

STUDY ON ASSESSING AND PROMOTING E-ACCESSIBILITY



FINAL REPORT

A study prepared for the European Commission DG Communications Networks, Content & Technology



This study was carried out for the European Commission by









Authors of this report

This report was compiled and edited by Lutz Kubitschke (empirica), Kevin Cullen (WRC), Ciaran Dolphin (WRC), Susanna Laurin (Funka Nu) and Andreas Cederbom (Funka Nu) with the support of the overall study team and a network of national correspondents.

Overall study team

Lutz Kubitschke, Wencke Höhner, Sonja Müller, Ingo Meyer empirica Gesellschaft für Kommunikations- und Technologieforschung mbH Susanna Laurin, Andreas Cederbom, José Angel Martinez Usero, Jonas Eriksson, Malin Forne, Torbjørn Helland, Solhaug, Jennifer Jordahl, Pernilla Lövenhamn Seger, Jeanette Nilsson, Stefan Pelc, Sarah Skinner Funka Nu

Kevin Cullen, Ciaran Dolphin Work Research Centre Amalia del Río Montero Technosite

Internal identification

Contract number: 30-CE-0454397/00-83

SMART 2011/0070

DISCLAIMER

By the European Commission, Directorate-General of Communications Networks, Content & Technology.

The information and views set out in this publication are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

ISBN 978-92-79-33183-1

DOI 10.2759/33027

© European Union, 2013. All rights reserved. Certain parts are licensed under conditions to the EU.

Reproduction is authorised provided the source is acknowledged.

National correspondents

Country specific data reported in this document have been collated by the following national correspondents according to a common research template:

Gunela Astbrink (Australia)

Martina Lindhofer (Austria)

Jean Joseph Engelen (Belgium)

Todor Yalamov (Bulgaria)

James Carter (Canada)

Nikolaos Floratos (Cyprus, Greece)

Jaroslav Havlíček, Robert Hlavatý (Czech Republic)

Susanna Laurin (Denmark, Sweden, Norway)

Jane Matt, Hille Hinsberg (Estonia)

Erkki Kemppainen, Jouko Kokko (Finland)

Dominique Burger (France)

Wencke Höhner (Germany)

György Lengyel (Hungary)

Elisabeth Schmid, Mariano Peluso (Italy)

Ciaran Dolphin (Ireland)

Arnis Gulbis (Latvia)

Austė Kiškienė (Lithuania)

Jörg Artmann (Luxembourg)

Brian Restall (Malta)

Thea van der Geest, Eric Velleman (Netherlands)

Katarzyna Świeżawska-Ambroziak (Poland)

Carlos Rodrigues, Gonçalo Santinha (Portugal)

Alina Beatrice Raileanu (Romania)

Radoslav Delina, František Janke (Slovakia)

Vasja Vehovar (Slovenia)

Manon van Leeuwen, Enrique Varela (Spain)

Irena Kolar (United Kingdom)

Cathy Bodine, Maureen Melonis (USA)

Contents

1	INTRODUCTION	4
2	WEB	5
	2.1 THE WEBSITES COVERED AND ASSESSMENT METHOD APPLIED	5
	2.2 RESULTS OF THE WEBSITE ACCESSIBILITY ASSESSMENTS	9
	2.3 THE POLICY CONTEXT	39
	2.4 SYNTHESIS AND CONCLUSIONS	45
3	TELECOMS	47
	3.1 SOME INDICATORS OF EQUIVALENCE OF ACCESS	47
	3.2 OTHER ASPECTS	88
	3.3 EVOLUTION IN RECENT YEARS	93
	3.4 SYNTHESIS AND CONCLUSIONS	94
4	TELEVISION	96
	4.1 ACCESSIBILITY OF BROADCAST TV PROGRAMME CONTENTS	96
	4.2 OTHER ASPECTS	110
	4.3 EVOLUTION IN RECENT YEARS	114
	4.4 SYNTHESIS AND CONCLUSIONS	117
5	CONCLUSIONS	119
	Annexes	
An	nex 1 - Obligations in relation to public web site accessibility	122
An	nex 2 - Scope of public sector obligations	140
An	nex 3 - Timeframes for web accessibility	145
An	nex 4 - Obligations in relation to accessibility of (outsourced/privatized) 'Basic services' websites .	149
An	nex 5 - Obligations in relation to private (commercial) website accessibility	153
An	nex 6 - Web accessibility standards/guidelines applied	156
	nex 7 - Monitoring of web accessibility	
Ar	nex 8 - Evolution of web accessibility policy in recent years	170
Ar	nex 9 - Policy situation in relation to choice for telecoms users with disabilities	179
	nex 10 - Evolution of telecoms accessibility policy	
Ar	nex 11 - Evolution of television accessibility policy	200

List of figures

Figure 2-1 Test 1 overall results	
Figure 2-2 Average scores for each country - Test 1	11
Figure 2-3 Average scores across all countries for each service type - Test 1	11
Figure 2-4 Test 2 overall results	13
Figure 2-5 Scores for each country - Test 2	13
Figure 2-6 Average scores across all countries for each service type - Test 2	14
Figure 2-7 Test 3 overall results	
Figure 2-8 Average scores for each country - Test 3	
Figure 2-9 Average scores across all countries for each service type - Test 3	
Figure 2-10 Test 4 overall results	
Figure 2-11 Average scores for each country - Test 4	
Figure 2-12 Average scores across all countries for each service type - Test 4	
Figure 2-13 Test 5 overall results	
Figure 2-14 Average scores for each country - Test 5	
Figure 2-15 Average scores across all countries for each service type - Test 5	
Figure 2-16 Test 6 overall results	
Figure 2-17 Average scores for each country - Test 6	
Figure 2-18 Average scores across all countries for each service type - Test 6	
Figure 2-19 Test 7 overall results	
Figure 2-20 Average scores for each country - Test 7	
Figure 2-21 Average scores across all countries for each service type - Test 7	
Figure 2-22 Test 8 overall results	
Figure 2-23 Average scores for each country - Test 8	
Figure 2-24 Average scores across all countries for each service type - Test 8	
Figure 2-25 Test 9 overall results	
Figure 2-26 Average scores for each country - Test 9	
Figure 2-27 Average scores across all countries for each service type - Test 9	
Figure 2-28 Test 10 overall results	34
Figure 2-29 Average scores for each country - Test 10	34
Figure 2-30 Average scores across all countries for each service type - Test 10	
Figure 2-31 Overall scores across all tests - EU27 compared to other countries	
Figure 2-32 Overall scores for each country – public sites	
Figure 2-33 Distribution of test scores for each country – public sites	
Figure 2-34 Contribution of each test (average score for each test) – public sites	
Figure 2-35 Average scores for forms accessibility and for other aspects of accessibility – public	
Figure 2-36 Accessibility scores for tests related to modern design approaches - public sites	39
Figure 2-37 Accessibility scores for tests for a specific accessibility focus in the design - public s	sites 39
Figure 3-1 No of countries with any provisions concerning accessibility of directory services (n=3	31) 48
Figure 3-2 No. of countries with provision of any accessibility features with public pay phones (n	
Figure 3-3 No. of countries in which a relay service is available (n=31)	
Figure 3-4 No. of countries where accessible end user devices are offered by at least one of the main telecoms operators (n=31)	e four
Figure 3-5 No. of telecoms operators offering accessible end user equipment per country	73
Figure 3-6 No. of countries where access to emergency services is provided by alternative	
communication modes (n=31)	80

Figure 4-1 No. of countries with any subtitling (n=31)	
Figure 4-2 Average share of programmes with access services in the overall programme across a	
countries included in the study	
Figure 4-3 No of countries with any signing (n=31)	
Figure 4-4 No. of countries with any audio description (n=31)	
Figure 4-5 No. of types of access services available from the two main public broadcasters in a gi country (n=31)	
Figure 4-6 No. of types of access services available from the two main commercial broadcasters i given country (n=31)	
Figure 4-7 No. of EU Member States with any subtitling (n=25)	
Figure 4-8 No. of EU Member States with any sign language interpretation (n=25)	
Figure 4-9 No. of EU Member States with any audio description (n=25)	
Figure 4-10 No. of countries with one or more types of access services available from main public channels investigated (n=25)	
Figure 4-11 No. of countries with one or more types of access service available from the main commercial channels investigated (n=25)	
List of tables	
	•
Table 2-1 Websites targeted for assessment in each country	
Table 2-2 The tests used in the study	
Table 2-3 Test 1 overall result	
Table 2-4 Test 2 overall results	
Table 2-5 Test 3 overall results	
Table 2-6 Test 4 overall results	
Table 2-7 Test 5 overall results	
Table 2-8 Test 6 overall results	
Table 2-9 Test 7 overall results	
Table 2-10 Test 8 overall results	
Table 2-11 Test 9 overall results	30
Table 2-12 Test 10 overall results	33
Table 2-13 Source of web accessibility obligations in the different countries	41
Table 3-1 Dedicated provisions concerning accessibility of directory services by people with disabilities	49
Table 3-2 – Availability of public pay telephones with accessibility features directed towards users disabilities	
Table 3-3 – Availability of text relay services	
Table 3-4 Availability of accessible end user equipment by at least one of the main fixed or mobile telecoms operators	:
Table 3-5 Accessibility of emergency services to people with disabilities through alternative acces	
modes	
Table 0-1 Development over time according to selected indicators	94
Table 4-1 Provision of TV access services by selected TV channels in 2011	101

Executive Summary

This report presents the results and conclusions from a study on assessing and promoting e-accessibility that was conducted on behalf of the European Commission. The main aims of the study were to take stock of the extent of e-accessibility across the EU27 countries and some key third countries, as well as the policy efforts that have emerged in this area. The focus was on e-accessibility in three key domains – the World Wide Web, telecoms and television.

Web accessibility

The accessibility of a sample of websites across the 31 countries was assessed by the central research team and information on the policy context was gathered locally by national correspondents in each country. For the web accessibility assessment, the target sample for each country was 12 websites. These included public websites (the main government portal and websites of eight key public services) and other websites of importance in everyday life (newspaper, bank and railway). Ten accessibility tests were performed, based on a selection of important success criteria in the four different principles of WCAG 2.0 (covering both WCAG 2.0 level A and level AA) and also covering accessibility issues for a broad range of end-user target groups (people with visual impairments, hearing impairments, motoric impairments, cognitive impairments, reading- and writing difficulties etc.).

Key results

- On the policy side, there has been some progress in recent years, with nearly all Member States now having some type of obligation or policy in place for accessibility of public websites and some having strengthened or further developed their existing approaches.
- The general patterns that can be observed suggest the importance of clear/strong obligations for web accessibility, ideally combined with official monitoring of compliance.
- Despite this, there remains much room for improvement in the actual levels of web accessibility that are so far being achieved across Europe; for the EU27 as a whole, the levels of web accessibility (for the types of websites covered in this study and according to the set of accessibility indicators used) are lower than in the comparison countries (AU, NO, CA and US).
- There is also considerable variation across the Member States in the levels of web accessibility being achieved; a number of EU countries score between fully meeting the accessibility requirements and partially meeting the requirements, but a number of EU countries also score poorly in terms of the indicators used in this study.
- The current tendency for most countries is to work towards the WCAG 2.0 guidelines (most
 commonly with reference to level AA), and this is expected to continue; despite this, the
 study found variations across Member States in terms of the aspects of web accessibility that
 seem to be given emphasis.
- More generally, across Europe as a whole there may be a tendency for accessibility requirements of blind end-users to be more often addressed, even if there is still room for improvement also in this area; with the exceptions of some public websites, a rather poor performance in meeting the requirements of users with hearing impairments was an important issue identified from the indicators used in this study.

Possible implications for further EU efforts in the web accessibility field

 The continuing variation across Member States in terms of progress towards public website accessibility suggests that EU-level initiative in this field (possibly addressing obligations and monitoring) is warranted.

- Given that there are variations across Member States in terms of the likely web accessibility
 experiences of different user groups, a common EU-wide approach to ensure that key
 aspects of web accessibility are consistently addressed in all countries in a harmonized way is
 needed.
- Finally, there is a need for more research on different aspects of web accessibility; in this study, web accessibility was assessed from the perspective of users of the traditional (desktop) computer-based access platform, but, since more and more users access the internet via a smartphone or tablet, and with touch screen interfaces, studies should in the future also take more account of these forms of usage; further studies should also pay attention to the extensive usage of social media and other aspects of the online 'lifestyles' that have become so popular today.

Telecoms accessibility

When it comes to the telecoms field, the study approach focused especially on issues relating to article 23(a) of the 'Universal Service' Directive of 2009 on 'ensuring equivalence in access and choice for disabled end-users'. Benchmarking of the e-accessibility situation in this regard is quite a complex matter, and has presented challenges for the development of a coherent picture of the situation across the Member States in the telecoms accessibility field to date. Earlier information gathering efforts have made a useful contribution in this area, although it is generally difficult from these sources to get a consistent and systematic view of the situation across the Member States in a manner that would help to guide regulatory policy in this field. The current study aimed to provide a benchmarking that would throw some light on the overarching question of whether the accessibility objectives of the EU Directives are being achieved, as well as helping to develop a deeper understanding of some key aspects of this.

Key results

- There has apparently been some progress across the Member States in the extent to which measures in relation to telecoms accessibility are in place; the accessibility provisions in the revised EU Directives seem to have provided a stimulus for this in a number of the countries.
- Nevertheless, there remains much room for improvement of telecoms accessibility across
 Europe as a whole, in regard both to equivalence of access and equivalence of choice for
 users with disabilities.
- There is considerable variation across Member States in terms of what telecoms accessibility measures are in place and in the quality of the measures that have been implemented.
- Better results seem generally to be achieved where there are specific obligations imposed in legislation and/or by the regulators; in the absence of such obligations, there seems to be a lot less likelihood that the relevant accessibility measures are being provided by telecoms operators in a country.

Possible implications for further European efforts in the field of Telecoms accessibility

 Prevailing variations across Member States in terms of which aspects of telecoms accessibility are being given emphasis and in the quality of the measures that are implemented suggest that the establishment of an ongoing mechanism for providing guidance to Member States and the national regulatory bodies in meeting the objectives of the Universal Service Directive and for identifying and sharing good practice (i.e. benchlearning) might be considered. Although the issue of equivalence of choice is generally not well developed in terms of
accessibility policies and provisions, some countries have given or are giving active
consideration to this matter and there may also be merit in developing a focused
benchlearning effort on this aspect as well.

TV accessibility

The TV domain is also quite a complex and dynamic field where, in principle, quite a wide range of accessibility dimensions are relevant be considered. On the one hand, there is the basic requirement to ensure that the contents of broadcast TV programmes are accessible for people with disabilities, and this was the main focus of the benchmarking in this study. A range of other aspects of relevance for TV accessibility were also addressed in the study, although in lesser depth.

