantage of the choice of undertakings and service providers available to the majority of end-users.

The specific obligations that have been imposed on the basis of the enabling legislation are set out in the national regulator's (ComReg's) document *'The Future Provision of Telephony Services Under Universal Service Obligations'* (ComReg, 12 July 2006). This document sets out the Universal Service regime that will remain in place until June 2010. The Universal Service Provider (Eircom) is required to provide:

- For users who are hearing-impaired:
  - inductive couplers
  - amplifier phones
  - visual / loud sound alert when the telephone rings
- For users that are hearing and/or speech impaired:
  - Text Relay Service
  - rebate scheme for text telephone users to equalise call costs
- For users with limited dexterity or mobility:
  - push button phones with speed and automatic redial
  - handsfree/loudspeaker phones
- For users with restricted vision:
  - restricted vision phones that allow numbers to be found easily
  - Braille billing free of charge
- For users unable to use the paper directory because of a disability:
  - special directory enquiry arrangements to allow free usage of directory enquiry services.

The regulations were amended in 2007, with a provision specifying the maximum penalty for an offence of the disability measure of €6,000 and allowing a defense that "reasonable steps were taken to comply with the relevant obligation..." (Statutory Instrument 374 of 2007).

The Universal Service Provider is also required to provide a dedicated section of its website, accessible from the homepage, with information on the services it provides which are of particular interest to people with disabilities. They are also required to maintain a Code of Practice concerning the provision of services for people with disabilities and to periodically review and, where appropriate, amend the Code in consultation with the National Disability Authority (NDA) and other representative bodies.

### **Example 37: Sweden**

In Sweden there are provisions in the main telecommunications market regulation legislation (linked to the transposition of the EU directives) that give powers to the regulator to impose accessibility obligations on telecommunications operators. However, in practice the Swedish approach to telecommunications accessibility has so far been mainly based on public procurement of the necessary products and services.

As regards the main telecommunications market legislation, Chapter 5, section 1 of the Electronic Communications Act (2003:389) prescribes, among other things, that regulator - the National Post and telecom Agency (PTS) - may order telecommunications operators to provide universal services to people with disabilities and to satisfy the needs of such people for special services. Such an obligation, if imposed, would not involve any compensation from the State. If required due to the costs of provision, access to services should instead be ensured through public procurement. In Chapter 5, section 7 of the Electronic Communications Act, it is further prescribed that any provider of a public telephone service shall take account of disabled persons' needs for special services. PTS is authorized to lay down regulations on how telecommunications operators should meet their obligations in respect of disabled persons. So far, however, PTS has not imposed obligations on any provider to provide services without compensation, nor has PTS laid down regulations on how telecoms operators should cater for the special needs of disabled persons.

In addition, line with article 22 of the Universal Service Directive, PTS is in the process of producing regulations concerning the quality of electronic communications services. Important aspects for people with disabilities will be included in the regulation with the aim of enabling end-users to compare and choose operators on the basis of price as well as quality of the service.

The current main accessibility provisions are based on Ordinance 1997:401, Section 5(1), which sets out the PTS responsibility to meet disabled persons' needs. The general strategy for services to people with disabilities involves consultation with market players on the possibilities for offering tailored services to people with special needs. At the same time, PTS goes a step further and procures eight services to disabled consumers, while running trials of several more. Where necessary, the handling of telecommunications services for disabled persons is put out to tender. The definition of operators refers not only to telecommunications operators, but also to call centres, interpretation centres, or other providers of the service.

PTS currently procures the following services:

- Text telephone relay service: Among other things, guidelines stipulate that the service should be able to handle communication via fax, paging systems and GSM text and offer textmail (telephone answering function).
- Videophone relay service, providing call handling between speech and sign language. At present the service is provided on a temporary trial basis.
- TeleTal: TeleTal ("TeleSpeech") is a service for persons with speech, voice and language difficulties. The service offers speech support for persons with inarticulate speech, support for writing memos for persons with reading and writing difficulties, as well as memory support for persons with cognitive difficulties.
- Cost free directory enquiries for disabled people.
- Health care information for users of text telephones.
- A network of databases including discussion groups for deaf-blind people is operated under the name "Frukträdet" (The Fruit Tree). PTS gives financial support for operation of the service, which is provided by the Fruit Tree association.

Disabled people should not have any extra usage costs compared with people without disabilities, and both the video and text relay services are free of charge. However, provision / pricing of special/accessible terminal equipment for disabled users is not covered in the

Swedish telecommunications legislation but other legislation obligates the County Councils to provide terminal equipment.

Emergency services are directly accessible via 112 for people with disabilities who use text. It is also possible to reach 112 via text messaging (SMS), or via the relay services. This is financed by the government, and other public entities.

### **Example 38: United States of America**

Overall, legislative and regulatory provisions for accessibility of telecommunications are strong in the US, covering fixed and mobile services and equipment. Various legislative provisions under Section 255 of the Telecoms Act (1996) and the Hearing Aid Compatibility Act (1988) have already been described earlier.

Other aspects that may provide useful pointers for possible European approaches are the requirements in relation to relay services and the provision of text telephones in various locations. These are outlined in some detail below.

#### **Relay services**

Legislation and associated FCC rules require provision of relay services for deaf users of telephony services<sup>119</sup>. The intent of Title IV of the Americans with Disabilities Act is to further the Communications Act's goal of universal service by ensuring that individuals with hearing or speech disabilities have access to telephone services that are "functionally equivalent" to those available to individuals without such disabilities. To support this, a Text Relay Service (TRS) is available in all states and users can access the TRS via the toll free 711 dialing code. Several forms of TRS are provided, to meet the variety of needs of the user and the equipment available. These are outlined in the box below.

#### **Forms of relay service in the US<sup>120</sup>**

Traditional Text-to-Voice TTY-based TRS – relays the call back and forth between the parties by speaking what a text user types, and typing what a voice telephone user speaks.

Voice Carry Over (VCO) - allows a person with a hearing disability, but who wants to use his or her own voice, to speak directly to the called party and receive responses in text from the CA. No typing is required by the calling party. This service is particularly useful to senior citizens who have lost their hearing, but who can still speak.

Hearing Carry Over - allows a person with a speech disability, but who wants to use his/her own hearing, to listen to the called party and type his/her part of the conversation on a TTY. The CA reads these words to the called party, and the caller hears responses directly from the called party.

Speech-to-Speech (STS) Relay is used by a person with a speech disability. A CA, who is specially trained in understanding a variety of speech disorders, repeats what the caller says in a manner that makes the caller's words clear and understandable to the called party. No special telephone is needed.

Shared Non-English Language Relay Services - Due to the large number of Spanish speakers in the United States, the FCC requires interstate TRS providers to offer Spanish-to-Spanish traditional TRS. Although Spanish language relay is not required for intrastate (within a state) TRS, many states with large numbers of Spanish speakers offer this service on a voluntary basis. The FCC also allows TRS providers who voluntarily offer other shared non-English language interstate TRS, such as French-to-French, to be compensated from the federal TRS fund.

Captioned Telephone Service - like VCO, is used by persons with a hearing disability but some residual hearing. It uses a special telephone that has a text screen to display captions of what the other party to the conversation is saying. A captioned telephone allows the user, on

<sup>119</sup> Title IV of the Americans with Disabilities Act (ADA) - Telecommunications services for hearing-impaired and speech-impaired individuals codified at 47 U.S.C. § 225.; FCC Regulations for the Provision of Telecommunications Relay Services (TRS) pursuant to Title IV of the Americans with Disabilities Act (ADA), Pub. L. No. 101-336, § 401, 104 Stat.327, 366-69 (adding Section 225 to the Communications Act of 1934, as amended, 47 U.S.C. § 225

<sup>120</sup> <http://www.fcc.gov/cgb/consumerfacts/trs.html>



one line, to speak to the called party and to simultaneously listen to the other party and read captions of what the other party is saying. There is a “two-line” version of captioned telephone service that offers additional features, such as call-waiting, \*69, call forwarding, and direct dialing for 911 emergency service. Unlike traditional TRS (where the CA types what the called party says), the CA repeats or re-voices what the called party says. Speech recognition technology automatically transcribes the CA’s voice into text, which is then transmitted directly to the user’s captioned telephone text display.

Video Relay Service (VRS) - This Internet-based form of TRS allows persons whose primary language is American Sign Language (ASL) to communicate with the CA in ASL using video conferencing equipment. The CA speaks what is signed to the called party, and signs the called party’s response back to the caller. VRS is not required by the FCC, but is offered by several TRS providers. VRS allows conversations to flow in near real time and in a faster and more natural manner than text-based TRS. Beginning January 1, 2006, TRS providers that offer VRS must provide it 24 hours a day, seven days a week, and must answer incoming calls within a specific period of time so that VRS users do not have to wait for a long time.

Internet Protocol (IP) Relay – IP Relay is a text-based form of TRS that uses the Internet, rather than traditional telephone lines, for the leg of the call between the person with a hearing or speech disability and the CA. Otherwise, the call is generally handled just like a TTY-based TRS call. The user may use a computer or other web-enabled device to communicate with the CA. IP Relay is not required by the FCC, but is offered by several TRS providers.

IP Captioned Telephone Service – IP captioned telephone service, one of the newest forms of TRS, combines elements of captioned telephone service and IP Relay. IP captioned telephone service can be provided in a variety of ways, but uses the Internet – rather than the telephone network – to provide the link and captions between the caller with a hearing disability and the CA. It allows the user to simultaneously both listen to, and read the text of, what the other party in a telephone conversation is saying. IP captioned telephone service can be used with an existing voice telephone and a computer or other Web-enabled device without requiring any specialized equipment.

The costs of providing intrastate TRS services are recovered by the states, either through rate adjustments or surcharges on local telephone bills (as an example, in the State of Idaho the amounts in 2007 were 2 cents per month and 0.2 cent per call minute<sup>121</sup>).

Costs for interstate TRS are recovered through a shared-funding mechanism (TRS Fund) set forth in the Commission’s rules. All providers of interstate telecommunications services contribute to the TRS Fund, and TRS providers recover the costs of providing interstate TRS from the TRS Fund on a minutes-of-use basis. The current TRS Fund Administrator is the National Exchange Carrier Association (NECA) and presently makes payments to eligible providers based on per-minute compensation rates for traditional TRS, IP Relay, Speech-to-Speech (STS), and VRS. The compensation rates are set on an annual basis, calculated on the basis of an assessment of cost data supplied by providers.

The development of Video Relay Services led to a dramatic increase in the costs of the TRS programme. As a result, in 2007 the FCC modified the funding regime in order to establish a funding method which resulted in fairer and more predictable rates of payment to service providers.

The TRS service must meet detailed standards set by the FCC<sup>122</sup>. Issues regarding the policies and rules for the operation of TRS, including the mandatory minimum standards for TRS, are handled by the Disabilities Rights Office of the Consumer and Governmental Affairs Bureau.

#### Relay service quality requirements

- The CA answering or placing a TRS call must stay with the call for a minimum of 10 minutes to avoid disruptions to the TRS user (15 minutes for STS calls).
- Most forms of TRS must be available 24 hours a day, seven days a week.

<sup>121</sup> <http://www.puc.idaho.gov/telecom/30531.PDF>

<sup>122</sup> <http://www.fcc.gov/cgbd/dro/trs.html>

- TRS providers must answer 85 percent of all calls within 10 seconds (but there are different answer speed rules for VRS).
- TRS providers must make best efforts to accommodate a TRS user's requested CA gender.
- CAs are prohibited from intentionally altering or disclosing the content of a relayed conversation and generally must relay all conversation verbatim unless the user specifically requests summarization.
- TRS providers must ensure user confidentiality and CA's (with a limited exception for STS) may not keep records of the contents of any conversation.
- The conversation must be relayed in real time.
- CAs must provide a minimum typing speed for text-based calls and VRS CAs must be qualified interpreters.
- For most forms of TRS, the provider must be able to handle emergency (911) calls and relay them to the appropriate emergency services.

#### Text telephones in various locations

The Americans with Disabilities Act and associated standards (ADAAG) require provision of text telephones in various locations.<sup>123</sup> Because telephone communications were judged so essential to the conduct of business and personal affairs, text telephone requirements appear in each of the substantive titles of the ADA: TTYs may be a reasonable accommodation for an employee under title I; a component of program accessibility or effective communications under title II; an instance of readily-achievable barrier removal or an auxiliary aid in an existing place of public accommodation under title III; or a link in the telecommunications relay system specified by title IV.

Additionally, the installation of text telephones is required under certain conditions in new construction and alterations of buildings and facilities covered by titles II and III of the Act. ADAAG contains scoping and technical provisions that specify these conditions and installations.

In new construction, at least one public pay telephone is required:

- in buildings with four or more public pay telephones on-site, if one is interior, and at rail station entrances and airport terminals, concourses and baggage claim areas if four or more public pay telephones are provided in those locations;
- in transit stations, airports, stadiums, arenas, convention centers, hotels with convention centers, and covered malls if any interior public pay telephones are provided, and
- in or adjacent to hospital emergency rooms, recovery rooms, and waiting rooms if a single public pay telephone is provided.

Additionally, in new buildings with banks of three or more interior public pay telephones, one telephone at each bank must be equipped with a shelf and power outlet for a portable TTY.

In alterations, a text telephone would be required:

- in facilities that add public pay telephones for a total of four or more telephones on-site, if one is interior, or
- in facilities that alter public pay telephones, if four or more are provided and one is interior.

Many persons with hearing or speech impairments travel with portable TTYs to ensure convenient and timely access to telephone communications. Since permanently-fixed public text telephones are only required in limited circumstances where use rates are - or are expected to be - high, ADAAG also includes provisions for accommodating portable units at other locations.

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<sup>123</sup> <http://www.access-board.gov/Adaag/about/bulletins/ttys.htm>

Thus, a shelf and power outlet must be installed at one pay telephone in every bank of three or more public pay telephones provided in new construction. Travelers who carry laptop computers will also find a shelf and outlet useful. ADAAG establishes a performance standard for the location of the shelf and outlet required to serve a portable text telephone.

ADAAG allows flexibility to design for unique and special circumstances and to facilitate the application of new technologies. Providing a portable text telephone at a hotel registration desk instead of a fixed text telephone at a nearby public pay telephone is an example of equivalent facilitation. The public pay telephone must be equipped with the requisite shelf and outlet to support the portable TTY; the portable device must be as available to users as are the facility's other public pay telephones, and directional signage must indicate where a portable unit can be obtained for use.

The international TTY symbol must be displayed where required text telephones are provided. At banks of telephones where no text telephone is installed, directional signage must indicate the location of the nearest public text telephone (if one is located in the facility). Where there are no banks of telephones, the directional signage should be located at the building entrance (for example, in the building directory).

Under the Department of Justice title III regulations, a public accommodation must provide a TTY when customers, clients, patients, or participants are permitted to make outgoing calls on more than an incidental convenience basis. For example, TTYs must be made available on request to hospital patients or hotel guests if in-room phone service is provided.

Stores and shops, doctor's offices, restaurants, and similar establishments are not required to offer TTY service for persons with hearing or speech impairments making inquiries, appointments, or reservations since this can be accomplished through the relay system established under title IV of the ADA.

However, emergency telephone services (911 and similar fast-dial lines) offered by public entities covered by title II must offer direct access to non-voice callers. Other state or local government communications with applicants and beneficiaries require the use of TTYs or equally-effective telecommunications systems, which may include relay services.

### **Example 39: Australia**

The Telecommunications (Consumer Protection and Service Standards) Act 1999<sup>124</sup> provides for the Universal Service Obligations (USO). The definition of a 'standard telephone service' includes carriage for the purpose of voice telephony or, if voice telephony is not practical for an end-user with a disability, another form of communication that is equivalent to voice telephony. The 'standard' service also includes supply of customer equipment in order to comply with the Disability Discrimination Act 1992. This standard service must be 'reasonably accessible to all people in Australia on an equitable basis'. The USO includes providing reasonably accessible payphones.

The USO regime requires the primary Universal Service Provider (USP) to develop a Policy Statement and a Standard Marketing Plan (SMP) that demonstrates how the obligation will be complied with. The current SMP explains the USP's Disability Equipment Program and other measures it undertakes to comply with its universal service obligation. These include upgrades to its standard rental phone and a variety of telephony equipment compatible with different disabilities. The USP's Disability Equipment Program ensures equivalent pricing for a service, so that people requiring equipment on its program do not pay more for a text telephone than a person pays for a standard rental telephone, for example.

The Telecommunications (Equipment for the Disabled) Regulations 1998 specify equipment for supply as part of the Universal Service Obligation. The first three pieces of equipment are those needed for the person with a disability to have access to the National Relay Service, i.e. text telephone, equipment which facilitates data transmission over the telecommunications network (for example, a modem), and telebraille. The other equipment listed refers to equipment that a person with a disability needs in order to communicate directly with a person without a disability.

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<sup>124</sup>

<http://www.comlaw.gov.au/comlaw/Legislation/ActCompilation1.nsf/0/0958820E4179E5B4CA2571610080F03A?OpenDocument>

The examples given include one touch dial memory, handset with amplifiers, hands free handsets, visual signal alerts, etc.

Section 380 of the Telecommunications Act 1999 provides for setting disability standards. The 1999 Act also provides a co-regulatory basis for development of industry codes. Standards have been set on the accessibility features of equipment used for voice telephone, and on the information to be provided about accessibility features.

Section 593 specifies funding for consumer representation on ICT issues. The Telecommunications and Disability Consumer Representation group (TEDICORE) is funded in this way.

## Learning points

The examples show that accessibility issues for fixed telephony have been addressed in a variety of ways in terms of legal bases as well as the concrete provisions that are made. Specification of a core (minimum) set of concrete requirements that cover all of the main dimensions would be a useful co-ordination measure at EU level. Apart from this, some of the examples illustrate the types of more detailed 'good practice' specifications that have been developed for various dimensions, such as text telephony and text telephone relay.

## 4.3 TV broadcasting

As already outlined in Chapter 2, there is considerable divergence across the Member States in the level of development of legislation and other policy measures on accessibility of TV broadcasts. Only a few countries have legislation in place that imposes requirements that address both public and commercial broadcasters and/or that include specific requirements in relation to each of the three accessibility themes (text captions, signing, audio description) for both sectors.