Key results

- There has apparently been some progress across the Member States in the extent to which
 measures in relation to television accessibility are in place; the accessibility provisions in the
 EU's Audiovisual Media Services Directive seem to have provided a stimulus for this in a
 number of the countries.
- Nevertheless, there remains much room for improvement of television accessibility across Europe as a whole.
- There is considerable variation across Member States in terms of the extent to which different types of accessibility measures are in place for broadcast programme content, as well as in the proportion of programming that is covered by these.
- Better results seem generally to be achieved where there are specific obligations imposed in legislation and/or by the regulators; in the absence of such obligations, there seems to be a lot less likelihood that the relevant accessibility measures are being provided by broadcasters in a country.
- Aspects of accessibility that particularly arise in relation to technology driven changes in the broadcasting world, e.g. when it comes to the digital switch over, seem have been addressed in comparatively few countries by means of dedicated policies, and there is variability in regard to how these aspects are addressed.

Possible implications for further European efforts in the field of TV accessibility

- The variations across Member States in terms of the aspects of television accessibility that
 are being given emphasis and in the quality of the measures that are implemented suggest
 that the establishment of an ongoing European-level mechanism for providing guidance to
 Member States and the national regulatory bodies in progressing the objectives of the
 AVMSD Directive and for identifying and sharing good practice (i.e. benchlearning) might be
 considered.
- The scope of the work on television accessibility in the current study focused mainly on broadcast television programme content; there would be merit in considering a more extensive European benchmarking and benchlearning initiative in this field to address the entire supply chain for accessibility in the television field (broadcast content, carriers such as cable TV companies, equipment/set-top boxes, etc.), as well as the full range of relevant access/delivery modes today.

1 Introduction

This report presents the results and conclusions from a study on assessing and promoting e-accessibility that was conducted on behalf of the European Commission. The main aims of the study were to take stock of the extent of e-accessibility across the EU27 countries and some third countries, as well as the policy efforts that have emerged in this area. The focus was on e-accessibility in three key domains – web, telecoms and TV.

The core objective was to benchmark the current situation in relation to e-accessibility, using an appropriate set of indicators. In addition to providing evidence that can help to inform about EU policy in this field, the results may be useful for other relevant stakeholders (at pan-European and Member State levels) in their efforts to promote progress in e-accessibility across Europe. The conceptual approach and results of the study can also contribute to the ongoing efforts to develop effective monitoring systems in the e-accessibility field in Europe. The main elements of the approach and methods were:

- Selection and operationalisation of the indicators to be used
- Collection of information and data at national level
- Analysis and reporting.

Selection and operationalisation of the indicators to be used

There are a very wide range of dimensions that in principle are of relevance for assessing e-accessibility in each of the three domains. For purposes of this study it was necessary to select a manageable set of indicators that would yield relevant and useful results, whilst at the same time being feasible to be applied within the time and resource constraints of the study. Selection of the indicators was informed by our own analysis of the most relevant themes to address at this point in time and in this particular study, the work done in previous e-accessibility assessment exercises, and inputs from the European Commission and other relevant stakeholders.

It is important to note that this study is not meant to produce an exhaustive and fully comprehensive benchmarking of the e-accessibility situation across Europe. A multi-topic study, like this one, is looking at a number of different technological domains (web, telecoms, TV), and has the purpose of giving an overview of the subjects involved.. In addition, the themes to be covered and the associated indicators for these themes must be the ones that are suitable for the methodological approach (as discussed in more detail in section 1.2.2, involving decentralised information gathering by national correspondents in each country as well as a centralised assessment of website accessibility by the core research team). The indicators selected for each domain are described in the relevant Chapters of the report.

Collection of information and data at national level

The study approach involved collection of information and data on the extent of e-accessibility and the policy context for this in 31 countries. These included the 27 EU Member States and 4 relevant third countries (Norway, Australia, Canada and the United States). The third countries were included because they tend to have relatively well-developed approaches to e-accessibility and therefore provide useful comparators for purposes of benchmarking the EU situation in the wider international context.

For most parts of the information and data gathering, national correspondents in each country were engaged to document and report on the situation. The correspondents were provided with common reporting templates and detailed methodological guidance, and the core research team invested considerable effort on quality assurance in order to maximise consistency and comparability across countries. The results can therefore be expected to be quite robust in terms of the overall patterns and trends that are reported, and this is where the main value may reside for purposes of EU-level policy guidance.

The more specific details of the situation in any given country, as well as any positioning/ranking of countries presented in the report, are also likely to be of interest and value for bench-learning, benchmarking and other purposes. However, it should be noted that this was a multi-topic approach with relatively limited resources for addressing any given topic in a deep manner in each country. For this reason, the level of detail and completeness of the country-specific information will inevitably be variable, and the positioning/ranking of individual countries may not always be as robust as the overall patterns and conclusions that can be drawn at the pan-European level. In addition, any interpretation of or commentary on the situation in a given country should be taken as being the researchers, and not necessarily as reflecting the official position or a legalistic interpretation.

For the assessment of web accessibility, the work was conducted by the central research team rather than through the national correspondents in each country (although they did make a contribution in terms of identifying the URLs for the websites that were to be assessed in their countries). This centralised approach was adopted both because it is possible for this aspect of e-accessibility monitoring (websites, by their nature, can be accessed remotely) and in order to ensure that a consistent assessment method was applied across all countries and websites.

Analysis and reporting

The remainder of the report is structured into four Chapters.

Chapters 2, 3 and 4 present the results for each of the three topics - web, telecoms and TV. In each Chapter, the current status of e-accessibility according to the indicators applied in this study is presented, and the policy context for this is also presented and discussed. In each case, a mix of qualitative and/or quantitative results is provided, depending on the nature of the particular topic being addressed.

Chapter 5 presents an overall synthesis and conclusions, bringing together the results for the three domains and summarising the main conclusions arising from the work.

2 Web

This Chapter presents the results of the work on assessing accessibility of websites and the policy context in this area. The accessibility of a sample of websites across the 31 countries was assessed by the central research team and information on the policy context was gathered locally by national correspondents in each country.

2.1 The websites covered and assessment method applied

This section describes the target sample of websites for assessment in each country and the assessment method that was applied.

2.1.1 Target sample of websites

The target sample for each country was 12 websites, as listed in Table 2-1 below, with the same set of websites to be assessed in each country wherever possible. These included 9 public websites and 3 sectoral websites, as outlined in the Table.

Table 2-1 Websites targeted for assessment in each country

Public websites

- Main government portal
- Support of citizens re personal income tax
- Job seeker support services provided by public employment service
- Support of citizens re publicly paid unemployment benefits
- Support of citizens re personal documents: passports
- Support of citizens re registering a car
- Public libraries
- Publicly financed support for higher education students
- Notification of change of residence

Sectoral websites

- Main national daily newspaper
- Main retail bank operating in the country
- Main national railway service operating in the country

The public websites included the main government portal and websites of eight public services (these eight service areas are a subset of the twelve that are included within the EU's e-Government Action Plan). All eight types of service exist in some form in most countries, although there are some exceptions (e.g. some countries do not require notification of change of residence). In general, where the service is available in a country it has an online implementation of some form, although not always.

For the purposes of this study, one URL was identified for each service type for each country with help of national correspondents. Where this was more complex due to structural variations in how a given public service is organised across the 31 countries covered by this study, we included sites that provide roughly the same type of service (or part of the service). For instance, when it comes to entry to higher education we targeted sites that provide public financial supports rather than other aspects, such as enrolment, which may be organised in various ways. In general, when selecting URLs we tried to be specific about the part of the service that would be the focus (e.g. the job seeker support part of the public employment service rather than other parts such as supports for employers; passports as the focus for personal documents; and so on)

Also, there is variation as regards the level of public administration at which different types of services are provided. While in some countries responsibility for delivering a particular service may rest with the national-level administration, in others responsibility may rest with regional-level or even local-level administration. In those countries where a particular service in question is provided at the national governance level, we selected the web site through which it can be accessed by the population nation-wide. In cases where the service is not provided at the national governance level but on the regional level, we selected the web site through which it can be accessed by the citizens of the largest region in the country (measured in terms of inhabitants). Finally, in cases where the service is provided only on the municipal level, the web site was selected through which it can be accessed by the citizens of the largest municipality in the country (again measured in terms of inhabitants).

The sectoral websites included some key other sites of importance in everyday life – newspaper, bank and railway. The newspaper and bank sectors are generally private sector in all countries; the railway services vary across countries in the extent to which they have been privatized, but in most countries are still

operated by public companies. In each country, the websites of the services with the largest market shares were selected for assessment.

Overall, if all countries had all relevant services then a total of 372 (=31*12) websites would be the universe for the web assessment. In practice, only 361 sites could actually be tested, either because the type of service did not exist at all in a country and/or an appropriate URL could not be found.¹

2.1.2 Overview of measurement approach and methods

The tests performed in this study were chosen from WCAG 2.0, selecting important success criteria in the four different principles of WCAG 2.0, covering both WCAG 2.0 level A and level AA and also covering a broad perspective of end-user target groups. In order to get tests that are as accurate as possible, specific WCAG-techniques were used for each success criteria to be measured. The selection of techniques was chosen to ensure that a range of important accessibilities for a range of different user groups were covered, as well as aiming to include some topics that are only in WCAG2.0 and some that were also covered in WCAG1.0.

Table 2-2 presents the set of tests that were used. Together, this set of tests provides a useful indication of the accessibility of websites according to some important WCAG2.0 criteria. The experience of using these tests in this study, and the results achieved with these, may provide useful insights for future work on the development of common monitoring approaches to web accessibility across the Member States.

The groups affected by accessibility issues in these tests are blind users, visually impaired, hearing impaired, motorically impaired, cognitively impaired users and users with reading- and writing impairments.

The assessment approach in the study was based on manual testing of sites. The tests were conducted by a panel of accessibility experts assessing the web sites in Internet Explorer on desktop computers. It was not possible within the scope of this study to address issues in relation to access via other platforms, such as smartphones. Given the growth in smartphone ownership and trends in the usage of such platforms to access online services, this is an important area for future research on web accessibility in Europe and is discussed further in section 2.4.

Belgium: Support of citizens re registering a car - URL turned out to be the same as the main governmental portal so we did not test the same site twice; Bulgaria: Public libraries - no URL was found; Bulgaria: Publicly financed support for higher education students - here we found only a pdf document and we could not perform the same tests as with html pages, so no tests were performed; Cyprus: Main national railway service operating in the country - no URL was found; Greece: Support of citizens re registering a car - no URL was found; Greece: Publicly financed support for higher education students - no URL was found; Ireland: Notification of change of residence - no URL was found; Italy: Support of citizens re personal documents: passports - URL was not possible to test because it consisted of one log in page only; Latvia: Support of citizens re personal income tax - URL not possible to test because it consisted of one log in page only; Romania: Support of citizens re publicly paid unemployment benefits - URL turned out to be the same as Job seeker support so we did not test the same site twice; Canada: Notification of change of residence - no URL was found

Table 2-2 The tests used in the study

Test in this study	WCAG: Success Criteria	WCAG: Specific techniques
Test 1: Headings	<u>1.3.1</u> (level A)	H42: Using h1-h6 to identify headings
Test 2: Captions	<u>1.2.2</u> (level A)	G93: Providing open (always visible) captions, G87: Providing closed captions
Test 3: Keyboard control	2.1.1 (level A) 2.1.2 (level A)	G202: Ensuring keyboard control for all functionality, G21: Ensuring that users are not trapped in content
Test 4: Form labels	3.3.2 (level A)	H44: Using label elements to associate text labels with form controls, H65: Using the title attribute to identify form controls when the label element cannot be used
Test 5: Valid HTML	4.1.1 (level A)	G134: Validating Web pages, G192: Fully conforming to specifications, H88: Using HTML according to spec
Test 6: Zoom	<u>1.4.4</u> (level AA)	G142: Using a technology that has commonly-available user agents that support zoom
Test 7: Separating information and structure from presentation	<u>1.4.5</u> (level AA)	G140: Separating information and structure from presentation to enable different presentations
Test 8: Search	2.4.5 (level AA)	G161: Providing a search function to help users find content
Test 9: Tab focus	2.4.7 (level AA)	G149: Using user interface components that are highlighted by the user agent when they receive focus C15: Using CSS to change the presentation of a user interface component when it receives focus
Test 10: Error messages	3.3.3 (level AA)	G83: Providing text descriptions to identify required fields that were not completed

Procedures were put in place to ensure consistency of the assessments being made across the experts, as well as cross-checks to verify this at the end of the process. As a help in conducting the test, the Web Accessibility Toolbar in Internet Explorer was used.² In order to ensure that the tests can be performed again for control and used for future studies, tests based on techniques that the World Wide Web Consortium (W3C) recommends to use when fulfilling WCAG 2.0 were used.

As noted earlier, in most countries 12 websites could be tested, but in a few cases it was only possible to test 11 sites, and in one case only 10. This was mainly because a particular service does not exist in the country or that the same website covers two different services, or less frequently, because the URL available only pointed to a log-in form or a PDF document.

² www.paciellogroup.com/blog/2011/03/web-accessibility-toolbar-2011-2/

On each chosen website, the testing approach covered: the starting page; an ordinary sub page on the site; one page with a film/video/multimedia; and one page with a form consisting of at least 5 different form elements.

On each site a maximum of 10 tests were conducted. If a site didn't have multimedia, only 9 tests could be performed. In addition, as there were two tests for forms, only 8 tests could be conducted if a website lacked any form more advanced than a simple search function. This means that when a website lacks both multimedia and forms, only 7 tests could be performed.

2.2 Results of the website accessibility assessments

This section presents the results of the web accessibility assessments across the 31 countries. Section 2.2.1 presents the results for each test separately. Section 2.2.2 then brings together the results to provide an overall synthesis and comparative analysis.

2.2.1 Results by tests

This section presents the results for each of the individual tests that were conducted.

2.2.1.1 Test 1: Headings

WCAG 2.0 SC 1.3.1, Technique: H42

Relevance

The headings are one of the first things that the user sees and reads on a web page. For users who can see, the visual headings are important for understanding the structure of content and for the ability to search and find relevant information fast and efficiently. For users with assistive technology the headings must be correctly coded with H1 to H6 elements in HTML, since the assistive technology reads the code. This is important for blind users with screen readers as they would otherwise have no structure for the page and its information. It is also important for users with reading difficulties who use assistive technology that rips the text on the page and presents it in a visually different way, for example with colours and fonts that the user can decide and control. In these situations the assistive technology needs to know what text is a heading to preserve the visual structure of the information.

How the test was conducted

On each selected page for each web site we used the Web Accessibility Toolbar to show what heading elements (h1, h2, h3 and so on) were used to produce the visual headings. By presenting this not in HTML source, but in the actual design of the web page, any visual headings with an incorrect code can be identified. Each visual heading in the content area and other areas except the overall navigation should be created with a correct heading element. Each site received a score according to the following scheme:

- **2 points** = Requirement fully met (Practically all visual headings are created with the elements h1-h6. We only accept one occurrence of a heading that is not correctly coded).
- **1 point** = Requirement partially met (The majority of visual headings are created with the elements h1-h6. The requirement is considered partially met if at least 90 % of the visual headings are coded correctly).
- **O points** = Requirement not met (Less than 90 % of the visual headings are coded with the labels h1-h6).