### **Example 40: United Kingdom**

Under the Communications Act 2003, Ofcom (the regulator) is required to draw up, and from time to time review and revise, a code giving guidance as to the extent to which television services should promote the understanding and enjoyment by people who are deaf or hard of hearing, as well as those who are blind or partially sighted, or have dual sensory impairment (deafblind).<sup>125</sup> These are set in a Code on Television Access Services. The code applies to a broad spectrum of both public and private broadcasters. Ofcom is required to set ten year targets for key television access services - subtitling, signing and audio description.

The size of the targets to be met depends upon the size and audience of the broadcaster, with different anniversary dates for different broadcasters/channels (linked to when they were established etc.). For subtitling, the targets range from 10% to 100% of programming now, rising to 80% or more for all broadcasters by 2014. For signing, targets range from 1% to 5% of programming over varying timeframes. For audio description, targets range from 4% to 10% over varying timeframes. An annex to the Code provides guidelines on good practice for subtitling, signing and audio description.

In addition, as already covered earlier, there is a Code of Practice on accessibility that must be followed by Electronic Programme Guide (EPG) providers<sup>126</sup>.

### **Example 41: Ireland**

The Broadcasting Act (2001) stipulates that the Broadcasting Commission (BCI) (the regulatory authority) shall make rules requiring each broadcaster to take specified steps to promote the understanding and enjoyment of programmes by (a) "persons who are deaf or hard of hearing"

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<sup>125</sup> Communications Act (2003) and regulator's (Ofcom) Code on Television Access Services

<sup>126</sup> Communications Act (2003), section 310

and (b) “persons who are blind or partially sighted.” This was then amended by Section 53 of the Disability Act, 2005, which added more specificity to the Broadcasting Act by listing the types of accessibility measures that may be included in the requirements: sign language, teletext services, subtitling, audio description; also having regard to whether these measures are being provided daily or at other regular intervals, at popular viewing times as well as at other times, and for news and news-related matters as well as for other matters.

The rules to implement the Act of 2001 (The BCI Access Rules) were published by the BCI in March 2005. They apply to broadcasters under the jurisdiction of the Republic of Ireland or those who make use of the frequency or satellite capacity or up-link based in the Republic of Ireland. Detailed principles are applied in assessing whether there is an obligation and the nature of the obligation for each broadcaster/channel: nature of the broadcaster (public/private; receipt of public monies/public service duties; etc.); stage of development of the broadcast provider (time in operation, experience in providing access services, expertise etc.); level of current provision of access services; type of programming schedule (production of live programming, amount of programming received from other broadcasters, amount of home produced programming); and technical and human resource costs/capabilities. Costs are also taken into account in the establishment of timeframes, to the extent that these can be calculated.

For subtitling, the targets range from 9% to 100% of programming to be covered within the ten year timeframe. Some captioning (on-screen text) may be included in these targets over the first three years but there should be a complete changeover to subtitling after this. Broadcasters must comply with the standards and guidelines set out in the BCI Subtitling Guidelines. For signing and audio description relatively small initial targets (1%) have been set for the main public broadcaster.

Broadcasters are required to indicate through the use of a standard symbol those programmes for which access provision (subtitling, sign language or audio description) is available. In so far as is possible, they should also ensure that any programme listings also indicate the programmes for which access provision is available.

#### **Example 42: United States of America**

Section 713 of the Telecommunications Act 1996 and related FCC regulations set out requirements with regard to closed captioning of video programming and associated technology receivers. The rules provide that open captioning or subtitles in the language of the target audience may be used in lieu of closed captioning. Different closed captioning schedules apply to new, pre-rule, and Spanish language programming.

Access to emergency information is covered by Section 713 of the Telecommunications Act. Under this section, the FCC implements rules that require broadcasters, cable operators, and other multichannel video programming distributors to make emergency information that they provide to their viewers accessible to persons with hearing and vision disabilities (e.g., pertaining to storms, school closings, and other emergencies).

With regard to audio (video) description, the FCC had previously introduced rules but these were struck down by court ruling (November 2002). The rules required the major networks and cable channels in the top 25 television markets to present at least four hours of described programming per week. The FCC further required that video described programs be made available where TV stations not in the top 25 markets had the equipment to do so. The basis for the decision was that the enabling legislation (in the Telecoms Act), although it called for inquiries on both closed captions and video description, only specified that close captioning must be implemented after the inquiry.

A bill to reinstate the video description requirements was prepared in 2005 but appears not yet to have been enacted (H.R.951: Video Description Restoration Act of 2005). Similarly, a draft discussion Act (the Twenty-first Century Communications and Video Accessibility Act) was submitted on 21st December 2007. This Act aims to restore the audio description rules previously struck out by the Court, widens the scope of equipment that must enable closed captioning and audio description, and also provides for the accessibility of navigational programming guides.

With regard to equipment, the Television Decoder Circuitry Act of 1990 and related rules require that television receivers with picture screens 13 inches or larger contain built-in decoder circuitry designed to display closed captioned television transmissions. The Act also requires the FCC to ensure that closed captioning services continue to be available to consumers as new technology is developed. The FCC amended its rules in 1991 to include standards for the display of closed captioned text on analogue television receivers. The development of digital broadcasting required updating of the rules and in 2000 the FCC incorporated sections of industry standard EIA-708-B, "Digital Television (DTV) Closed Captioning" into its rules.

The standard provides instructions for the encoding, delivery, and display of closed captioning information for digital television systems. Devices covered under the rules include DTV sets with integrated "widescreen" displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens.

The Report and Order contains provisions that will allow viewers to choose and alter the colour, size, and font of their captioning and to choose between multiple streams of captioning, such as "easy reader" or alternate language captioning. The Order also requires that cable providers and other multi-channel video programming distributors transmit captions in a format that will be understandable to the decoder circuitry in digital television receivers.

## Learning points

The UK and IE examples provide models of how clear concrete requirements can be introduced, with these tiered to cater for the different circumstances of different broadcasters. The US example shows how 'end-to-end' aspects can be included in legislation, whereby both broadcast services and TV equipment are addressed.

## 4.4 Public procurement

As mentioned earlier in this report, the revised EU Public Procurement Directives of 2004 implicitly address eAccessibility, albeit that a rather light touch was given to this matter in the actual text of the Directive. With a view to coordinate Member States activity in this field, a Mandate has since been given to the EU Standards Organisations to prepare standards and a toolkit to support public procurers (and suppliers) to address eAccessibility requirements. To date, however, only a few Member States have given eAccessibility a prominent place within their national procurement legislation or regulation. In the US, public procurement has been leveraged to promote eAccessibility in a much stronger manner.

### **Example 43: United Kingdom**

The approach in the UK can be considered to be strong because the implementation of the EU Directives imposes a direct requirement to include accessibility criteria in public procurements and this is now being interlinked with obligations on public procurers in relation to eAccessibility under equality/anti-discrimination legislation.<sup>127</sup> In regard to the latter, a Code of Practice and a specific guidance document for procurers set out the procedures to be employed in procurements and give examples of ICT procurements in this context.

The UK Public Contracts Regulations 2006 are intended to implement the EU Directives by regulating procurement procedures for most public authorities in the UK. Article 9(3), on technical specifications, states that a contracting authority "shall, wherever possible, take into account accessibility for disabled persons or the suitability for design for all users."

More generally, public authorities that are subject to the Disability Equality Duty under the DDA 2005 are required to include disability considerations in the process of procuring or commissioning a service. This duty requires public authorities to be proactive in ensuring that

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<sup>127</sup> UK Public Contracts Regulations (2006); Disability Discrimination Act (Amendment) (2005); Guidance document: Procurement and the Disability Equality Duty

disabled people are treated equally in terms of access to services. The Code of Practice explicitly sets out the terms public authorities are required to include in external contracts to ensure the inclusion of disability considerations. The DED applies to all types of services and the Code of Practice for government departments gives examples of the procurement of new IT systems and the re-design of a department's website by external contractors as services to which the procurement policy applies under the DED. There is an explicit reference to the need to ensure that websites are fully accessible to disabled people.

The Office of Government Commerce (OGC) guidance 'Social Issues in Purchasing' indicates that, whenever public authorities purchase goods that may be used by disabled people then this should be appropriately reflected in the specification. For example, it will generally be advisable for public authorities to assume that their employees and potential users of equipment are likely to include people with a range of disabilities, and so the specification should state that the goods to be supplied should be usable by disabled people. This could include, among other things, IT equipment and software.

#### **Examples 44: Italy**

In Italy, the so-called Stanca law<sup>128</sup> is mainly aimed at public agencies. Article 4 stipulates obligations and duties regarding eAccessibility in the case of public procurement of ICT goods and services. In particular, when purchasing ICT goods and services, signing contracts regarding their development and maintenance or carrying out competitive tenders, accessibility requirements must always be taken into consideration.

The purchase of non-accessible IT must be adequately motivated by the procuring administration. In the case of public websites, public organizations are obliged to purchase products and services responding to accessibility requirements, or the contract may be considered null and void. In this case, according to Italian regulation, there may be disciplinary action against the public officers responsible for the contract stipulation. This is a strong measure to ensure compliance by public officers.