Result

The overall results on this test are shown in Table 2-3 and Figure 2-1. The overall average score for this test across all sites was 0.99, where 2.00 is the maximum score possible. The EU27 as a whole scored considerably lower than the other countries as a whole, and this difference was statistically significant. Within the EU27 countries, public websites overall scored a little higher on average than sectoral websites.

Testable sites (%) Number of sites Scoring Scoring Scoring Mean score tested 0 1 2 All countries, all services 361 39,4 22,5 38,2 0,99 EU 27 countries, all services 314 42 23,2 34,7 0.93* Other countries, all services 1.40* 47 21,2 17,1 61,7 EU 27 countries, public services 234 41,4 21,8 36,8 0,95 EU 27 countries, sectoral services 80 27,5 28,7 43,7 0,85

Table 2-3 Test 1 overall result

^{*} the difference between these scores was statistically significant (p<0.001)

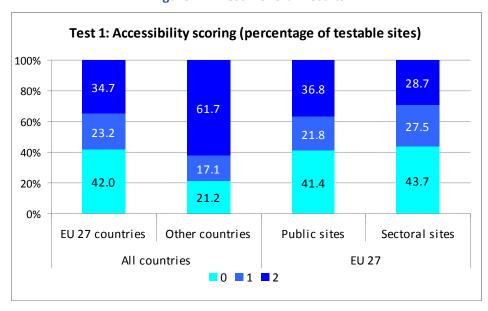


Figure 2-1 Test 1 overall results

Looking more closely at the pattern of scoring, it can be seen that just over two-in-five (42.0%) of the testable EU27 websites, and a similar proportion (41.4%) of the EU27 public websites, scored 0 on this test. Most of these sites are not even close to having ninety percent correctly coded headings. This failure will affect accessibility significantly and make the structure of the content hard to grasp for users with assistive technology. Most sites scoring 1 (requirement partially met) will work for most users, but each heading that is lost poses a problem for some user groups.

Figure 2-2 shows that there was also considerable variation across the Member States in terms of their average scores for this test.

Figure 2-2 Average scores for each country - Test 1

Finally, Figure 2-3 shows the patterns in terms of average scores across all countries for the different services. It can be seen that, on average, the main government portal tends to score best on this test and the main national daily newspaper scores poorest.

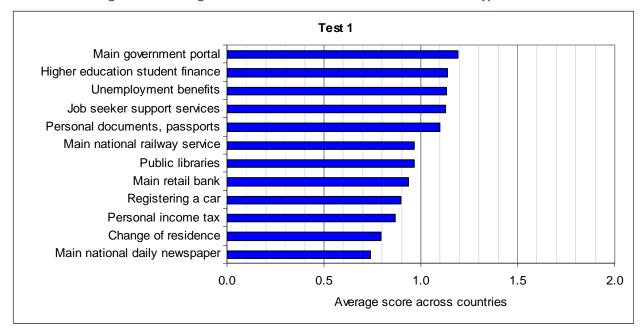


Figure 2-3 Average scores across all countries for each service type - Test 1

Discussion

Coding of headings is also important for Search Engine Optimization (SEO), so the fact that a site codes headings doesn't automatically mean that the web owner has worked actively towards accessibility objectives. Sites built with modern approaches (following standards, making use of new techniques, giving attention to search engine optimisation requirements etc.) tend to code headings because it's the correct way to do and it's important for search engines. This may be a factor influencing the results in this study when conducting the tests, modern sites generally scored 1 or 2 on this test, while sites that appeared to be older more often scored 0.

2.2.1.2 Test 2: Captions

WCAG 2.0 SC 1.2.2, Technique: G83, G87

Relevance

Today videos with speech are increasingly being used to provide information to the user, something that most users benefit from. For people with hearing impairments and people with another native language, it's essential that there is a way of getting the same information as is provided with sound in videos. This could be done by captioning the video or by providing the same information in text in the same context as the movie is shown.

How the test was conducted

EU 27 countries, sectoral services

On each site in this study we tried to identify a page containing a video with speech. We started the video and looked for captions, either visible or hidden captions that the user can turn on and off. If no captioning was found, we looked at the page to try to identify the same information that was provided in the video speech or a link in the same context as the video, linking to a text with the same information.

- **2 points** = Requirement fully met (If the video has always visible captions or captions that could be turned on).
- **1 point** = Requirement partially met (If the video doesn't have captions but the page with the video has a text link placed in direct connection to the video leading to a page with information on the same topic as the film, or the page itself contains a substantial text on the same topic).
- **O points** = Requirement not met (If the video doesn't have captions and if the page clearly doesn't have enough text information to give the same meaning as the video and there is no text link directly adjacent to the video).

Result

The overall results on this test are shown in Table 2-4 and Figure 2-4 and indicate two main issues. The most common issue is the lack of any information provided via video with speech on the site at all. In many countries less than half of the sites had any video that we could find, and in some cases a lot fewer than half or even none of the sites had any video. The second issue is that, when we actually did find a video, it often wasn't captioned.

Testable sites (%) Number of sites Scoring Scoring Scoring Mean score tested 0 1 2 All countries, all services 4,7 0,3 150 82,6 12,7 EU 27 countries, all services 0,26 127 84,9 3,8 11 Other countries, all services 23 69,5 8,8 21,7 0,52 EU 27 countries, public services 0,28 81 85,3 1,2 13,5

46

84,7

8,6

0,22

6,5

Table 2-4 Test 2 overall results

Test 2: Accessibility scoring (percentage of testable sites) 100% 11.0 13.5 21.7 80% 8.8 60% 84.9 84.7 85.3 40% 69.5 20% 0% EU 27 countries Other countries Public sites Sectoral sites All countries **EU 27** 0 1 2

Figure 2-4 Test 2 overall results

The overall average score for this test across sites that had a video was a very low 0.30, where 2.00 is the maximum score possible, with the vast majority of video material not being captioned and not providing alternative text material. The EU27 as a whole again scored considerably lower than the other countries as a whole. Within the EU27 countries, sectoral websites were more likely to have video but scored a little lower on average than public websites in terms of their accessibility. Figure 2-5 shows that there was also considerable variation across the Member States in terms of their performance on this test. (Note: because multimedia was relatively uncommon, for this test we report the actual numbers of sites with multimedia and the scores that these sites achieved).

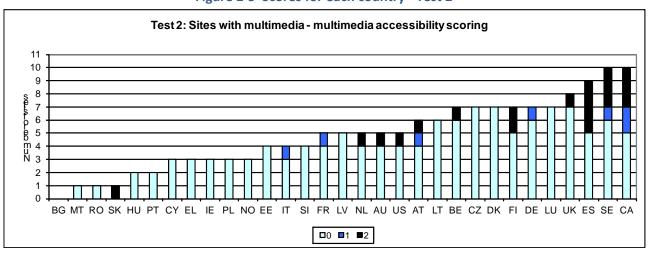


Figure 2-5 Scores for each country - Test 2

Finally, Figure 2-6 shows the patterns in terms of average scores across all countries for the different services. It can be seen that, on average, the main government portal again tends to score best on this test. Again, however, it should also be noted that there was a lot of underlying variation across service types in terms of the number of sites that had any video.

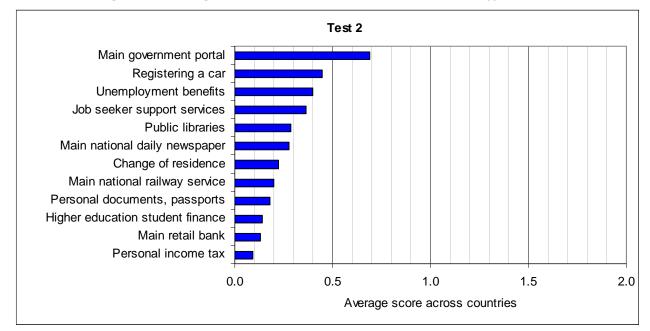


Figure 2-6 Average scores across all countries for each service type - Test 2

Discussion

There clearly is a growing problem with more and more video content being provided without website owners taking responsibility for providing captions or clearly labelled alternatives. At the same time, there is a case to be made for encouraging a lot more provision of video with speech. This is very helpful to large target groups that have problems to read text, as well as the more general value of a combination of images and speech as a very efficient way of informing users. Accessibility for all users needs to be addressed in this regard. This includes users with hearing difficulties or who use a non-native or minority language. In addition, anyone that has been in a situation where they are presented with a video when using their smartphone will appreciate that it's not always possible to hear what is said in the video.

2.2.1.3 Test 3: Keyboard control

WCAG 2.0 SC 2.1.1, 2.1.2, Technique: G202, G21

Relevance

Users with mobility impairment that can't use a mouse need assistive technology or other means for input control and navigation on a web page. Many of these users use a keyboard interface to access the page and the possibility of keyboard control usually means that other input devices can be used on the website. Blind users with screen readers also do not use the mouse, but only keyboard.

How the test was conducted

The test was done by using the tab key to move through the pages and trying to activate different types of links (menus, lists and text links). We also tried to start and stop the video player on sites where we found a video.

- **2 points** = Requirement fully met (If all links and objects can be reached with the tab key on the keyboard. This includes starting and stopping any media player on the pages tested).
- 1 point = Requirement partially met (If all objects can be reached with keyboard as stated in requirement fully met above EXCEPT for level 2 in menus and lists that fold out/expand. If a user with the mouse can expand a menu without loading a new page, but a user navigating with a

- keyboard needs to load a new page to access level 2 of the menu this would be considered that the requirement is partially met).
- **O points** = Requirement not met (If not all objects can be reached with the keyboard or if level 2 of a menu is different when expanded with a mouse or by a keyboard. For example, if a menu allows a user to expand level 2 by mouse over, and those links are different from, or presented in a different order, than the links shown on level 2 in the menu for a user that has loaded a new page by selecting the menu item on level 1).

Result

The overall results on this test are shown in Table 2-5 and Figure 2-7. This test scores a relatively high average of 1.49 out of 2.00. More than two-thirds of the sites overall were fully accessible in relation to this indicator, although more than one-in-five scored zero. The EU27 as a whole again scored lower than the other countries as a whole. Within the EU27 countries, public websites scored considerably better than sectoral websites, and this difference was statistically significant.

Testable sites (%) Number of sites **Scoring** Scoring **Scoring** Mean 0 2 score tested 1 7,7 All countries, all services 21,6 70,6 1,49 361 EU 27 countries, all services 314 23,2 69,8 7 1,46 Other countries, all services 47 10,6 12,8 76,6 1,66 EU 27 countries, public services 234 17,5 6 76,5 1.59* 10 1.10* EU 27 countries, sectoral services 80 40 50

Table 2-5 Test 3 overall results

 $^{^{*}}$ the difference between these scores was statistically significant (p<0.001)

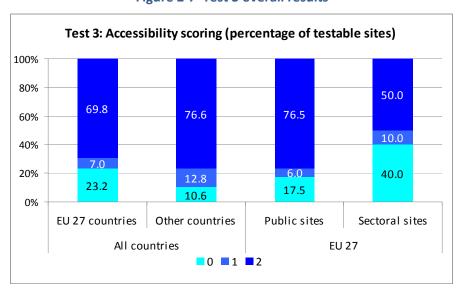


Figure 2-7 Test 3 overall results

Figure 2-8 shows that there was also considerable variation across the Member States in terms of their average scores for this test.

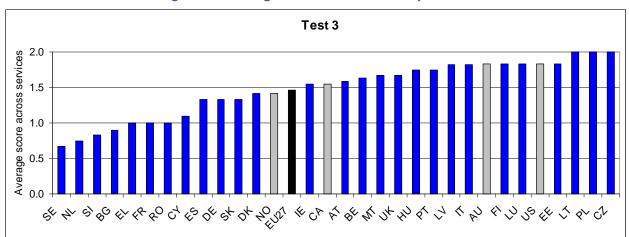
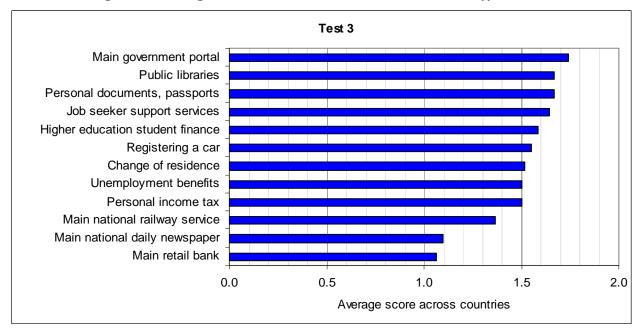


Figure 2-8 Average scores for each country - Test 3





Finally, Figure 2-9 shows the patterns in terms of average scores across all countries for the different services. It can be seen that, on average, the main government portal tends to score best on this test, although most of the public services also tend to score quite well. The main retail bank and the main national daily newspaper tend to score lowest.

Discussion

Even though many countries score high on this test, there are some trends that are disturbing. When we conducted the tests modern sites often posed bigger problems on this test than older sites. It's not uncommon that the problem causing a site to score 0 is connected to the video player, or the way that the video player is integrated in the page. Also, in many modern sites there are lightboxes presented in a layer placed on top of the page, like a popup window but in the same web browser window. These can be made accessible with keyboard but often the developer misses to put the lightbox in the right place structurally, something that leads to problems for the user since the keyboard focus remains in the background, making the whole page hard to handle and in practice inaccessible. This use of modern technology may be a factor, for example, in the case of Sweden, which performs less well on this test in comparison to the overall score of the country. A reason for this may be that developers do not know how to make the new technique

accessible or that there is a lack of understanding of the need to require accessibility from this functionality as well.

2.2.1.4 Test 4: Form labels

WCAG 2.0 SC 3.3.2, Technique: H44, H65

Relevance

Labels are used to inform the user about what he or she should use a specific form control for - what to write in a text field, what it means to check a checkbox or what to choose in a list. Labels are essential for the user.

For users with assistive technology, the connection between the label and the form control must be correctly coded with a label-element in HTML in order for the assistive technology to be able to give the relevant information to the user. Without it, the assistive technology must guess and often this results in the user being unable to fill out the form. In some cases there is no label to a specific form control. In these cases the title-attribute on the form control can be used to give information to the user. For blind users with assistive technology, the form labels are absolutely necessary. They are also important for users with reading difficulties who use assistive technology.

The label-element is also important for users with motoric difficulties and/or spasms. By using a label-element and associating it with a form control the user is able to click on the whole label to get focus on the form control. If a user for example needs to click on a checkbox, he or she can click on the entire text label instead of just in the small square of the checkbox.

How the test was conducted

On each site we identified a page containing a form with at least 3 different form controls. We tried to click on each label to see if there was a correct connection to the form control. We also looked for title-texts on the form controls by pointing the mouse to them.

- **2 points** = Requirement fully met (All form controls except for buttons have a label correctly connected to the form object or a title-text on the form control).
- 1 point = Requirement partially met (If most of the form controls meet the requirements as above, but there are 1-2 form controls that do not have a label or a title-text but they have got place holding texts (a place holding text is a default set of characters in edit boxes/text fields made to help the user, for example "Search" in the search field).
- 0 points = Requirement not met (If more than 2 form controls lack both label and title-texts).

Result

The overall results on this test are shown in Table 2-6 and Figure 2-10. The average score on this test was 0.89 out of the 2.00 maximum. About one third of the sites overall did not have a form that could be tested. More than half of those that had a form scored 0, indicating a lot of accessibility problems in this area. The EU27 as a whole again scored lower than the other countries as a whole. Within the EU27 countries, sectoral websites were more likely to have a form, but tended to score very slightly lower than public websites in terms of their accessibility.

Table 2-6 Test 4 overall results

	Number Testable sites (%)				
	of sites	Scoring	Scoring	Scoring	Mean
	tested	0	1	2	score
All countries, all services	256	51,6	8,1	40,3	0,89
EU 27 countries, all services	223	53,3	7,6	39,1	0,86
Other countries, all services	33	39,4	12,1	48,5	1,09
EU 27 countries, public services	160	53,2	7,4	39,4	0,86
EU 27 countries, sectoral services	63	54	8	38	0,84

Figure 2-10 Test 4 overall results

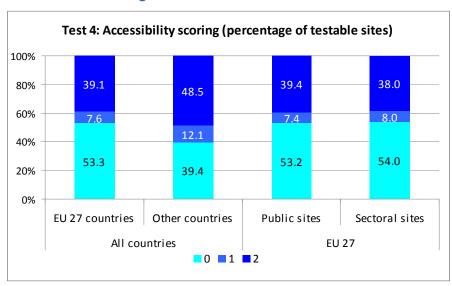


Figure 2-11 shows that there was also considerable variation across the Member States in terms of their average scores for this test.

Figure 2-11 Average scores for each country - Test 4

Finally, Figure 2-12 shows the patterns in terms of average scores across all countries for the different services. It can be seen that, on average, the national railway service tends to score best, along with public unemployment benefit services and the main government portal. The national daily newspaper scored lowest and car registration services also tended to have a very low score.

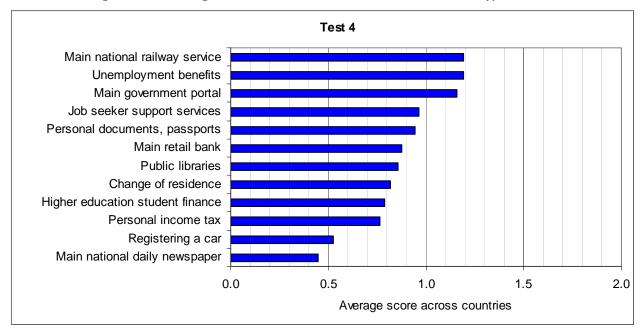


Figure 2-12 Average scores across all countries for each service type - Test 4

Discussion

Since more services are provided online, forms are becoming more and more important. For many people with disabilities, the Internet has opened new doors, made it possible to interact with the society without needing assistance from other persons, thereby making them more independent. But if the e-services aren't made fully accessible we will create new barriers for those that would have the most benefit of e-services. More generally, many sites did not have any forms. This may also be a problem for people with disabilities, as well as other users, if it necessitates having to physically fill out a form or even having to visit the service provider's office.

Overall, the scoring on this test is low, especially as the solutions are not new techniques and the labels aren't hard to implement. We think that this test is one of the better ones to show whether the web owners have had accessibility in focus when developing the site - you don't need to use label-elements to have a modern site that is search engine optimized, but you need to have label-elements if you want the web site to be accessible.

2.2.1.5 Test 5: Valid HTML

WCAG 2.0 SC 4.1.1, Technique: G134, G192, H88

Relevance

When developing new web sites, web browsers and assistive technology, the developers need to have a common protocol for how information should be presented and rendered to the user. This is why we have standards for HTML and CSS made by W3C. If the web site doesn't follow the specifications the web page might not be rendered in the way that the site owner intended it to be. The end user can discover the lack of validation when a site does not function correctly in a new version of a web browser, or when their version of assistive technology presents the information incorrectly to the user.

Another problem if the HTML or CSS standard is not followed is that developers of web browsers and assistive technology are forced to spend much time to make the browser or assistive technology cope with bad code, rather than implementing accessibility features.

How the test was conducted

- 4 pages on each site were selected and validated using the W3C Markup Validation Service (http://validator.w3.org/).
 - 2 points = Requirement fully met (No errors on the first 4 checked pages).
 - **1 point** = Requirement partially met (No more than 3 errors occur on the 4 pages together. For example 3 pages have 1 error each and one page validates correctly, or, 1 page has 3 errors and the rest validates correctly).
 - 0 points = Requirement not met (More than 3 errors occur on the 4 pages together).

Result

The overall results on this test are shown in Table 2-7 and Figure 2-13.

Testable sites (%) Number of sites Scoring Scoring Scoring Mean score tested 0 1 2 All countries, all services 88 2,3 0,22 358 9,8 EU 27 countries, all services 311 89,4 1,6 9 0,2 Other countries, all services 47 78,8 6,4 14,9 0,36 EU 27 countries, public services 233 2,2 12 0.26* 85,8 EU 27 countries, sectoral services 0.00* 78 100 0 0

Table 2-7 Test 5 overall results

^{*} the difference between these scores was statistically significant (p<0.001)

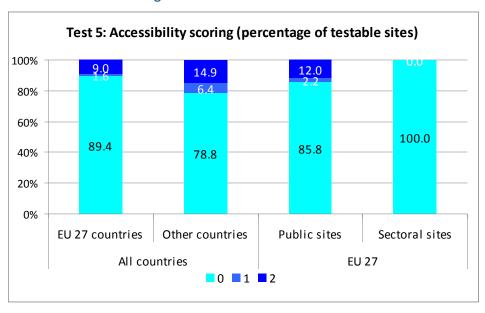


Figure 2-13 Test 5 overall results

The average score on this test was very low, only 0.22 where 2.00 is maximum. A large majority of sites scored 0. The EU27 as a whole again scored lower than the other countries as a whole. Within the EU27

countries, public websites were more likely than sectoral sites to score well on this test, and this difference was statistically significant, although even then the majority of public websites also scored 0.

Figure 2-14 shows that there was some variation across the Member States in terms of their average scores for this test, although scores were typically very low.

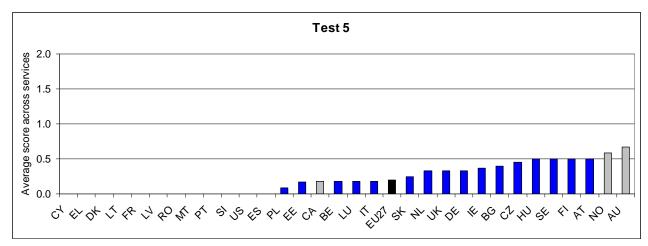
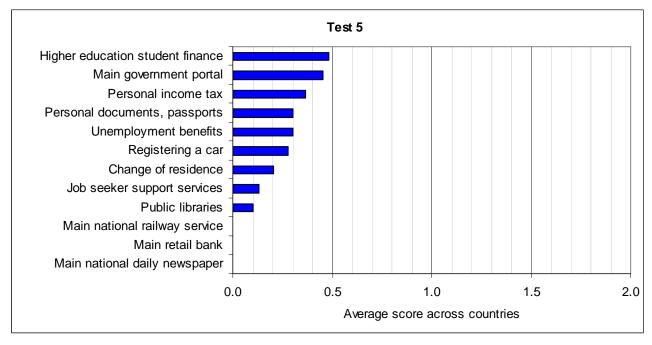


Figure 2-14 Average scores for each country - Test 5





Finally, Figure 2-15 shows the patterns in terms of average scores across all countries for the different services. It can be seen that, on average, the higher education support services and main government portals scored best, although still were at a low level overall. The sectoral sites all scored 0 on this test.

Discussion

Many users amongst the general population will probably not experience problems because of the lack of validation when surfing these web sites, but the implications of the low scoring on this test are nevertheless important in a broader perspective. To date it seems not to have been very important for developers to implement the HTML code according to standard, but this might be a reason why we spend much effort in web projects to make web sites look the same, and work consistently, in different web

browsers on different platforms. In addition, as mentioned already, it is hard to expect the AT industry to follow standards if the websites don't, and the lack of standardisation is bad for AT-users. When not all AT works the same way, or sometimes may not work at all, with all browsers and platforms, the AT user has less to choose from and risks being forced into having to use tools that he/she doesn't like/want/feel comfortable with.

This is another test that we think gives a key indication of the extent of accessibility awareness. Even if many developers today try to make the code validate to a standard it often takes extra effort to get the whole package (Content Management System (CMS), HTML templates and user entered data) to work according to a specific standard. Sites that score high on this test right now have probably given an extra focus to accessibility. In the future this will change as the CMS get better and better in following standards.

2.2.1.6 Test 6: Zoom

WCAG 2.0 SC 1.4.4, Technique: G142

Relevance

Many users need to change the size of text and objects on the screen. Users with visual impairments, motoric problems and reading difficulties need to enlarge text and other objects. People with visual impairments enlarge to see the objects, persons with reading difficulties enlarge to get a clearer overview and shorter lines, persons with motoric difficulties enlarge to get larger click-areas.

Today enlargement is more important than ever because of the increasing surfing on smartphones and other small screens. The most common way to change the size is by zooming in the web browser. How much a person needs to zoom is highly individual, but following WCAG 2.0 you should at least be able to zoom the page 200% without loss of content or interactivity.

How the test was conducted

We used Internet Explorer 9 to zoom all selected pages on the sites in this study to 200%.

- **2 points** = Requirement fully met (If all pages can be zoomed 200 % and this doesn't affect the functionality in any way. This is also checked for the page with the synchronized media and the media must be possible to zoom or view in full screen mode).
- **1 point** = Requirement partially met (If all text can be read on the pages when they are zoomed to 200% but the video can't be zoomed, or the zoom creates a scroll list inside the page in addition to the scroll list of the main browser window).
- **O points** = Requirement not met (When the page is zoomed to 200%, if individual words can't be read without scrolling or parts of the information and functions can't be accessed in an easy way. It's enough to fail if this occurs in only one page).

Result

The overall results on this test are shown in Table 2-8 and Figure 2-16. This test scores the highest average of all tests in the study, at 1.89 out of a maximum 2.00. A large majority of sites scored the maximum with relatively few scoring 0. The EU27 as a whole and the other countries were very similar on this test. Within the EU27 countries, there was little different between public and sectoral websites.

Table 2-8 Test 6 overall results

	Number	Testable sites (%)			
	of sites	Scoring	Scoring	Scoring	Mean
	tested	0	1	2	score
All countries, all services	360	3,9	3,3	92,8	1,89
EU 27 countries, all services	313	3,8	3,2	93	1,89
Other countries, all services	47	4,3	4,3	91,5	1,87
EU 27 countries, public services	233	3,9	3,4	92,7	1,89
EU 27 countries, sectoral services	80	3,7	2,5	93,7	1,9

Figure 2-16 Test 6 overall results

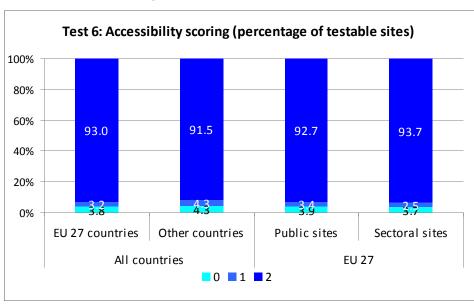


Figure 2-17 shows that there was relatively little variation across the Member States in terms of their average scores for this test, although some countries did score relatively poorly.

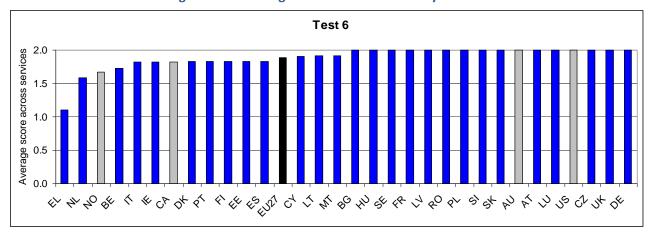


Figure 2-17 Average scores for each country - Test 6

Finally, Figure 2-18 shows the patterns in terms of average scores across all countries for the different services. It can be seen that variations across services were relatively small on this test.

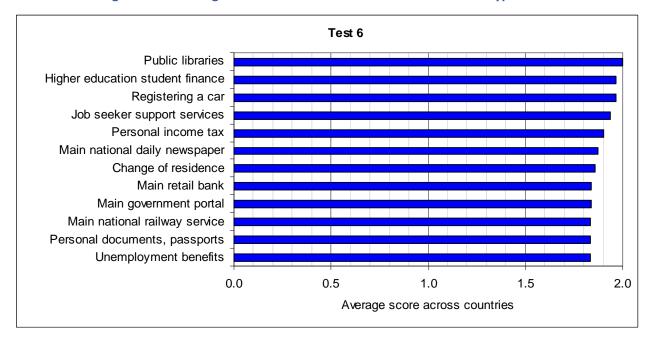


Figure 2-18 Average scores across all countries for each service type - Test 6

Discussion

The fact that this test scores so highly reflects that browsers today are quite good in handling zoom, and it could perhaps be said that the browsers are taking care of the accessibility issue of zooming. Often it doesn't require anything special from the developer to make a site work with zoom. At the same time there are some sites that do not work well in this regard, and these will pose severe problems for many users, not only users with disabilities but also users that surf with a smartphone.

2.2.1.7 Test 7: Separating information and structure from presentation

WCAG 2.0 SC 1.4.5, Technique: G140

Relevance

Some users want to change how the information is presented. For example people with reading difficulties or visual impairment may perceive specific colours better than the colours used on the site. A user can alter the presentation by using personal style sheets in the web browser. For the user to be able to do this they need the website to have separated content and design by using style sheets (CSS) for the design and HTML for content. For users with assistive technology it's also important that the information and presentation are separated. Otherwise the assistive technology might not be able to interpret and present the information in a logical order to the user.

How the test was conducted

By blocking all style sheets on the selected pages we checked if the information was presented without any layout and in an order that made sense to the user.

- **2 points** = Requirement fully met (If the layout and design disappears and all content can be accessed when the pages are viewed without style sheets).
- 1 point = Requirement partially met (If all of the content can be accessed on the pages but some
 presentation elements occurs or some design images still remains when the pages are viewed
 without style sheets).
- **O points** = Requirement not met (If some information can't be accessed or if the overall layout is still in place when the style sheets are turned off).

Result

The overall results on this test are shown in Table 2-9 and Figure 2-19.

This test also presented a relatively high average score of 1.61 out of the maximum 2.00. More than two-thirds of sites fully met the requirements for this test, although more than one-in-eight scored 0. The EU27 as a whole performed less well that the other countries on this test, and this was statistically significant. Within the EU27 countries, there were only slight differences between public and sectoral websites.