The law also reiterates the obligation (already foreseen in previous legislation) for public and private organizations to provide assistive technologies and accessible IT equipment for their disabled employees, including teleworking equipment (Article 9). Public employers must respect this obligation, but within the limits of their available budget.

Also the law recalls the importance of accessibility in the sector of education including the production of teaching tools, courseware and electronic textbooks (Article 5).

#### **Example 45: United States of America**

Section 508 of the US Rehabilitation Act of 1973 (amended 1998) requires that when Federal agencies develop, procure, maintain, or use electronic and information technology, Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency. Section 508 also requires that individuals with disabilities who are members of the public seeking information or services from a Federal agency have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities, unless an undue burden would be imposed on the agency.

The Section 508 standards<sup>129</sup> define the types of technology covered and set forth provisions that establish a minimum level of accessibility. The ICTs covered are:

- Software applications and operating systems
- Web-based intranet and internet information and systems
- Telecommunication products

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<sup>128</sup> Law No. 4/2004

<sup>129</sup> <http://www.section508.gov/index.cfm?FuseAction=Content&ID=12>

- Video and multimedia products
- Self contained, closed products
- Desktop and portable computers

In relation to these ICT product categories, provisions are made as follows:

- When developing, procuring, maintaining, or using electronic and information technology, each agency shall ensure that the products comply with the applicable provisions, unless an undue burden would be imposed on the agency.
- When compliance with the provisions imposes an undue burden, agencies shall provide individuals with disabilities with the information and data involved by an alternative means of access that allows the individual to use the information and data.
- When procuring a product, if an agency determines that compliance with any provision imposes an undue burden, the documentation by the agency supporting the procurement shall explain why, and to what extent, compliance with each such provision creates an undue burden.
- When procuring a product, each agency shall procure products which comply with the provisions when such products are available in the commercial marketplace or when such products are developed in response to a Government solicitation. Agencies cannot claim a product as a whole is not commercially available because no product in the marketplace meets all the standards. If products are commercially available that meet some but not all of the standards, the agency must procure the product that best meets the standards.

The General Services Administration (GSA) monitors compliance and provides support. The GSA is planning to issue a “report card” that will document how many procurements / procurers are following good practice with respect to Section 508 requirements. The Department of Justice is required to report on progress in compliance every two years

Asking for VPATs (Voluntary Product Accessibility Templates) is a regular part of procurement. The template asks vendors to provide information about specific accessibility attributes that are relevant to the procurement, thus helping the procurement officer to compare the attributes of competing offerings.

A new Buy Accessible Data Center<sup>130</sup> has been set-up as a successor to the GSA Buy Accessible Portal. The Center manages data and references to company and accessibility information about electronic and information technology products and services for government buyers.

## Learning points

The examples provided above are instructive in a number of regards. The UK is an example of strong implementation of the provisions of the EU directives, inter-linkage of this with other relevant national legislation, and follow-up with guidance and other support documentation. The Italian example shows how sanctions can be included in the national provisions. The US example is perhaps the international exemplar, with detailed standards for procurers in place and evidence of market impacts in terms of the visible attention being given to eAccessibility by suppliers.

## 4.5 Employment equality

As discussed in more detail in Chapter 2, the 'employment equality' Directive<sup>131</sup> at least implicitly includes eAccessibility of workplace ICTs within the framework of reasonable accommodations to be provided in order to ensure equality of access to employment for

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<sup>130</sup> <http://datacenter.buyaccessible.org:8080/DataCenter/>

<sup>131</sup> Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation



people with disabilities (unless such measures would impose a disproportionate burden on the employer).

Although most (but not all) Member States have introduced a clear reasonable accommodation or similar provision, eAccessibility is not yet explicitly visible in the reasonable accommodations context in most countries. However, aspects of good practice can be identified in some countries.

#### **Example 46: United Kingdom**

Amendments to the Disability Discrimination Act (DDA) in 2004 implemented most of the elements of the EU Directive.

Under the DDA an employer has a duty to make 'reasonable adjustments' to employment practice and premises if these place a disabled person at a substantial disadvantage. The guidance documentation for employers gives specific mention of and a high profile to accessibility of ICTs as examples of reasonable adjustments ("getting or modifying equipment such as a CCTV, voice-activated computer software or a telephone adapted with an amplifier; translating instructions and reference manuals into accessible formats, such as large print and audio cassette"). It also makes specific reference to available public supports for equipment.

Redress mechanisms are provided, including support through the Disability Rights Commission (DRC), now the Commission for Equality and Human Rights (CEHR)

#### **Example 47: Sweden**

In Sweden the Law Against Discrimination in the Working Life due to Disability,<sup>132</sup> as amended in 2003, has been updated<sup>133</sup> to include provisions from the European 'employment equality' Directive. ICT-related assistive technologies are covered by section 6, which obliges the employer to create a situation for a person with a disability that is equivalent to that for persons without such a disability (to include the acquisition of technical support if needed). In practice this means that a person with a disability has the right to obtain assistive technology at a reasonable cost to the employer. Furthermore, the state actively intervenes in this area and in case the employer does not have enough resources, the Swedish Social Insurance Administration can provide financial assistance.

The employer is also responsible for setting up a vocational rehabilitation plan if an employee acquires an injury, disease or disability. This involves a review of the complete work situation of the individual, including his/her ICT workstation. The review could result in a need for a redesign of the workstation and to acquire an assistive device.

#### **Example 48: Spain**

In Spain, the law on Equal Opportunities, Non-Discrimination and Universal Accessibility of People with Disabilities (LIONDAU)<sup>134</sup> has been enacted in response to the European 'employment equality' Directive, although it went beyond the parameters of this directive (see also section 3.7.1).

#### **Example 49: Italy**

The Italian Stanca law (cf. section 4.3.1), although it has not been enacted in the framework of employment equality regulation, makes explicit reference to the provision of assistive technologies and accessible IT equipment to disabled employees, including teleworking equipment (Article 9). Public employers must respect this obligation, but within the limits of their available budget.

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<sup>132</sup> Law 1999:132

<sup>133</sup> Proposition 2005/06:207

<sup>134</sup> Law 51/2003, the Law on Equal Opportunities, Non-Discrimination and Universal Accessibility for Persons with Disability (LIONDAU) Official Link: [www.boe.es/boe/dias/2003/12/03/pdfs/A43187-43195.pdf](http://www.boe.es/boe/dias/2003/12/03/pdfs/A43187-43195.pdf)

## **Learning Points**

The examples presented above provide some good practice elements, including clear reference to ICTs and assistive technology in the context of the employment equality regulations or in follow-up Codes of Practice giving examples of eAccessibility accommodations, and linkage to provision of public supports, including assistive technologies.

## **4.6 Summary / conclusions**

There is wide divergence across Europe and internationally in the types of measures that have been implemented and in the scope/detail of coverage of particular eAccessibility themes. Although no 'perfect' models exist, the many examples presented in this Chapter provide a useful resource to draw upon in the formulation of future EU measures to help strengthen and/or better leverage the existing EU-level provisions in the fields of public websites, fixed telephony services, TV services, public procurement and employment equality.

## **5 Towards a framework for further EU measures on eAccessibility**

eAccessibility has come to have a high priority on the EU policy agenda, with recognition of its importance not just for the social objectives of the Union but also for its competitiveness and internal market objectives. The stock-taking and analysis presented in Chapter 2 of this report shows that there is a clear need for further development of concrete measures at EU level in order to meet these objectives. This Chapter presents a framework to help in decision-making on how the EU 'acquis' in the eAccessibility field might be further developed in an orderly and timely manner.

An 'orderly' approach is needed because of the multi-sectoral and multi-dimensional kaleidoscope of issues that need to be addressed, with blurring of traditional boundaries and new themes emerging as technologies and markets change over time. A timely response is needed because ICT-based products and services continue to present major barriers to participation for large numbers of Europeans and because the trends towards fragmentation in the regulatory requirements being introduced across Member States may soon pose significant threats to the smooth functioning of the internal market.

### **5.1 Key challenges and issues**

Based on the material presented in Chapter 2, there are a number of key challenges and issues that need to be taken into account in developing an optimal EU approach to the development of coordination or other measures in the field of eAccessibility.

#### **5.1.1 Better coverage of and impacts on ICT sectors already addressed**

It is clear from the analysis presented in section 2.2 that there is considerable scope for better coverage of and impacts on the sectors – fixed telephony services, TV broadcast services and public websites - that are already addressed to at least some degree in EU legislation or other coordination measures. For the fixed telephony and broadcast TV sectors, the main concern is whether and how the existing legislation can be strengthened and/or better leveraged. For public websites, a key issue for consideration is whether a reinforced OMC-type approach is sufficient or legislative measures are warranted.

#### **5.1.2 Extending coverage to other ICT sectors**

It is also clear from the analysis presented in section 2.1 that many ICT sectors are not yet directly and actively addressed in any current EU legislation or other coordination measures. Important specific gaps include business websites, mobile telephony, telecommunications equipment, TV equipment and self-service terminals, but extension of coverage in some way to the full spectrum of ICTs that are commonly used in everyday social and economic life also needs to be considered. One key issue in relation to possible extension of coverage of the EU eAccessibility 'acquis' is to identify whether there are particular technologies/sectors that may warrant specific 'vertical' regulatory attention. There is also the issue of whether more cross-cutting legislation, horizontal rather than sector-specific, might have a role to play in extending the EU coverage.