Table 2-9 Test 7 overall results

	Number	Testable sites (%)			
	of sites	Scoring	Scoring	Scoring	Mean
	tested	0	1	2	score
All countries, all services	361	12,2	14,1	73,7	1,61
EU 27 countries, all services	314	13,4	15,9	70,7	1.57*
Other countries, all services	47	4,3	2,1	93,7	1.89*
EU 27 countries, public services	234	13,7	14,1	72,2	1,59
EU 27 countries, sectoral services	80	12,4	21,3	66,2	1,54

^{*} the difference between these scores was statistically significant (p<0.005)

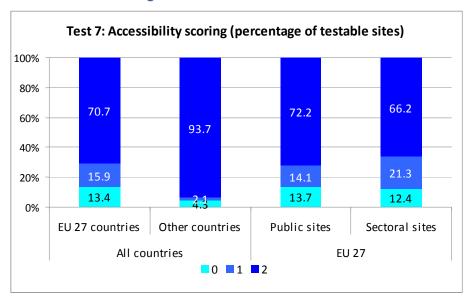


Figure 2-19 Test 7 overall results

Figure 2-20 shows that there was quite a lot of variation across the Member States in terms of their average scores for this test, with many countries scoring well but quite a number scoring relatively poorly.

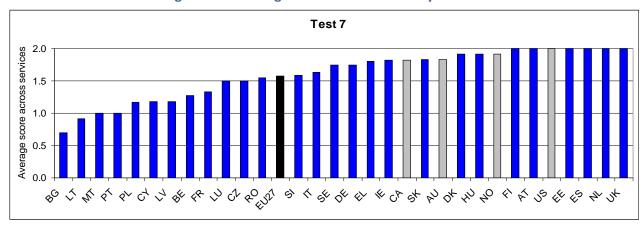


Figure 2-20 Average scores for each country - Test 7

Finally, Figure 2-21 shows the patterns in terms of average scores across all countries for the different services. It can be seen that the services do vary to some extent on this test, although generally varying within a relatively small range.

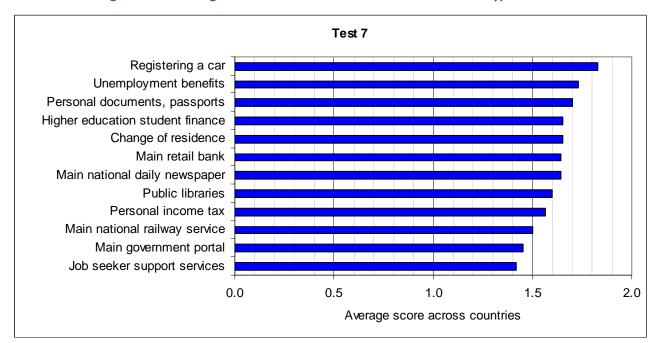


Figure 2-21 Average scores across all countries for each service type - Test 7

Discussion

The most surprising result is perhaps that some countries score quite low on such an easy and, you would think, well known issue. The low results in this test probably mean that most users that would benefit from changing the interface – people with reading- and writing- or learning difficulties, cognitive problems or mild visual impairments have difficulties in using the web sites tested. Also, users with AT will have problems.

Separation of information and presentation is something that has been common on new sites for the last 8 years. Today this is the normal way to build a web site. We have no information on how old the evaluated web sites are, but it wouldn't be surprising if the countries performing less well on this test tend to have older web sites than countries performing better. The reason that newer sites often perform better on this test is partly that separation of design and content makes it easier to maintain and develop the site further, and partly because search engines more easily can make sense of the content and tend to rank sites that separate design from content higher.

2.2.1.8 Test 8: Search

WCAG 2.0 SC 2.4.5, Technique: G161

Relevance

Search facilities are very important for most users when using websites. When the user enters a web site, there are different ways of finding the relevant information. The user can navigate the menus, use the internal search functionality, the site map or a site index, or a combination. Often users try to navigate in the menus but when they struggle they turn to the search functionality for help. People with reading difficulties, lack of background knowledge or concentration problems need to find what they are looking for without having to look at many different objects and views. For these groups, the search functionality is even more important.

How the test was conducted

By looking on all selected pages on the web sites we tried to identify the search function. It should be visible on all pages since you can't anticipate when the user needs it.

- 2 points = Requirement fully met (If a search function is clearly visible on all pages).
- **1 point** = Requirement partially met (If the search function itself is not visible, but there is a link to the search page on all other pages).
- **O points** = Requirement not met (If one of the 4 pages we've checked doesn't seem to have either a search form or a link to a search form).

Result

The overall results on this test are shown in Table 2-10 and Figure 2-22. This test was also one that had a high average score of 1.62 out of a maximum 2.00. Just over three-quarters of sites fully met the requirements for this test, although more than one-in-seven scored zero. The EU27 as a whole performed less well that the other countries on this test. Within the EU27 countries, sectoral websites tended to score somewhat better than public websites on this test.

Testable sites (%) Number of sites Scoring Scoring Scoring Mean score tested 0 1 2 All countries, all services 361 14,9 8,4 76,8 1,62 EU 27 countries, all services 15,6 75,9 314 8,6 1,6 Other countries, all services 47 10,6 6,4 83 1,72 EU 27 countries, public services 234 17,5 9,4 73,1 1,56 EU 27 countries, sectoral services 80 10 6,3 83,7 1,74

Table 2-10 Test 8 overall results



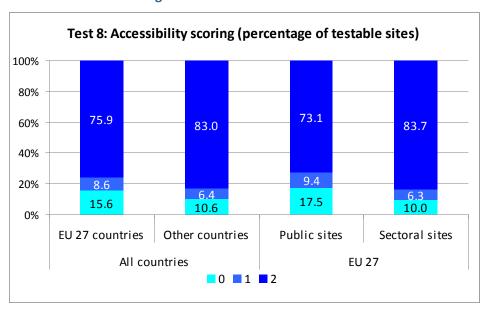


Figure 2-23 shows that there was quite a lot of variation across the Member States in terms of their average scores for this test, with many countries scoring well but some scoring relatively poorly.

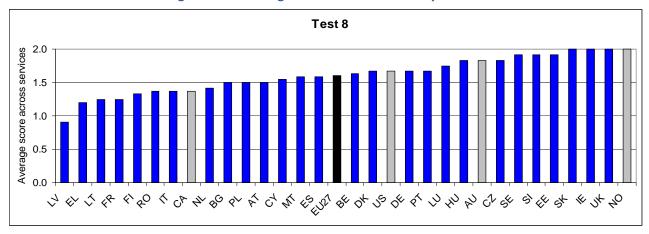


Figure 2-23 Average scores for each country - Test 8

Finally, Figure 2.24 shows the patterns in terms of average scores across all countries for the different services. It can be seen that the main daily newspaper and main government portal tended to score best on this test.

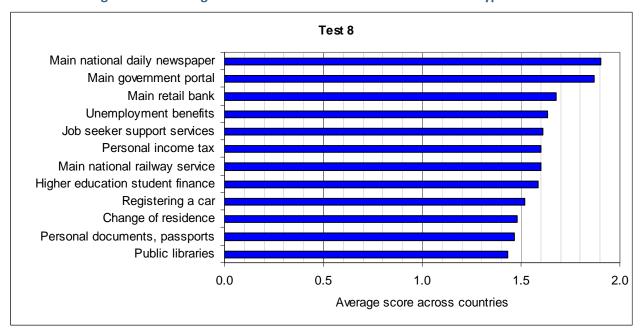


Figure 2-24 Average scores across all countries for each service type - Test 8

Discussion

One possible explanation of why some web sites lack an internal search function could be that many search functions that are built-in to a CMS or are free of charge have quite bad functionality, and that the good ones may be very expensive. For many users with or without disabilities, searching is the most natural way to surf the internet. The lack of search function will affect most visitors in one way or another. In some cases the sites in this study just functioned as a collection of links to other sites. On a site that just contains a handful pages, a search function might be considered overkill. In reality, however, users on these sites often struggle to find the right link and they would benefit from a search function that could help them in the right direction.

2.2.1.9 Test 9: Tab focus

WCAG 2.0 SC 2.4.7, Technique: G149, C15

Relevance

All users that navigate with a keyboard have a need for a visual indication of where the focus is. For sighted keyboard users, this is a prerequisite to be able to navigate at all. Keyboard users are found among end users with motoric impairments but also many travelling users and large groups of developers choose to navigate without a mouse.

How the test was conducted

By using the tab key on the keyboard to walk through the pages selected, step-by-step, we checked if it was always clear where focus was.

- **2 points** = Requirement fully met (If every link and form control is clearly highlighted when it receives focus via keyboard navigation).
- **1 point** = Requirement partially met (If links are clearly highlighted but not the form controls. For example the links are clearly highlighted but when a checkbox or a submit button receives focus it's only a thin, dotted line that indicates what object is in focus right now).
- **O points** = Requirement not met (If not all links are clearly highlighted).

Result

The overall results on this test are shown in Table 2-11 and Figure 2-25.

This was the test with the lowest score of all in this study. The average score was only 0.09 out of the maximum 2.00. A large majority of sites scored 0 on the test. The EU27 as a whole performed considerably less well than the other countries on this test, and this was statistically significant. Within the EU27 countries, sectoral websites tended to score even more poorly than public websites on this test.

Table 2-11 Test 9 overall results

	Number	Testable sites (%)			
	of sites	Scoring	Scoring	Scoring	Mean
	tested	0	1	2	score
All countries, all services	361	93,4	3,9	2,8	0,09
EU 27 countries, all services	314	94,9	2,9	2,3	0.07*
Other countries, all services	47	83	10,6	6,4	0.23*
EU 27 countries, public services	234	94,4	2,6	3	0,09
EU 27 countries, sectoral services	80	96,3	3,7	0	0,04

^{*} the difference between these scores was statistically significant (p<0.01)

Test 9: Accessibility scoring (percentage of testable sites) 100% 80% 60% 96.3 94.9 94.4 83.0 40% 20% 0% EU 27 countries Other countries Public sites Sectoral sites EU 27 All countries 0 1 2

Figure 2-25 Test 9 overall results

Figure 2-26 shows the patterns across the Member States in terms of their average scores for this test, with only some countries showing any positive scores and anyway very low scores.

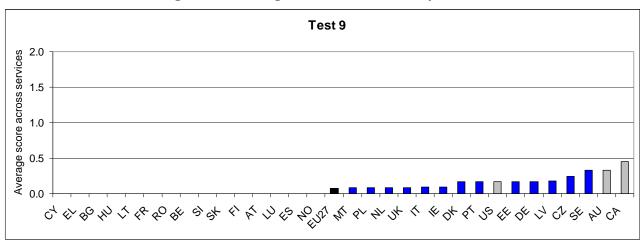


Figure 2-26 Average scores for each country - Test 9

Finally, Figure 2-27 shows the patterns in terms of average scores across all countries for the different services. It can be seen that the main government portal tended to score best on this test.

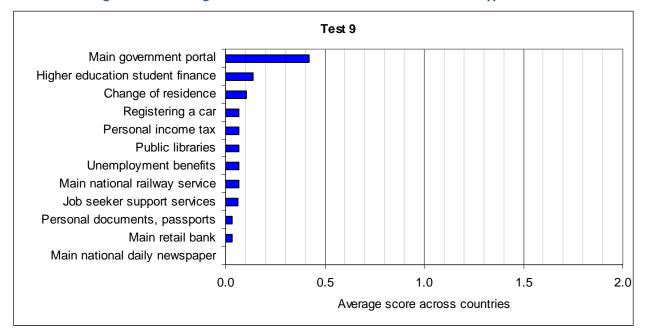


Figure 2-27 Average scores across all countries for each service type - Test 9

Discussion

This is a new success criterion in WCAG 2.0, which may explain why the scores were so low. In WCAG 1.0 this was not mentioned at all.

This is also something that is only mentioned in relation to accessibility, so we see this as one of the key indicators of attention being given to accessibility. A site that scores 1 or 2 probably has had some focus on accessibility when the site was developed. This is not something that just happens by itself and it is not something you do to make something else work better (like search engine optimizing). To achieve a clear visible focus on keyboard navigation you need to put in something extra in the CSS code. Web sites developed since 2009 and later that score 0 on this test therefore indicate a lack of knowledge on accessibility.

2.2.1.10 Test 10: Error messages

WCAG 2.0 SC 3.3.3, Technique: G83

Relevance

If users can make a mistake on a web site, some of them will do it. The responsibility of the web site owner is to minimize the numbers of errors possible and help users avoid and correct the errors that do occur. This is important for all users. Users with reading- and writing difficulties, visual impairments, concentration problems or other cognitive difficulties are amongst those that rely the most on good handling of errors.

By checking if error-handling on web sites can cope with one of the most common errors - uncompleted mandatory fields in forms - we can get an indication of whether there has been any thought given to the error handling.

How the test was conducted

If we found a form with a mandatory field we tried to send it without entering any data.

- **2 points** = Requirement fully met (If the form contains at least one mandatory field and we receive an error message at the top of the form, identifying the form field by its label and the form field itself is visually highlighted).
- **1 point** = Requirement partially met (If the form contains at least one mandatory field and we get a text error placed in connection to the form field, but not at the top of the form or at the top of the form but not at each field).
- **O points** = Requirement not met (If only a visual indicator shows what form field is not completed and no text information is given (for example, if the field gets highlighted with a red border but no text), or if the form is submitted to the next step without any error messages).

Result

The overall results on this test are shown in Table 2-12 and Figure 2-28. This test scored an average of 0.83 out of a maximum of 2.00. A little less than one-half of sites that had forms scored 0 on the test. The EU27 as a whole performed less well than the other countries on this test. Within the EU27 countries, sectoral websites tended to score a little better than public websites on this test.

Table 2-12 Test 10 overall results

	Number	Tes	Testable sites (%)		
	of sites	Scoring	Scoring	Scoring	Mean
	tested	0	1	2	score
All countries, all services	246	46,7	23,6	29,7	0,83
EU 27 countries, all services	217	48,4	23,4	28,1	0,8
Other countries, all services	29	34,4	24,2	41,4	1,07
EU 27 countries, public services	155	50,3	21,3	28,4	0,78
EU 27 countries, sectoral services	62	43,5	29	27,5	0,84

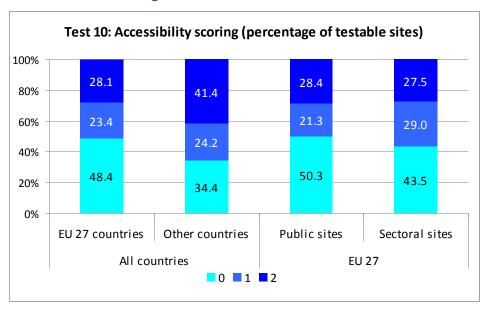


Figure 2-28 Test 10 overall results

Figure 2-29 shows the patterns across the Member States in terms of their average scores for this test. It can be seen that there is considerable variation, with a few countries scoring quite well, many having a moderate score, and some scoring very poorly.

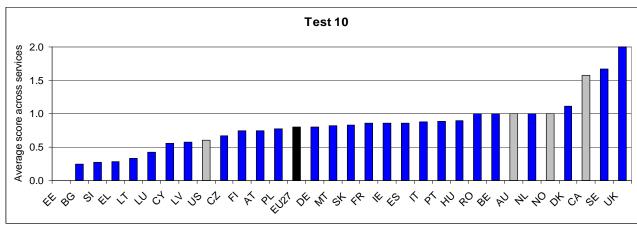


Figure 2-29 Average scores for each country - Test 10

Finally, Figure 2-30 shows the patterns in terms of average scores across all countries for the different services. It can be seen that the main retail bank tended to score best on this test and the main newspaper least well, with quite a bit of variation across the other service types.

Discussion

If a web site scores 0 on this test this represents a major accessibility problem for several user groups. A score of 1 could indicate awareness but lacking knowledge of different user group's needs. It should be an obvious accessibility and user experience feature to give clear error messages to the user. It is also a question of how we spend public money: if users can make mistakes and the web site doesn't help them, they need help in other ways such as over the phone, email or even turning up in person. Bad error message handling thus make the e-services more expensive and less efficient.

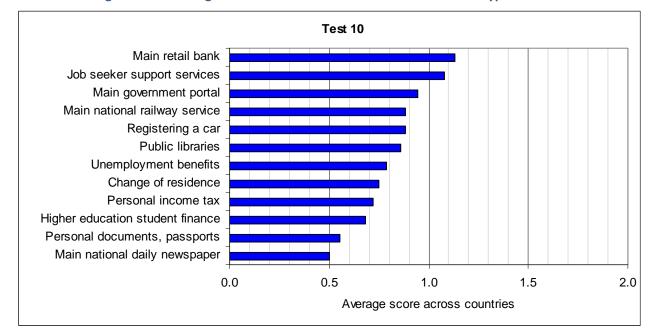


Figure 2-30 Average scores across all countries for each service type - Test 10

2.2.2 Overall results

In this section we present an overall synthesis and comparative perspective on the web accessibility situation across countries and types of websites.

Figure 2-31 presents the overall scores across all tests for the different services (expressed as a percentage of the total score that could have been achieved) for the EU27 compared with the other countries. It can be seen that the EU27 as a whole scores somewhat lower than the other countries for most services and for all services combined. This is an indication of an e-accessibility 'gap' between the EU27 and the comparison countries.³

For the EU27 as a whole, the average score across all services is just above one-half of the score for full accessibility on these tests (i.e. there is a substantial e-accessibility 'deficit' within the EU). Overall, the main government sites score highest but it is nevertheless important to continue the push for more accessible main government sites, but at the same time the results also suggest that extra efforts to increase accessibility of various key public services is especially relevant and important as these services are interactive with those in need.

Looking at the sectoral services, for the EU27 as a whole, the overall scores for the main daily newspapers and main banks tend to be lowest. The overall score for the main railway services is somewhat better, which may be linked to the fact that these tend mainly to be still publicly operated.

-

It is not necessarily straightforward to make direct comparisons between types of services and/or countries in terms of the overall accessibility of their websites, even for the relatively limited set of indicators used in this study. This is because sites for the services covered (within and/or across countries) can have different features, especially in terms of whether or not they have multimedia and whether or not they have forms. Tests for multimedia accessibility and forms accessibility can only be conducted when these features are present. In order to reduce the influence of this variability on the comparability of results across service types or countries, the scoring was generally calculated on the basis of values available only for those tests that were actually applicable in a given instance under investigation.

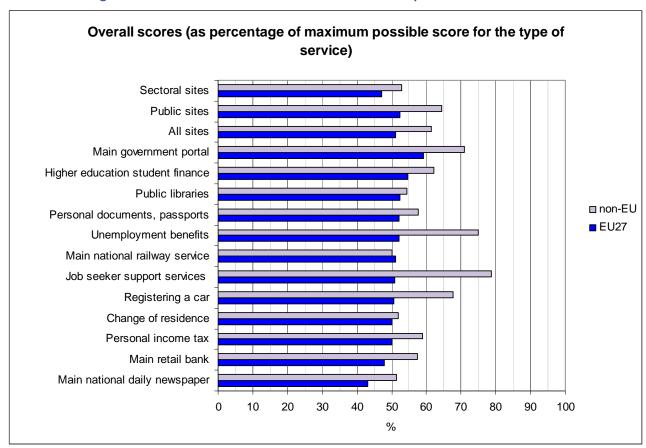


Figure 2-31 Overall scores across all tests - EU27 compared to other countries

Turning to patterns across countries, Figure 2-32 presents the results for the 9 public services combined across the countries. Figure 2-33 presents the country scoring in a more differentiated manner, showing the percentage of 0, 1 and 2 scores that were achieved across all tests that could be applied across all the public sites in each country. Both approaches give fairly similar patterns in terms of country rankings. Overall, it can be seen that there are wide variations across the EU27 countries, with the highest scoring country more than twice the lowest scoring one. Nevertheless, even the highest scoring countries fall well short of the maximum possible accessibility score on the indicators used in this study.

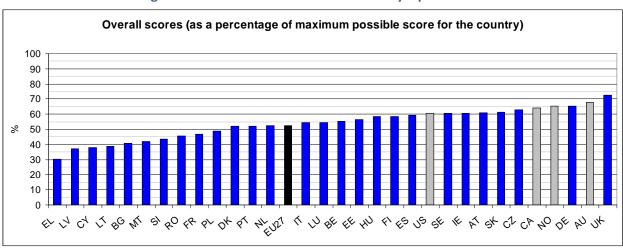


Figure 2-32 Overall scores for each country – public sites

Figure 2-33 Distribution of test scores for each country – public sites

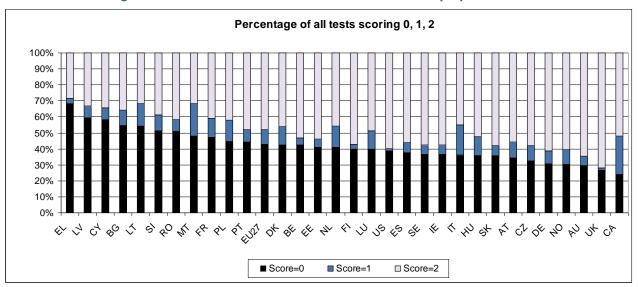


Figure 2-34 Contribution of each test (average score for each test) – public sites

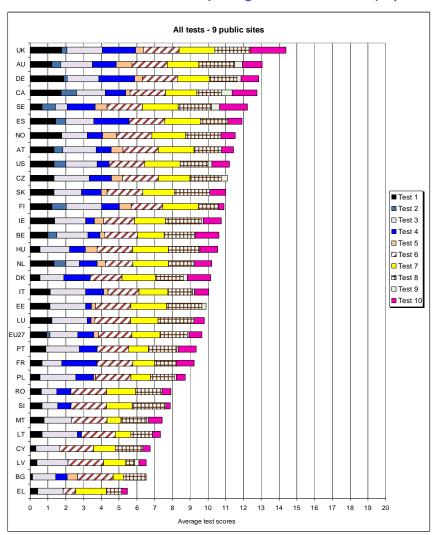


Figure 2-34 above presents the pattern of accessibility scoring across the different tests and shows that there is quite a lot of variation across countries in their scoring on the different aspects of accessibility. This suggests that, as well as variation in overall levels of effort, there is also a lack of consistency in terms of what aspects of accessibility are being given attention across the different countries.

It is perhaps worthwhile to also comment here again that there was considerable variation across countries in terms of the proportion of sites that had multimedia and in the proportion of sites that had forms. In our scoring system, the focus was on *accessibility of* forms and of multimedia where these were found on sites. It could also be said that provision of multimedia, per se, is an important contribution to accessibility for most groups, so that a scoring approach that gave some value for the presence of multimedia in the first place, and then added in the accessibility score for the multimedia might be something to consider for future scoring systems. Somewhat similar considerations could also be given in relation to the provision of forms, although here the value of forms, per se, is perhaps more in terms of avoiding people with disabilities having to complete their transactions in other ways (e.g. through a physical visit to the service, through a call centre, or whatever) rather than in relation to the accessibility of the website, as such.

Figure 2-35 shows the situation in terms of scores on tests addressing accessibility of forms and tests addressing other aspects of accessibility of the websites (multimedia accessibility is not included in this chart). Although overall there is a positive correlation between scores on the two sets of tests, sometimes a country may score relatively higher on one aspect and lower on the other.

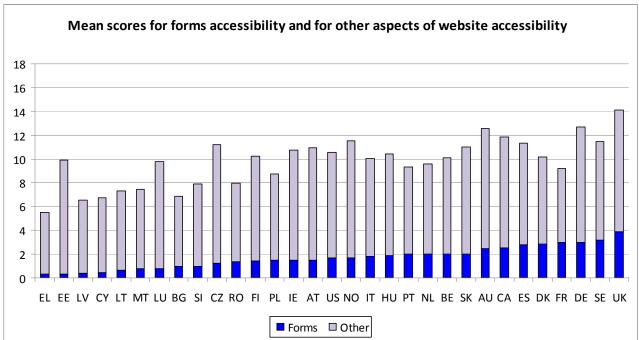


Figure 2-35 Average scores for forms accessibility and for other aspects of accessibility – public sites

Finally, for some of the features of websites that are covered in the set of accessibility tests used in this study, the accessibility aspect may also coincide with other interests of web-owners, for example Search Engine Optimization (SEO). Sites developed with modern techniques in line with the latest trends in web development (such as responsive web design, mobile first and progressive enhancement) can be expected to score well on some of the accessibility tests. Tests that a modern website with some user experience focus would be expected to score well on are test 1 (headings), test 7 (separating information and structure from presentation), test 8 (providing a search function) and test 10 (error messages). Figure 2.36 shows the pattern of results on these tests.

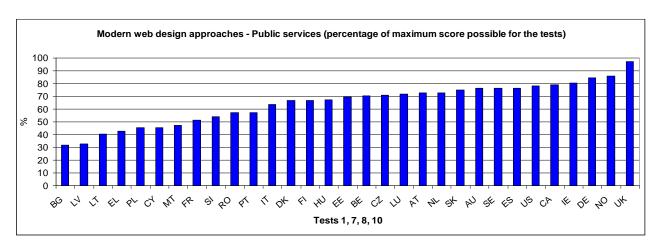


Figure 2-36 Accessibility scores for tests related to modern design approaches - public sites

We have also included some tests for which sites would only be expected score well if there has been a specific focus on accessibility. These factors are relevant for "accessibility only", and are covered in tests 4 (form labels), 5 (valid HTML) and 9 (tab focus). Figure 2.37 shows the pattern of results on these tests.

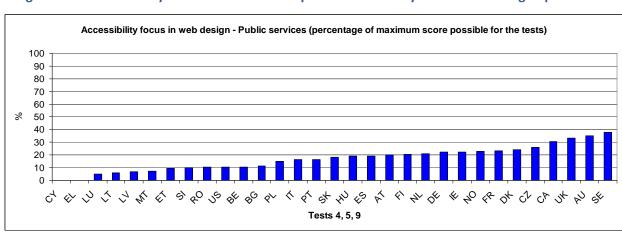


Figure 2-37 Accessibility scores for tests for a specific accessibility focus in the design - public sites

It can be seen that while many countries score relatively highly on the tests measuring requirements that would typically be met on a modern web site, scores on the tests that we believe show the extent of specific focus on "pure accessibility" factors are much lower. This result shows a need for increased awareness.

2.3 The policy context

This section looks at the policy context for web accessibility across the countries covered in the study. Section 2.3.1 discusses how the web accessibility results presented in section 2.2 relate to the national policy contexts across the countries. Section 2.3.2 provides a more general description/analysis of the current and evolving policy situations in the countries.

2.3.1 How the accessibility results relate to the national policy contexts

It is useful to explore a little how the accessibility results relate to the national policy contexts in order to help understand the patterns that can be observed across countries. This can provide pointers towards the types of policy approaches that seem to have best results. It might also help to identify what could be the most useful EU-level interventions in this field, if such are deemed to be warranted.

Overall, the general tendency for public websites to score a bit better than sectoral sites fits with the policy situation that is described in more detail in section 2.3.2 - web accessibility obligations to date have mainly focused on public websites. However, although the large majority of countries now have some level of legal or other official requirement for (or at least encouragement of) attention to accessibility of public websites, the accessibility results still shows the need for improvements and continuous attention to focus on policies that can make a change.

A gradient across countries in public website accessibility can be observed from the results presented in section 2.2. However, it is probably best not to focus too much on individual country scores, given that the differences between countries are often not so large and, anyway, the comparative positions of countries can change depending on what indicators or combinations of indicators are used. Nevertheless, the general patterns that can be observed do suggest the importance of clear/strong obligations for web accessibility, ideally combined with official monitoring of compliance. Countries with scores at the lower end of the scale tend not to have any direct obligations yet (e.g. CY, RO) or to have only introduced them very recently so that impact would not yet be expected (e.g. EL ministerial decree of 2012; PL requirements only became mandatory in 2012), or the obligations tend to be softer and/or more of a recommendatory than obligatory nature (e.g. SI, LT, LV) and/or are not backed up by official monitoring to assess the extent of accessibility of public websites (e.g. MT, BG, FR).

As already mentioned in section 2.2.1, one issue to consider in relation to the patterns across countries is that some of the variation may be associated with differences in the prevalence of more or less modern websites and website designs (this can influence some of the aspects of accessibility that were assessed in this study) rather than being due to efforts targeting accessibility, per se. Whilst this may exert some influence, a closer analysis of the results has indicated that the extent to which there appears to have been a deliberate accessibility focus seems also to be reflected in the overall observed patterns of accessibility across countries. When countries are compared on a subset of the tests (e.g. tests 4, 5 and 9) that cover aspects that would unlikely be addressed unless accessibility was in focus, a fairly similar pattern to the overall pattern is observed across countries; countries that score lower on the combined set of tests also generally, although not always, tend to score lower on these particular tests

However, it is also important to look beyond country differences to the bigger picture presented by the results in section 2.2. In addition to the EU27 as a whole performing less well than the comparison countries, the absolute levels of public website accessibility in the EU are not very high,, even in the better performing countries. Within the EU27 also, there was a tendency for the main government website to score better than the specific public services that citizens are likely to use for important public duties and/or accessing key services. Overall, it seems that whilst these key public services have been accepted by the Member States as priorities for being provided online, sufficient efforts have not yet been made for ensuring their being accessible.

Finally, as also mentioned in section 2.2, there is considerable variation across the Member States in terms of what aspects of web accessibility seem to be given attention, with a consequence that people with different types of disabilities may be better or less well catered for in different countries. As discussed in section 2.3.2 in relation to web accessibility standards/guidelines being applied in the different countries, it seems that although most countries are generally working within the WCAG2.0 framework there is scope for a lot of variation in what aspects are given emphasis.