#### **5.1.3 Covering the full eAccessibility 'supply chain'**

The supply chain perspective is important for eAccessibility both in relation to 'end-to-end' issues and in recognition of the important roles of both 'producer' and 'deployer' sectors in ensuring eAccessibility for end-users.

## **'End-to-end' eAccessibility**

The achievement of eAccessibility often involves a number of interlinked supply-chain components, including content production, content transmission and content rendering through end-user equipment. Each has a role to play in the delivery of eAccessibility. There is little value in regulating that content is developed to be accessible if the accessibility features are not then transmitted by the carrier networks and/or not rendered by the end-user equipment. Today, such end-to-end issues are especially important for eAccessibility in the telecommunications, TV and web fields but existing EU legislation or other coordination measures on eAccessibility in these fields have not so far addressed this aspect.

### **Both *producers/providers* and *deployers* of ICTs have important roles**

From a regulatory point of view, a distinction can be made between producers / providers of ICT-based products and services, on the one hand, and entities that utilise (deploy) ICT products and services in the course of their main activities but for whom the ICTs, per se, are not their *raison d'être*. The two sectors have somewhat different yet complementary roles to play in the provision of eAccessibility to those that need it. The producer/provider sectors contribute by incorporating eAccessibility in the ICT products and services that they design and sell. The deployer sectors (employers, public services, educational institutions, banks and so on) contribute by ensuring that the ICTs that are used in their day-to-day activities do not pose eAccessibility barriers to their employees and customers. Where the ICTs in question are off-the-shelf or developed by a third-party, this can be done through procurement criteria that are applied when purchasing ICTs or specifying contracts with system developers. However, the potential provided by the current EU-level public procurement legislation in this regard has not yet been leveraged to any significant degree at the Member State level, and there is an issue as to how eAccessibility criteria can be given a more prominent place within national procurement legislation / regulation. Where the ICT-based applications are developed by deployers in-house, eAccessibility needs to be included as part of the development staff's brief. Some of the Member State approaches to public website accessibility provide examples of measures addressing this dimension.

#### **5.1.4 Dealing with a moving target of sectors, technologies and applications**

A difficulty in relying solely on a sector-specific approach is that 'white spaces' (sectors / technologies / applications not covered by e-Accessibility legislation) inevitably remain for as long as it takes for the relevant sectoral legislation to emerge. In reality, it may also be impracticable to expect a sufficiently large suite of vertical legislation to emerge to cover the full spectrum of ICTs and their applications; nor would such an approach be likely to be desirable from the point of view of regulatory efficiency.

Another difficulty is that technological evolution and the increasing convergence across sectors is blurring what were previously relatively clear-cut distinctions so that accessibility to key ICT products and services can fall through the net. For example, telephony over the Internet often falls outside the scope of legislation dealing with accessibility of voice telephony and there is a lack of clarity as to whether interactive TV is a broadcast or a telecommunications service, or neither of these but a new class of service from an e-Accessibility regulatory point of view.

Horizontal approaches may have merit in addressing these aspects.

### **5.1.5 Ensuring consistency of requirements across measures**

The existing patchwork of vertical/sectoral legislation across Europe is also leading to a situation where the e-Accessibility requirements for the same ICT product or service may differ because of different requirements / standards in the different pieces of legislation / regulation. Cross-cutting co-ordination measures may be needed to ensure consistency across sectors.

### **5.1.6 Both 'top-down' and 'bottom-up' legislation have roles to play**

In the Member States and beyond, eAccessibility is currently being addressed through two generic legislative approaches. One type involves 'top-down' approaches that impose direct eAccessibility obligations on supply-side players (such as ICT product manufacturers and ICT-based service providers). The other type involves a 'bottom-up' approach that gives rights to users/consumers in relation to eAccessibility issues. Examples of legislation involving some combination of the two can also be found. The EU legislative approach needs to include both dimensions in an appropriate and complementary manner.

The key challenge in relation to eAccessibility is to influence decisions that are taken as far back as possible in the supply chain. The ideal approach would most likely be a mix of a 'top down' approach that directly regulates the relevant sectors and generates systemic change alongside a consumer protection/non-discrimination approach that affords just satisfaction to an aggrieved end-user. The latter, on its own, might have some systemic impact also, especially if an 'anticipatory element' is included within its scope, but this would not be as effective in bringing about the rapid improvement in readily attainable eAccessibility that could be achieved through direct positive obligations on the sectors concerned.

### **5.1.7 Legacy issues can present barriers to an effective approach**

There are significant 'legacy' factors that can present barriers to an effective approach to eAccessibility in the EU. One set of factors can be traced to the policy preoccupations of the 1990s, when market liberalisation and the removal of barriers to the internal market were the key concerns in fields such as telecommunications. Thus, although accessibility issues were addressed in both the telecommunications' services market regulation directives and in the directive regulating the market for telecommunications equipment, the provisions were limited. In the telecommunications services area, the focus was more on allowing the possibility for accessibility regulations at national level rather than on implementing a coordinated approach to ensuring a common minimum set of provisions across the Member States. In the telecommunications terminals area, the possibility to regulate on accessibility was introduced but not implemented.

More generally, as mentioned earlier, the separate regulation of the services and terminal equipment sectors in the EU legislation has been unhelpful in the promotion of the 'end-to-end' eAccessibility that is needed for many users. Another 'legacy' issue is that the telecommunications services regulations focused on fixed voice telephony only, reflecting the predominant role of fixed voice telephony in day-to-day telecommunications at that time. Today, mobile telephony has come to equal and in some countries supersede fixed telephony as the main form of household 'connection' to voice telephony services<sup>135</sup>, but is excluded from the current scope of EU eAccessibility regulation through the telecoms directives.

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<sup>135</sup> Eurobarometer: E-Communications Household Survey November-December, 2007

### 5.1.8 'Jurisdictional' perspectives and boundaries can impede progress

Apart from these legacy issues, progress can also be impeded by more 'jurisdictional' factors associated with the complexities of 'sector responsibility' in relation to eAccessibility. At a superficial level, one issue concerns the increasing need for coordination of the roles of the various DGs within the Commission in relation to eAccessibility policy (especially DG Information Society and Media, DG Employment, Social Affairs and Equal Opportunities, and DG Internal Market and Services, but also DG Health and Consumers) in order to ensure a joined-up, effective and complete approach.

At a deeper and more fundamental level, there is a need for clarification of what legal basis or bases could (or should) underpin eAccessibility-related measures at EU level and what types of legislative or other measure are most appropriate to reach the various sectors and the various dimensions of eAccessibility. Traditionally, regulation in relation to ICTs has tended to be seen as a market issue and therefore to be underpinned by and addressed through the typically 'top-down' internal market regulatory mechanisms. Regulation with regard to more social aspects, such as rights and equality, has been underpinned by and addressed through the typically 'bottom-up' mechanisms associated with the anti-discrimination approach. A key challenge for further development of eAccessibility legislation in Europe is to bring together or otherwise leverage these approaches in an appropriate manner, as well as to link in a coherent manner with other relevant perspectives and approaches from the fields of consumer protection and public procurement.

In fact, recent thinking and precedent seems to indicate that existing demarcations may be becoming less relevant and less sustainable. For instance, the Communication of November 2007 on the 'Single Market in the 21<sup>st</sup> Century' states that "*single market policy must take full account of the social and environmental implications of market opening, and must be accompanied by measures that enable all citizens and businesses to take advantage of new opportunities*".<sup>136</sup> More specifically, in the proposals for revisions to the accessibility provisions in the telecommunications directives, the legal and policy basis clearly derives both from a 'rights' perspective and an internal market perspective (with reference to Declaration 22 as annexed to the final Act of Amsterdam which provides that the institutions of the community shall take account of the needs of persons with a disability in drawing up measures under Article 95 of the Treaty).

In addition, in the field of public procurement it has been clarified that social objectives<sup>137</sup> can and indeed should fall within the scope of the EU coordination mechanisms. Reflecting this, the revised EU Directives now include clauses encouraging the inclusion of accessibility criteria in public procurement although not making specific reference to eAccessibility, as such. eAccessibility objectives are also consistent with and supportive of consumer policy objectives, where equality of access and rights of all consumers to the marketplace is at the core although, again, no direct attention has yet been addressed to eAccessibility in this context. However, the eAccessibility-related exemptions in the digital copyright directive can be viewed as a form of protection of consumer eAccessibility rights.

### 5.1.9 Taking account of the realities of the current legislative landscape

Finally, the realities of the current legislative landscape across the Member States and in third countries needs to be well understood if appropriate EU-level measures are to be formulated and implemented. As outlined in Chapters 2 and 3, across Europe and internationally there are many examples of legislation that either explicitly or implicitly

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<sup>136</sup> Communication from the Commission: A single market for 21st century Europe. COM (2007) 724 final, p 3.

<sup>137</sup> Communication of the Commission on the Community law applicable to public procurement and the possibilities for integrating social considerations into public procurement – COM (2001) 566 Final; 15.10.2001

addresses eAccessibility. This corpus of legislation can be segmented into three main operational types of intervention:

- 'top down' legislation that imposes positive obligations to ensure eAccessibility
- 'bottom up' legislation that gives rights of redress/complaint on eAccessibility grounds (or other user rights such as copyright exemptions)
- public procurement legislation that requires public entities to include eAccessibility requirements in their procurements.

The following Exhibit presents a schematic mapping of the ways in which and extent to which these types of legislative approach impact on the different supply-side players.

It can be seen that the main concentration and focus of direct legislation so far has been in terms of 'top-down' obligations on the fixed telephony services, TV broadcast services, and public website 'sectors'. As documented in Chapter 3, although examples are to be found of direct obligations on some other sectors, relatively few of these are to be found in Europe.

**Exhibit 1: Schematic mapping of ways in which and extent to which different types of legislative approaches impact on different supply-side players**

	ICT product producers	ICT-based service providers			ICT deployers			
		Traditional (core) services (telephony and TV)		New (online) services / digital content	Internal deployment		External deployment	
		Public	Private		Public	Private	Public	Private
<b>'Top-down' positive duties</b>	(just a very few examples - Section 255, TV decoder and Hearing Aid Compatibility Acts in US)	<b>X</b> (Telecoms and TV laws in many countries)	<b>X</b> (Telecoms laws in many countries; TV laws in some)		(some examples, such as positive duties under equality law e.g. ES, FR, UK)		<b>X</b> (Web accessibility law in a growing number of countries)	
<b>'Bottom-up' rights of redress / complaint / copyright exemptions</b>	(just a very few examples - section 255 right of complaint has had some concrete examples of impact)	X (generally not the main focus, a few examples of specific mention in laws - FR, ES, UK)	X (generally not the main focus, a few examples of specific mention in laws - FR, ES, UK)	X (digital copyright exemption in Member States and other countries)	X (impacted in principle through employment equality law in many countries)	X (impacted in principle through employment equality law in many countries)	X (some examples, mainly based on goods & services equality law, - UK, FR, US, etc.)	X (some examples, mainly based on goods & services equality law - MT, AT, US, AU)
<b>Public procurement</b>	(indirect impacts on computer and telecoms equipment industries already visible – mainly in US market)			(indirect impact in a few cases, e.g. eLearning sector in the US)	X (impacted in principle through public procurement law in many countries)		X (impacted in principle through public procurement law in many countries)	

As regards 'bottom-up' user rights approaches, the main focus to date has been on usage of equality/anti-discrimination legislation to reach deployer sectors. Even here, there are few examples of explicit attention to eAccessibility issues, although the implementation of the EU employment equality direct has led to the introduction of enabling legislation in most countries. Few examples of consumer-focused measures are to be found, although the digital copyright exemptions can be considered to fall within this arena.

Likewise, although the public procurement approach has the potential to impact directly on accessibility of both internally and externally deployed ICTs of public agencies, in practice the extent that this is being leveraged is quite limited. Important indirect impacts occur through encouragement of industry and suppliers to address eAccessibility. To date, such impacts are visible mainly in the US market, both on the part of US industry and on the part of European and other third country industries selling on the US public procurement market.

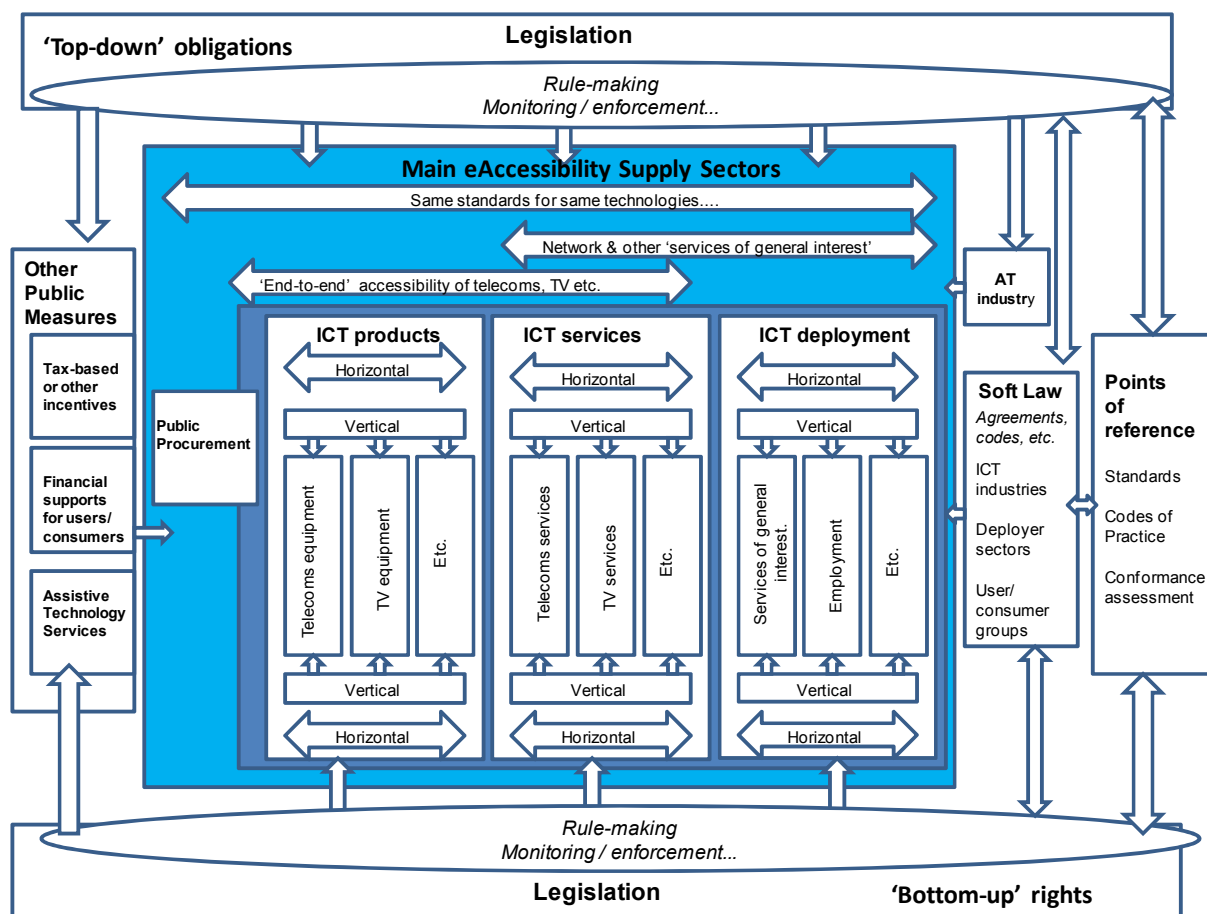
## 5.2 Developing a framework for a roadmap for Europe

This section develops a framework to help support the elaboration of a concrete roadmap for further development of the EU eAccessibility 'acquis' in an orderly and timely manner.

### 5.2.1 Overview of the intervention space

The following schema presents an analytic overview of the overall intervention space in relation to eAccessibility.

**Exhibit 2: Schematic overview of the overall intervention space in relation to eAccessibility**



There are a number of elements of this that have a particular relevance for the formulation of an appropriate overall policy strategy and implementation programme for the EU in the field of eAccessibility.



### **'Top-down' and 'bottom-up' legislation**

First, as discussed earlier, the key roles of both the 'top-down' and 'bottom-up' approaches is indicated. Top-down legislation imposes positive duty eAccessibility obligations on the relevant supply-side players. Bottom-up legislation provides rights of various sorts in relation to eAccessibility, for example, to make a complaint and have it addressed, to seek redress or to be exempt from particular copyright or other restrictions. The EU eAccessibility 'acquis' needs to include an appropriate combination of both types of measure. In addition, the links and synergies between the approaches need to be addressed. A specific example of interworking between these types of legislation comes from Australia, where invocation of the anti-discrimination legislation in a complaint by a deaf customer led to the mainstream telecommunications legislation being changed to include a positive duty on operators to provide necessary special equipment under equivalent conditions.

### **Basic legislation, followed by detailed rule-making**

For both types of legislation, an important issue arises as regards how far the primary legislation should go in terms of rule-making, specification of detailed requirements, and so on. In the US, for example, various ground-breaking pieces of legislation (e.g. section 255 of the Telecoms Act) introduced quite broad-sweeping obligations which were then worked through in consultation with the stakeholders to produce detailed guidelines. More generally, the Federal Communications Agency develops concrete eAccessibility rules based on various items of legislation, and updates these in the light of market developments over time.

In terms of EU co-ordination in the field of eAccessibility, a key contribution of legislation may be to establish and underpin one or more mechanisms that would then be responsible for subsequent detailed rule-making, implementation and administration. This would enable effective engagement of the relevant stakeholders in the process and also be more suited to addressing the changing landscape as technologies (and sectors) evolve and converge over time.

### **Coverage of the main eAccessibility supply sectors, vertically and/or horizontally**

Although it has been pointed out above that precise definition of sectoral boundaries and jurisdictions in relation to eAccessibility is not a necessarily a straightforward or very helpful approach, it is nevertheless the case that legislative approaches tend to follow some core distinctions in this regard. The schema above indicates three key sectoral domains against which existing eAccessibility legislation tends to be aligned. These are: ICT products, ICT services and content, and ICT deployment.