2.3.2 Aspects of web accessibility policy across the EU and other countries

This section looks a bit more closely at the web accessibility policies across the EU and other countries. Dimensions addressed include the policy context within which the obligations are located, the types of websites that are included within their scope, the accessibility standards/guidelines that are applied, whether there is official monitoring of compliance/achievements, and how web accessibility has been evolving in recent years.

Source of the obligations

Annex 1 presents information on the web accessibility policy situation in each country. By this stage, as mentioned already in section 2.3.1, almost all of the EU countries have some form of obligation or official policy initiatives in the web accessibility field. These vary in the extent of concreteness of the obligations that are imposed and/or in the extent to which the basic obligations are followed-up through monitoring or other measures.

Table 2.12 presents a summary of the main legislative or other sources of the obligations. The most common situation is for web accessibility obligations to be located within e-Government-type legislation, regulations or other initiatives. In some countries, however, the obligations emanate from wider legislation specifically focusing on accessibility for disabled people to information technology and/or the information society (e.g. ES, IT) and in some countries from wider disability and/or equality legislation (e.g. IE, DE, FR, MT, UK).

Table 2-13 Source of web accessibility obligations in the different countries

AT	E-Government Law (2004, amended 2008); Disability Discrimination Act (2005)
BE	No formal legal/regulatory obligations. Official initiatives in the regions: Flemish government decision (2004); Wallonie_Brussels Federation voluntary decision
BG	E-Governance Act (2007,2008,2009); related ordinances and sub-ordinances - mainly The Ordinance for Electronic Administrative Services and the related Instruction for Executive Power Administration Website Design Requirements (2008,2009,2010)
CY	There is not any direct national legislation or current policies on accessibility of public websites. However, it is noted that the ratification of the UN Convention for People with Disabilities and its optional protocol (ratified 27/6/2012) has relevance, also Article 16 of the EC Regulation 1083/2006 on accessibility and structural funds.
CZ	Public administration information systems (PAIS) law (2000, amendments of 2008 and 2012); Accessibility public notice (2008)
DE	Federal level: the general equality legislation, Behindertengleichstellungsgesetz (BGG), enacted in 2002; subsequent Federal Ordinance "Barrier-free Information Technology Ordinance" (BITV) of 2002, revised version (BITV 2.0) of 2011. All "Länder" parliaments have their own equality laws and these generally include similar obligations in relation to accessibility of web sites as in the federal law (BGG).
DK	Agreement of the government and Danish regions and local governments (2007) on the use of mandatory open standards for software in the public sector. It is a soft approach, of the type "comply or explain".
EL	Ministerial Decree YAΠ.Φ.40.4/1/989 on 10th April 2012. (Validation Framework for delivery of e-Government services). Also noted that the national ratification of UN Convention for People with Disabilities and its optional protocol (ratified May 2012) is relevant, as well as Article 16 of the EC Regulation 1083/2006 on accessibility and structural funds.
ES	Royal Decree 1494/2007 of 12 November, approving the Regulation on the basic conditions for access of disabled people to the technologies, products and services related to the information society and media.
EE	Public Information Act (2011); The Framework of Interoperability of the State Information System (2011); Interoperability of the State Information System Framework Version 1.0. Framework of Websites (2012); Everyone's Rights in e-State: The e-State Charter
FI	Recommendation JHS 129 of Advisory Committee on Information Management in Public Administration (JUHTA); Act on Electronic Services and Communication in the Public Sector (2003); also, Finnish Constitution prohibits discrimination on the basis of disability
FR	The Law for Equal Rights and Opportunities, Participation and Citizenship of People with Disabilities (Law n° 2005-102 of 11 February 2005); Decree published in 2009 referring to technical reference document based on WCAG2.0

HU	The 2009. LX. law about electronic public-utility service; the 225/2009. (X. 14.) governmental regulation prescribing the general rules of electronic public-utility service; Government Decree 1056/2012 on the Action Plan for 2012-2013 of the Implementation of the New National Disability Program		
IE	Disability Act (2005); Code of Practice prepared by the National Disability Authority.		
IT	Stanca Act (2004) (Provisions to support the access to information technologies for the disabled) and associated decrees (2005); updated with Decree 179 of 18/10/2012 converted into Law 221 of 17/12/2012		
LU	Loi du 20 avril 2009 portant création du Centre des technologies de l'information de l'Etat (CTIE); Plan Directeur De La Mise En Œuvre Des Technologies De L'Information Au Sein De L'État 2010-2014; RENOW standard		
LT	General Requirements for the Websites of the State and Municipal Institutions and Agencies (2003); Methodological Recommendations for the Creating and Testing of the Websites adapted for the Disabled (2004)		
LV	Regulations of Cabinet of Ministers No 171 "Order how State Institutions insert information in Internet". General Requirements for the Websites of the State and Municipal Institutions.		
MT	Equal Opportunities (Persons with Disability) Act (2000); GMICT Policy Framework, Website Accessibility Standard (2011)		
NL	Ministerial Decree BesluitKwaliteitRijksoverheidswebsites 2006 (specifying National Web Quality Guidelines, <i>Webrichtlijnen</i>); national e-government implementation plans, NUP (2009), i-Nup (2011); also equal treatment of people with disabilities is covered by the constitution and anti-discrimination laws.		
NO	DTL (The Anti-Discrimination Act) 2008-06-20 # 42, also applying (with some exceptions) to private sector websites; regulation adopted in 2013		
PL	Act on the computerisation of the operations of the entities performing public tasks (2005; amendment 2010); Regulation concerning the National Interoperability Framework (2012)		
РТ	Earlier Resolutions of the Council of Ministers (1999; 2003; 2006; 2007); Law № 36/2011 on open standards in the computer systems of the State and Resolution of the Council of Ministers № 91/2012 regulating digital operability.		
RO	No specific obligations in relation to accessibility of public websites were reported.		
SE	Ordinance SFS 2001:525 on accessibility of public authority premises and operations for people with disabilities; official web accessibility guidelines		
SI	Strategy of Work and Development of the Public Administration in Slovenia (2004); Act on the Equalization of Opportunities for Disabled Persons (2010); Action Plan for Disabled Persons 2007-2013 (provisions 3.9, 3.11, etc.)		
SK	Acts on Information Systems of Public Administration (2006, amended 2009); Ministry Regulation about Standards for Information Systems of Public Administration, and methodological instruction related to this (2010)		
UK	Equality Act 2010, replacing most of the Disability Discrimination Act 1995 (as amended); statutory Codes of Practice and non-statutory guidance from the Equality and Human Rights Commission (EHRC); also was guidance from Cabinet Office for public sector websites, and issue is on the agenda of the current e-accessibility Action Plan.		
AU	The Online and Communications Council (OCC) accessibility requirements (applying to all Australian, state and territory government websites); requirements for Australian Government agencies under the <i>Financial Management and Accountability Act 1997</i>) (FMA Act), as extended by The Secretaries' ICT Governance Board (SIGB); also the Disability Discrimination Act 1992; ratification of the UN Convention on the Rights of Persons with Disabilities (UNCRPD)		
CA	Standard on Web Accessibility (2011) (replaces Part 2 of the Common Look and Feel 2.0 Standards for the Internet) (internal regulation that is directed at Web sites that are developed for the federal government).		
US	Section 508 of the Rehabilitation Act (for federal websites); Americans with Disabilities Act (1990) in principle		

may cover websites more widely (i.e. for covered entities); other legislation also of relevance

Type of websites covered

The main focus of current policy approaches to web accessibility obligations has tended to focus on public websites. However, in some countries obligations can also be found for privatised (or outsourced) basic services of general interest and/or for other types of private sector websites.

Public websites

Annex 2 presents information on the **types of public websites** that are covered by the web accessibility obligations and/or policies across the different countries.

In terms of **levels of public administration** covered, in general, the obligations in most Member States seem, at least in principle, to extend across the entire public sector and to apply at all levels of public administration – national, regional and local. In Germany, there are web accessibility obligations for the federal level under the legislation which apply to websites owned by federal government bodies and regional government bodies which implement federal law. However, the 16 regional parliaments in the country have adopted their own equality laws which may or may not include similar obligations in relation to accessibility of web sites when compared with the federal law. In cases where any obligations have been imposed they tend to concern public administrations and related bodies at the regional and municipal governance levels. In Belgium, the main official policies seem to have focused on the regional government levels although in practice a lot of web accessibility efforts at the level of municipalities are also reported. More generally, although it is difficult to generate a detailed picture without a dedicated study on this particular topic, it seems that in practice, at least in some countries, the emphasis/focus may so far have tended to have been more on websites at central government level rather than dedicated efforts to ensure implementation of web accessibility at all levels of administration.

In terms of **other aspects of scope of coverage**, the most common approach seems to focus on public administration/services. However, some countries also explicitly include non-public entities that are in receipt of public funding, companies where there is a substantial public shareholding, companies with licences/concessions to provide public services etc. This aspect is discussed further in the section on 'basic services' below.

Annex 3 presents information on the **timeframes** for the achievement of web accessibility that are imposed in the obligations/policies in the different countries. In general, the most common approach seems to be one that, in principle, expects efforts to be made immediately to address the accessibility of websites that fall within the scope of the obligations/policy, although there is variability in the extent to which this is explicitly required in a concrete manner or is of a more vague nature. Quite a number of countries have had their web accessibility obligations/policies in place for some time now, and where concrete dates for achievement of web accessibility have been imposed these are often now in the past. A few countries have imposed timeframes that extend into the future, generally 2015.

Most countries seem to apply the same timeframe for both existing and newly made websites, although sometimes a longer timeframe is given for existing websites (e.g. EL, NO). In some countries, there is also possible ambiguity in terms of whether and how websites that existed prior to the obligations being introduced are covered, or as regards what constitutes a 'new' website in terms of how much change is necessary for this to be deemed to be the case. There are also some examples of phasing of requirements in terms of levels of accessibility to be achieved (e.g. NL), as well as some examples of complexity where it seems that existing sites (at the time of a change in regulations) may be allowed to apply older standards and new sites are expected to apply updated standards (e.g. MT).

Basic services of general interest (outsourced/privatised)

The policy analysis also examined the extent to which current web accessibility obligations cover what are sometimes called 'basic services' or 'services of general interest'. In EU policy, 'services of general interest' are services covering such essential daily realities as energy, telecommunications, transport, radio and television, postal services, schools, health and social services, etc. As many of these have now been outsourced or privatised in various ways in Member States, it is interesting to know whether such services are being addressed in the context of web accessibility policy. The focus was especially on measures which explicitly require that websites of these types of service of general interest, even if they are outsourced/privatised, be made accessible.

Annex 4 presents information on the extent to which basic services are covered by web accessibility obligations across the countries, even if they are outsourced / privatised. In general, the most common situation at present seems to be that such services are not specifically referred to within existing web accessibility obligations unless they are still provided by the public sector. However, in a number of countries (e.g. BG, ES, EE, FR, IE, IT, LT, MT, PL, SK) direct obligations do appear to apply for at least some such services that are not provided directly by the public sector. This is generally because the way that the web accessibility obligations are stated makes reference to provision by publicly-owned companies or companies with significant public shareholding (e.g. more than 50% ownership), or to where there is direct outsourcing/privatisation of 'public' services. In at least one case (ES), however, specific basic services (including ones that are provided by the private sector, when offered by large companies) seem to be addressed in the legislation/policy. In some countries also (e.g. AT, DE, IE, NL, UK), the more general anti-discrimination legislation may in principle cover such services, even if privately provided.

Private (commercial) websites more generally

Annex 5 presents information on the extent to which other private (commercial) websites are covered by web accessibility obligations across the countries. Amongst the EU countries, only Spain seems to have direct web accessibility obligations that apply to (some) private commercial organisations over a certain size (e.g. banks, insurance companies, private transport companies, travel agencies). In Norway, also, the legislation covers both public and private websites. In some of the other EU countries, private companies may be covered under the equality/anti-discrimination legislation (e.g. AT, DE, IE, NL, UK), although it seems that this has not generally so far been acted upon (e.g. in terms of cases being taken against private companies because of lack of web accessibility). In Australia and the United States, some cases have been taken against private companies because of lack of website accessibility.

Standards/guidelines applied

Annex 6 presents information on the web accessibility standards/guidelines that are applied in the different countries. The most common situation seems to be for WCAG guidelines to be directly referenced in an unmodified manner, either as a concrete obligation or as the recommended approach. In terms of progress towards introduction of WCAG2.0 guidelines, most countries seem already to be applying the updated guidelines, although some are in a transitional phase (e.g. FI, NL).

Where countries have their own standards/guidelines, these are mainly WCAG-based. In some cases, the national standards/guidelines are a direct national implementation of WCAG2.0 in its entirety (e.g. ES) although in a few cases there are some specific deviations in terms of exclusion or weighting of some checkpoints (e.g. DE, NO). More generally, there seems to be some variability in regard to how the WCAG 2.0 guidelines are being implemented in standards/guidelines, with some countries just specifying a particular level (AA seems most common) and others including level A rules plus a mix of requirements selected from levels AA and AAA (e.g. SK). In some countries, there are also additional requirements around universal access and other such issues that are not included within WCAG2.0 (e.g. NL, SE).

It would therefore seem that the different patterns of scoring on the different accessibility tests across the Member States, as noted in section 2.2, may be more related to variability in how web accessibility is being

implemented in practice rather than to major variations in national standards/guidelines or deviations from WCAG in this context

Official monitoring in place

Annex 6 presents information on approaches to monitoring of levels of web accessibility in the different countries. Overall, so far only a minority of countries seem to include regular official monitoring as part of their web accessibility policy approach (e.g. DK, EE, IT, LT, NL, SK, UK), although this is also something that is foreseen for the future in some countries (e.g. BG, HU). It can also be noted that the methodologies that are used for monitoring vary widely across these countries. Some countries have had occasional or once-off monitoring, or have monitoring of a softer nature, such as self-report (self-declaration) surveys of web-owners. A number of other countries have monitoring that is not official, being conducted by third parties such as NGOs, and some appear not to have any such monitoring activities at all.

Evolution in recent years

Finally, in order to give a more dynamic picture of how the policy approaches to web accessibility are evolving, Annex 7 presents information on recent evolution of web accessibility policy as well as any plans that could be identified in this area for the near future.

Apart from the general tendency to move towards the WCAG 2.0 guidelines, many countries have now had their web accessibility obligations/policies in place for some years already and have not seen very much change in their approaches in recent years. However, some countries have only relatively recently introduced any obligations in this area (e.g. EL, HU) and some have strengthened, made more concrete or expanded their existing approaches (e.g. ES, FR, MT, NL, PL, SK, UK).

Generally, not many very radical plans for new measures or change of policy direction in this field were identified across the countries. However, in some countries there seem to be initiatives underway or planned to reinforce activities in relation to public website accessibility (e.g. EE, HU, NL) and in some cases consideration is being given to extension of the scope of the obligations to cover a wider range of websites (e.g. SK); in some cases, also, consideration is being given to inclusion of a least some private websites within the scope (e.g. LU, PT). There seems also to be some discussion (although not necessarily of an official or formal nature) in some countries about more explicit coverage of web accessibility within the scope of equality anti-discrimination legislation (e.g. SE) or to better leverage this through approaches such as agreements or class actions (e.g. AT).