As regards alignment with traditional EU legislative jurisdictions, it seems that eAccessibility legislation on ICT products would fall mainly within the scope of the 'new approach' internal market legislative acquis, legislation on ICT services (especially telecoms and TV) would fall mainly within the electronic communications / audiovisual legislative acquis, and legislation on ICT deployment mainly within the equality/anti-discrimination acquis.

However, as indicated in the schema, horizontal perspectives and approaches may have an important role to play. One aspect arises in relation to ensuring 'end-to-end' accessibility in access to telecoms and TV, where content, network services and terminals all are relevant for the ultimate delivery of accessibility. In this context, section 255 of the Telecoms Act in the US would be an example of a horizontal approach in practice, where the legislation covers a broad sweep of telecoms services *and* telecoms equipment.

Another aspect arises in relation to the overlap between 'ICT services' (such as 'network services' like telecoms or TV) and 'deployer services' (such as public websites and other public or private services considered to fall within the scope of 'services of general interest'). In this context, legislation in some EU countries (such as UK, FR, ES) already straddles these sectors in their explicit scope.

Finally, another aspect arises in relation to ICT products or services that are common to two or all three of the main sectors. For example, telecoms terminals are products manufactured by the ICT products sector, offered by telecoms service providers and deployed by many different deployer sectors. Ensuring common standards and requirements across separate pieces of legislation dealing with these sectors would thus be an important horizontal mechanism. The efforts to align telecoms standards under public procurement law and telecoms law in the US would be an example of existing efforts of this nature.<sup>138</sup>

### **Soft law, with linkage to hard law**

'Soft law' has been variously conceptualised and defined for particular purposes. For example, in relation to the EU 'acquis' of measures, forms of 'soft law' would be opinions, declarations and so on. Recommendations would fall somewhere between 'hard' and 'soft' law in that they have some legal standing even if not binding as such. For present purposes, however, the term 'soft law' is used to refer to instruments such as agreements and codes of practice, as well as European standards. In the eAccessibility and other fields, codes of practice may be developed within sectors (e.g. ICT industry or deployer sectors) and agreements may be established across sectors (e.g. between an industry sector or individual company and the user/consumer sector). Examples of both can be found in the eAccessibility field. Codes of practice on eAccessibility (in the form of industry standards) have been developed by the banking industries and the telecoms industries in Australia, for example, with the latter being officially sanctioned by the regulatory authority. Legal agreements on eAccessibility have been made in the US between banks and user organisations, in the context of settlements to offset possible future litigation under anti-discrimination legislation.

### **Points of reference**

Linked to the above but also relevant for hard law is the notion of 'points of reference' for eAccessibility requirements. This refers to the importance of reference criteria against which the sectoral players can target their eAccessibility efforts, hard law can impose obligations and courts or other adjudication processes can assess compliance. Agreed standards are one important point of reference, but codes of practice can also be important. For example, compliance with the latter can be and has been seen to confer protection against anti-discrimination complaints in some contexts.

### **Public procurement**

The schema also gives visibility to public procurement and locates this as a measure falling within the suite of supply-side oriented measures. The approach speaks directly to the public (deployer) sector and in this context exerts an indirect (horizontal) reach across both ICT product and ICT services sectors. In the EU context, the further development of the eAccessibility 'acquis' needs to harmonise requirements under public procurement and other relevant measures, as well as ensuring that the links and synergies between the public procurement approach and other top-down or bottom-up measures addressing deployer sectors are fully recognised and developed. For example, it is possible that the public procurement 'duty' to address accessibility could come to be interpreted as a duty towards taking proactive measures ('anticipatory accommodations') under anti-discrimination law.

### **Other public measures**

Finally, the schema indicates some other important types of public measure that are also relevant for eAccessibility policy.

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<sup>138</sup> Update of the 508 Standards and the Telecommunications Act Guidelines. <http://www.access-board.gov/sec508/update-index.htm>

Public assistive technology services are one important approach and can be found in most EU Member States. One issue for the EU eAccessibility roadmap is whether and how to include such public services within its scope. This is an issue that in fact has already been mooted for possible EU-level attention.<sup>139</sup> Another aspect concerns the linkages between public assistive technology services and anti-discrimination legislation. Already, the employment equality directive links consideration of what is reasonable to expect of employers to the availability of public supports in the country. Again, there is a need to include within the eAccessibility roadmap measures to ensure that such links and synergies are fully recognised and developed.

Other public measures of relevance include financial supports for users/consumers and tax-breaks or other incentives for industry.

As regards user/consumer affordability issues, the principle of universal service in the telecommunications field includes consideration of affordability issues. In the case of eAccessibility, the main consideration is to ensure that users who require particular access services or types of equipment in order to have equivalent access to services should only have to pay equivalent prices. Where the real costs are higher these may be met through the sector itself (the funding of text telephone relay services in the US is a good example of this) or through public funds (the public procurement of a range of accessibility services in Sweden is one example of this; more generally, social services in a number of countries provide financial supports for special equipment; also, in some countries VAT is waived on certain special equipment/assistive technology). The links and possible synergies between these approaches and the affordability provisions within the EU electronic communications regulatory framework also need attention in the development of the EU approach to eAccessibility.

As regards financial incentives to industry/business, there is a tax credit available in the US against the costs for disabled access measures by small businesses. This allows a tax credit for 50 percent of costs for certain ADA compliance over a total \$250. A rather different approach would be to provide for competitive tendering for particular eAccessibility services, such as is the case for the provision of certain telecoms access services in Sweden. This approach has also been mooted as one that could be more widely used in the context of provision of services of a 'universal service' nature. The possibilities offered by such approaches also needs to be considered in the elaboration of the EU eAccessibility 'acquis'.

### **5.2.2 What next for the EU?**

It is beyond the scope of this paper to develop the specific details of what should be addressed, when and by what instruments in order to develop a complete and co-ordinated EU eAccessibility 'acquis' to cover the interventional space outlined above. Anyway, it can be argued that this is a level of detail that should be developed through a formally-organised, legislatively-underpinned mechanism that involves the relevant stakeholders (including the Commission, Member States, ICT industry, deployer sectors, standards bodies, and user/consumer organisations) in ways appropriate to their expertise and jurisdictions. However, based on the analysis that has been carried out, it is possible to provide some concrete pointers to help focus efforts on key aspects to support an orderly and timely development of the EU eAccessibility 'acquis'. These are organised around three themes:

- addressing some possible sectoral priorities
- possible horizontal perspectives and approaches
- overall rule-making and implementation approach and mechanisms.

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<sup>139</sup> DG Employment and Social Affairs (2003) Access to Assistive Technology in the European Union.

### 5.3 Addressing some possible sectoral priorities

Following from the analysis and assessment of gaps in the current EU sectoral coverage and divergence across the Member States in the areas that are currently covered, a number of possible themes for immediate vertical/sectoral attention can be identified. These are outlined in Exhibit 3 below, along with a selection of relevant examples of approaches in these field from Member States or third countries that may provide useful pointers. In addition, Exhibit 4 presents some possible lines of approach in the more cross-cutting fields of public procurement, employment equality and 'goods and services' equality. It is to be emphasised that the suggestions are merely intended to be indicative at this stage of the policy development process. Nevertheless, it should provide some food for thought as to how to begin indentifying appropriate approaches to addressing some particular sectoral priorities.

**Exhibit 3: Some possible approaches to ICT sectoral priorities**

Sector / theme		Possible approach to further development at EU level	Examples to draw upon
Telecoms	Fixed telephony services	Develop (minimum) concrete requirements suitable for possible implementation in all Member States Implement via or, if necessary, through revision of the electronics communications regulatory package (or OMC if this is not currently possible)	Examples 34, 35, 36, 37, 38,39 (section 4.2)
	Mobile telephony services	Extend scope of EU measures to include this within the electronic communications regulatory framework	Examples 1, 2, 3, 4, 5 (section 3.1.1)
	VoIP	Consider possible coverage through electronic communications framework and/or R&TTE	Example 6, 7 (section 3.1.2)
	Telecoms equipment	Develop (minimum) concrete requirements suitable for possible implementation for equipment sold on the European market Implement through R&TTE and associated internal market regulatory mechanisms	Examples 8, 9, 10, 11 (section 3.1.3)
TV	Broadcast services	Develop (minimum) concrete requirements suitable for possible implementation in all Member States Implement via or, if necessary, through revision of the audiovisual directive (or OMC if this is not currently possible)	Examples 40, 41, 42 (section 4.3)
	New features such as EPG and other issues raised by digital TV	Develop (minimum) concrete requirements suitable for possible implementation in all Member States Implement via or, if necessary, through revision of the audiovisual directive (or OMC if this is not currently possible)	Example 14 (section 3.2.2)
	TV equipment	Develop (minimum) concrete requirements suitable for possible application to equipment sold on the European market Examine how this sector could be addressed legislatively - through extension of 'new approach' acquis (R&TTE or equivalent) Examine the possible merits of encouraging a 'soft law' approach by the sector(s) concerned	Examples 12, 13 (section 3.2.1)

**Exhibit 3: Some possible approaches to ICT sectoral priorities (continued)**

Sector / theme		Possible approach to further development at EU level	Examples to draw upon
Websites	Public web-owners	Develop (minimum) concrete requirements suitable for possible implementation in all Member States Elaborate model of good practice in terms of accompanying measures necessary to achieve sustainable web accessibility Implement through new legislative measure, possibly non-binding recommendation at this stage (or OMC if legislation not feasible)	Examples 30, 31, 32, 33 (section 4.1)
	Business web-owners	Support the development of a common perspective / approach across the Member States (e.g. what are 'services of general interest'; how goods and services equality legislation can apply; how this may be viewed as analogous to access regulations on building and transport industries) Exploit the proposed equal treatment in access to 'goods and services' directive to reach this sector Examine the possibilities for encouraging 'soft law' approaches, such as codes of practice (e.g. Australian Banking Sector)	Examples 13, 14, 15, 16 (section 3.3)
	Web products (authoring, content management, etc.)	Develop (minimum) concrete requirements for possible application to products bought through public procurements in the Member States Examine the possible merits of encouraging a 'soft law' approach by the sector(s) concerned	No obvious example
Self-service terminals (Bank machines (ATMs), ticket machines etc)	Deployer-oriented.	Develop (minimum) concrete requirements suitable for use as a 'point of reference' for legislative or other approaches Exploit the proposed 'goods and services' directive to reach this sector; also the public procurement directives for public service terminals Examine the possibilities for encouraging 'soft law' approaches, such as codes of practice	Examples 17, 18, 19 (section 3.4)
	Supplier oriented	Examine whether/how this sector could be addressed legislatively through extension of the 'new approach' acquis Examine the possible merits of encouraging a 'soft law' approach by the sector(s) concerned	Example 20 (section 3.4)
Digital content (e.g. eBooks, etc.)	Top-down measures (requiring accessible design)	Develop (minimum) concrete requirements suitable for use as a 'point of reference' for legislative or other approaches Examine how this sector could be addressed legislatively, including exploiting the proposed 'goods and services' directive to reach this sector Examine the possibilities for encouraging 'soft law' approaches, such as codes of practice	No obvious example
	Bottom-up measures (rights)	Follow-up on the Green Paper in this field to ensure that the disability issues raised are fully addressed	No obvious example

**Exhibit 4: Leveraging existing and proposed cross-cutting measures**

<b>Sector / theme</b>	<b>Possible approach to further development at EU level</b>	<b>Examples to draw upon</b>
Public procurement	<p>Measures to better leverage the eAccessibility dimension of the revised directives of 2004:</p> <p>Ensure proper national transpositions of relevant articles dealing with accessibility</p> <p>Consider the possibility of preparing a Clarifying Communication to raise awareness and encourage the inclusion of eAccessibility in public procurement practice in the Member States</p> <p>Implement co-ordination measures based on Mandate 276 standards</p>	<p>Examples 43, 44, 45</p> <p>(section 4.4)</p>
Employment equality	<p>Measures to better leverage the eAccessibility dimension of the directive:</p> <p>Ensure proper national transpositions of relevant articles (on reasonable accommodations)</p> <p>Consider the possibility of preparing a Clarifying Communication (this might be a cross-cutting one on eAccessibility, covering public procurement etc. as well)</p> <p>Consider the possible development of co-ordination measure on public supports for assistive technology, linked to the employment equality directive</p>	<p>Examples 46, 47, 48, 49</p> <p>(section 4.5)</p>
Goods and services equality	<p>Ensure that eAccessibility will be well covered by the new directive, explicitly and/or implicitly as appropriate</p>	<p>Examples 22, 23, 24, 25, 26, 27</p> <p>(section 3.7)</p>

**5.4 Possible horizontal perspectives and approaches**

The analysis presented in Sections 5.1 and 5.2 points to a number of horizontal perspectives and approaches that have an important relevance for the further development of the EU eAccessibility 'acquis'.

**5.4.1 Overarching approach that transcends traditional jurisdictional boundaries**

To begin with, it is clear that a complete and effective EU approach to eAccessibility will require a co-ordinated approach that transcends traditional jurisdictional boundaries between 'social' and 'market' regulation. At the institutional level, this may require reinforcement of co-operation and cross-cutting mechanisms (across DGs Information Society and Media, DG Employment, Social Affairs and Equal Opportunities, DG Internal Market and Services, and DG Health and Consumers) in order to ensure a co-ordinated, effective and complete approach. At the legislative level, this type of co-ordinated and cross-cutting perspective and approach would support the creative exploration of the new regulatory perspectives and instruments that are needed to properly address the requirements of the eAccessibility domain. One could envisage the formulation of legislative and regulatory approaches that combined 'top-down' and 'bottom-up' approaches in a creative manner (partial examples of such approaches are already to be found in some countries, including the US, UK, ES, AU).

#### **5.4.2 Co-ordination of eAccessibility requirements across sectors and instruments**

Another important horizontal approach is to ensure common standards and requirements across separate pieces of (sectoral) legislation. Single point of reference European standards that could be drawn upon by EU and Member State legislation (and in follow-up adjudication processes, for example, under anti-discrimination legislation) have a key role to play in this. For example, suitably framed telecommunications accessibility standards that could be used to underpin regulations on both the telecoms equipment sector (via R&TTE directive) and telecoms operators (what they may be required to provide under the proposed revisions to the electronic communications regulatory package), as well as what might be included within public procurement requirements (under the public procurement directives) and referred to by adjudication processes in cases of discrimination involving telecommunications service providers (under current Member State 'goods and services' legislation and/or the proposed new EU directive in this field).

#### **5.4.3 Cross-cutting measures for 'end-to-end' delivery of eAccessibility**

The need for an 'end-to-end' eAccessibility perspective has been discussed earlier in key areas such as telecommunications, TV and the web. This is an aspect that also requires a horizontal, cross-cutting perspective. The proposed addition of 'certain aspects of terminal equipment' to the accessibility provisions under the revisions to the electronic communications directives represents a move in this direction. However, the question of how best to incorporate a truly 'end-to-end' perspective in the telecommunications and other field needs deeper exploration and attention.

#### **5.4.4 Cross-cutting measure for 'overlapping' sectors**

As mentioned earlier, another horizontal aspect arises in relation to the overlap between 'ICT services' (such as 'network services' like telecoms or TV) and 'deployer services' (such as public websites and other public or private services considered to fall within the scope of 'services of general interest'). In this context, the explicit scope of legislation in some EU countries already straddles these sectors. There is a need to examine the possibilities for a horizontal 'services of general interest perspective' in relation to EU eAccessibility regulation. In its pure form, one could envisage some form of an 'eAccessibility of services of general interest directive' that would encompass both network and other services, and include a multi-channel perspective (web, call centre and other electronic modes of access).

#### **5.4.5 Horizontal measures across sectors/technologies to fill 'white spaces'**

Finally, there is the important issue of whether horizontal legislation can be used to fill 'white spaces' not directly addressed by specific vertical legislation. Linked to this is the possibility to use horizontal legislation as a way of catering for changing technology over time. More generally, a single horizontal piece of legislation may have benefits of regulatory efficiency when compared with the option of many separate pieces of sectoral/vertical legislation. One possible avenue to explore in this regard would be some form of 'General eAccessibility of ICT products directive' that could be modelled on the 'new approach' directives on general product safety and on eco-design.

#### **5.4.6 'Softer' horizontal measures to clarify the territory and issues**

Finally, it is also relevant to consider the possibility of 'softer' horizontal measures to clarify the territory and issues, and encourage a comprehensive and appropriate approach across the Member States. This is important because the evidence shows that the defined scope and understanding of the eAccessibility field varies widely across the Member States, with

the result that different aspects have received different degrees of visibility and there is a lack of consistency in the application of the various types of legislative or regulatory approach. EU level instruments to support this type of co-ordination of perspectives and approaches could include 'Clarifying Communications' and/or the OMC process. In either case, the scope could be broad-reaching or more targeted on specific dimensions/issues (as suggested in the Tables in section 5.3).

## **5.5 Overall rule-making and implementation approach/mechanisms**

More generally, there is a need to establish an effective mechanism for a concerted, co-ordinated and incremental approach to the elaboration of EU eAccessibility regulations over time. There are a number of dimensions that could be addressed in this regard.

One requirement is for a mechanism to support the identification of priority eAccessibility issues to be addressed in EU legislative or other co-ordination measures. Another requirement is for an effective detailed rule-making process, one that takes into account in an appropriate manner the concerns of the various stakeholders (Member States, ICT industries, business, user/consumer organisations, etc.).

Given the complexities of this important field, there may be merit in considering the implementation of a dedicated 'eAccessibility regulatory mechanism' for the EU. This would involve legal establishment of an entity (involving some form of Comitology) that would engage in the process (at a level of discretion and influence to be agreed) of identifying priorities for EU attention and/or ongoing implementation/administration activities following the introduction of EU-level legislation. The type of accessibility role and functions suggested for the proposed European Telecom Market Authority might be one source of inspiration for this. Mechanisms in other fields, such as the European Medicines Agency, might also provide useful pointers.

The general legislative model for future eAccessibility legislation could be one of initial framing of legislation that, once published, would be followed-up by detailed rule-making on a once-off and/or ongoing basis. The rule-making process could be a co-operation between the Commission and the eAccessibility body, with the final rules (e.g. reference to standards, establishment of specific minimum requirements etc.) then formally issued by appropriate EU follow-up instruments linked to the initial legislation.