2.4 Synthesis and conclusions

This section summarises some of the key results from the work on web accessibility and identifies some possible implications for further EU efforts in the web accessibility field.

Key results

- On the policy side, there has been some progress in recent years, with nearly all Member States
 now having some type of obligation or policy in place for accessibility of public websites and some
 having strengthened or further developed their existing approaches.
- The general patterns that can be observed suggest the importance of clear/strong obligations for web accessibility, ideally combined with official monitoring of compliance.
- Despite this, there remains much room for improvement in the actual levels of web accessibility
 that are so far being achieved across Europe; for the EU27 as a whole, the levels of web
 accessibility (for the types of websites covered in this study and according to the set of accessibility
 indicators used) are lower than in the comparison countries (AU, NO, CA and US).
- There is also considerable variation across the Member States in the levels of web accessibility

being achieved; a number of EU countries score between fully meeting the accessibility requirements and partially meeting the requirements, but a number of EU countries also score poorly in terms of the indicators used in this study.

- The current tendency for most countries is to work towards the WCAG 2.0 guidelines (most
 commonly with reference to level AA), and this is expected to continue; despite this, however, the
 study found variations across Member States in terms of the aspects of web accessibility that seem
 to be given emphasis.
- More generally, across Europe as a whole there may be a tendency for accessibility requirements of blind end-users to be more often addressed, even if there is still room for improvement also in this area; with the exceptions of some public websites, a rather poor performance in meeting the requirements of users with hearing impairments was an important issue identified from the indicators used in this study.

Possible implications for further EU efforts in the web accessibility field

- The continuing variation across Member States in terms of progress towards public website
 accessibility suggests that EU-level initiative in this field (possibly addressing obligations and
 monitoring) is warranted.
- Given that there are variations across Member States in terms of the likely web accessibility experiences of different user groups, a common EU-wide approach to ensure that key aspects of web accessibility are consistently addressed in all countries in a harmonized way is needed.
- Finally, there is a need for more research on different aspects of web accessibility; in this study, web accessibility was assessed from the perspective of users of the traditional (desktop) computer-based access platform, but, since more and more users access the internet via a smartphone or tablet, and with touch screen interfaces, studies should in the future also take more account of these forms of usage; further studies should also pay attention to the extensive usage of social media and other aspects of the online 'lifestyles' that have become so popular today.

3 Telecoms

This Chapter presents the results of the work on assessing accessibility and the related policy context in the telecoms field. The approach focused especially on issues relating to article 23(a) of the 'Universal Service' Directive of 2009 on 'ensuring equivalence in access and choice for disabled end-users'. As part of the revised "Telecoms Package", earlier legislation with respect to Universal Service (US)⁵ had been reviewed and a new Article (Article 23a) entitled "Ensuring equivalence in access and choice for disabled end-users" was added. Through the new Article, Member States are required to enable relevant national authorities to specify, where appropriate, requirements to be met by undertakings providing publicly available electronic communication services to ensure that disabled end-users have access to electronic communications services equivalent to that enjoyed by the majority of end-users. They shall also encourage the availability of terminal equipment offering the necessary services and functions. In this context, member States shall take specific measures to ensure that access to, and affordability of, services for disabled end-users is equivalent to the level enjoyed by other end-users (Article7). To this end, they may oblige national regulatory authorities to assess the general need and the specific requirements, including the extent and concrete form of such specific measures for disabled end-users.

Benchmarking of the e-accessibility situation in this regard is quite a complex matter, and has presented challenges for the development of a coherent picture of the situation across the Member States in the telecoms accessibility field to date. Earlier information gathering efforts by BEREC⁶ and by the INCOM group have made a useful contribution in this area, although it is generally difficult from these sources to get a consistent and systematic view of the situation across the Member States in a manner that would help to guide regulatory policy in this field. The current study aimed to provide a benchmarking that would throw some light on the overarching question of whether the accessibility objectives of the EU Directives are being achieved, as well as helping to develop a deeper understanding of some key aspects of this.

3.1 Some indicators of equivalence of access

There are in principle many measures that need to be provided in order to ensure total equivalence of access to telecoms for people with disabilities. For feasibility and resource reasons, the study focused on a limited number of key areas that can be expected to have a big impact on accessibility for people with disabilities. These include: accessible directory services, payphones and emergency services; provision of relay services (text and video); and provision of special equipment.

3.1.1 Directory services

Telephony service users with sensory impairments rely on the availability of information in particular access modes. For instance, people with visual impairments may have problems to use printed telephone directories. Also, text telephone users or people with cognitive impairments may rely on specialist directory enquiry and service help facilities. Today, directory services seem to be available by means of different access media in many countries, albeit such service offerings may not specifically be aimed at people with disabilities. Beyond the "traditional" telephone book, this includes web sites where a user can retrieve telephone numbers without support by an operator as well as staffed inquiry services that can be contacted through a voice telephone and/or other means such as SMS. At least in principle, this may mean that people with disabilities have alternative access modes available which potentially suit their specific

⁴ Directive 2009/136/EC

⁵ Directive 2002/22/EC

⁶ Electronic communications services: Ensuring equivalence in access and choice for disabled end-users http://berec.europa.eu/doc/berec/bor_10_47.pdf

communication capabilities. It may nevertheless be harder for them to use such services when compared with other users. An available online-directory service may for instance not have been specifically designed in accordance with accessibility standards. Also, people with disabilities who might in principle be able to use mainstream directory services, e.g. a telephone enquiry service, may need to bear higher costs due to slower communication speed or in cases where particular alternative access modes, e.g. SMS, are offered only in terms of added value services at a higher charge when compared with basic telephone enquiry services. Against this background the question arises whether people with disabilities can access directory services on an equal footing when compared with the general population.

Following the liberalization of the telecommunications sector, the market for telephone directory services has become rather complex and competing services have emerged in many countries. An in-depth evaluation of the European and third country directory services market in relation to accessibility by users with disabilities is therefore beyond the scope of the current study and would rather require a dedicated study. Nevertheless, availability of directory service provisions specifically directed towards people with disabilities in the framework of universal service delivery represents a useful indicator for the purposes of the current study. As can be seen from Figure 3-1, there are currently 21 countries where any provisions are available. These include 17 European Member States and all of the four non-EU countries included in the study (Table 3-1). In most cases people with visual impairments can access telephone enquiry service free of charge or at reduced rates (AT, CY, DK, FR, EL, MT, NL, PT, IE, SE, SI, SK, UK, AU, CA, US, NO). Other provisions include for instance a dedicated directory assistance help line for customers who are unable to read a print directory, providing more detail when compared with the standard directory service (AU). Another approach includes the installation of dedicated customer service workstations for people with disabilities at customer service offices enabling access to a directory service (PL).

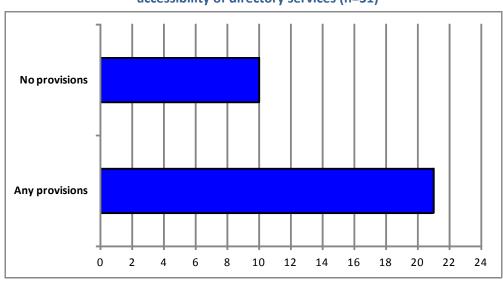


Figure 3-1 No of countries with any provisions concerning accessibility of directory services (n=31)

The policy context in this area mirrors the status picture quite well - in almost all countries where special provisions are available, some form regulation/policy has been put in place requiring dedicated accessibility provisions (Table 3-1). This may include a general requirement to enable access to directory service by people with disabilities or specific requirements such as cost-free access to telephone directory services for visually impaired people. The converse is also the case, whereby countries without any legislative/ regulatory requirement for accessible directory services seem generally not to have any measures being provided in practice.

Table 3-1 Dedicated provisions concerning accessibility of directory services by people with disabilities

		Provisions	Policy context
AT	Ø	Directory assistance number for blind and partially sighted people is offered at the local rate by the National Federation of the Blind (ÖBSV) in cooperation with Telekom Austria. There is a dedicated telephone number: 0810 00 17 14	Telecommunications legislation (TKG) requires operators of a publicly available telephone service inter alia to provide access to operator and help services
BE	0	No dedicated provisions to people with disabilities have been reported	No legal/regulatory obligation exists for providing accessible directory services. Non compliance of an existing web based directory service ("1207.be") with commonly accepted web accessibility standards (WCAG) has lead to a parliamentary enquiry according to which there are currently no plans to legally require compliance with web accessibility standards (cf. answer of Minister Vervotte to the Belgian parliamentarian Helga Stevens)
BG	0	No dedicated provisions to people with disabilities have been reported	Although the telecommunication legislation apparently requires provision of accessible directory services , no dedicated measures in this regard were not so far reported
CY	&	Access to a business telephone directory is available free of charge to people with sight loss according to particular eligibility criteria. Users who want to use the service free of charge must provide evidence on their eligibility.	Telecommunications legislation includes a general requirement to ensure equal access to directory services by people with disabilities.
CZ	Ø	A dedicated assistance service is provided to people with disabilities. Requested telephone numbers can be provided by sms, fax or email.	Telecommunications legislation includes a requirement to ensure equal access to directory services by people with disabilities by means of suitable technology and services.
DE	0	There are no dedicated provisions to people with disabilities	There is no reference to accessible enquiry services in existing legislation/regulation
DK	&	A telephone directory service is available for people with visual impairments	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 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
EE	0	There are no dedicated provisions to people with disabilities	There is no reference to accessible enquiry services in existing legislation/regulation
EL	Ø	Up to 20 free calls per month to the Directory Information Service 131 operated by OTE, the main telecoms provider, are available to people with visual impairment	Legislation requires measures being taken to ensure accessibility of directory services. It is mentioned that directory services have to be made without any graphics (text only) via CD-ROM to be provided free of charge and via the website of the Universal Service Provider. Moreover, people with visual impairments should be able to contact an enquiry service free of charge.

		Provisions	Policy context
ES	Ø	In general, all providers of directory services are affected by the relevant legislation. Coherent implementation by market players seems to be lacking.	The regulator has imposed an obligation on operators to provide accessible directory services through Internet in accordance with the current accessibility legislation (Real Decreto 1494/2007).
FI	0	There are no dedicated provisions to people with disabilities	There is no reference to accessible enquiry services in existing legislation/regulation.
FR	Ø	Visually impaired persons have free access to directory services	Telecommunications regulation includes a requirement that people with visually impairments must be provided with free access to the universal directory service
HU	Ø	An enquiry service can be reached by SMS. There is no general cost reduction for people with disabilities.	Telecommunication legislation and subsequent regulation requires telecoms operators to provide access to directory services by their subscribers. This has been interpreted to concern people with disabilities as well.
IE	Ø	Directory enquiries are available to users with restricted vision free of charge	The regulator has imposed an obligation on the designated USP (i.e. Eircom) to provide Special Directory Enquiry arrangements to allow the use of directory enquiry services free of charge by users with restricted vision. It should be noted however that the current policy approach of ComReg is to pursue voluntary agreements with other providers as well as the USP
IT	0	No dedicated provision to people with disabilities is reported	There is no reference to accessible enquiry services in existing legislation/regulation
LT	0	No dedicated provision to people with disabilities is reported	There is no reference to accessible enquiry services in existing legislation/regulation
LV	0	No dedicated provision to people with disabilities is reported	There is no reference to accessible enquiry services in existing legislation/regulation
LU	0	No dedicated provision to people with disabilities is reported	There is no reference to accessible enquiry services in existing legislation/regulation
MT	&	Directory enquiries are available to registered users with restricted vision free of charge	The regulator has imposed an obligation that special directory enquiry arrangements enabling usage of the directory enquiry services free of charge should be made available to visually impaired persons. The number of free calls to directory enquiry services by a visually impaired person has been limited to one call per week. Only persons that appear on an official list sent periodically by the responsible Ministry or Government Department to the designated provider qualifies to benefit from this universal service.
NL	Ø	The Universal Service Provides (KPN) provides a free enquiring service to people with visual disabilities who are registered and posess an access code.	Telecommunications legislation (Telecommunicatiewet) requires both a textual (telephone directory) and an oral telephony number enquiry service being provided. In addition, the law stipulates that there should be an accessible alternative of high quality and at reasonable costs for users with disabilities.
PL	&	A telephone enquire service is available from the Universal Service Provider via accessible public phones, on CD and by means of dedicated customer service workstations dedicated to serving people with disabilities. At least one of these workstations is provided at each	Regulation requires the Universal Service Provides to make directory information available to all customers by means of suitable facilities.

		Provisions	Policy context
		customer service office.	
PT	&	A directory service is listed at a specific website as well as equipment available to people with disabilities. The web site also provides information on how the service can be accessed. Web accessibility guidelines (WCAG 1.0, level A) are applied to the website	Regulation imposes an obligation on the universal service provider to provide directory inquiry services or equivalent measures free of charge to blind or visually impaired users.
RO	0	No dedicated provision to people with disabilities has been reported	No reference to accessible enquiry services in existing legislation/regulation has been reported
SK	Ø	The Universal Service Provider provides free of charge access to telephone directory service through human operator to blind persons.	The regulator has imposed an obligation on the Universal Service Provider to provide users with sight impairment with free access to an information service about telephone numbers
SI	&	People with disabilities can access a directory service through a special telephone number free of charge. Also, a text-based directory is available.	The regulator has imposed an obligation on the Universal Service Provider to provide (via special number) available data from comprehensive directory in speech form to blind and visually impaired end-users. Calls to this special number are free of charge for disabled people. Operator must also provide access to comprehensive directory in text form to deaf and hard of hearing end-users (Decree on measures for disabled end-users on the basis of 11th Article of The Electronic Communications Act).
SE	&	The regulatory body provides a service for visually impaired and deaf persons through web and a mobile service for the target groups free of charge.	Provision of the services particularly important to disabled users is ensured through procurement by the regulatory agency (PTS). Amongst others PTS has procured cost free directory enquiries for disabled people.
UK	&	BT offer a free directory enquiry service by calling 195 to those who have physical or mental impairments that would prevent them using a telephone directory. Eligible disabled users of other networks (fixed and mobile) also have access to this service	The regulator (OFCOM) has imposed an obligation on providers of publicly available telephone services that they must provide customers who are unable through disability to use a printed directory, free access to directory information and directory enquiry facilities 'in a form which is appropriate to meet their needs' and suitable onward connection. The regulator's guidance on this service confirms that this condition applies to mobile telephone companies as well as fixed, and that such communications providers are also obliged to take reasonable steps to ensure that this service is widely publicised.
AU	&	A Directory Assistance Helpline is provided by the designated Universal Service Provider. Registered customers with disability who cannot use a print directory can ring a designated number to receive more details than the standard directory assistance service.	Telecommunications legislation requires that a directory assistance services must be made available to end users of standard telephone services. The legislation with regard to directory services does not specifically mention people with disability. However, the USO in relation to the standard telephone service does mention directory services and an equivalent service for people with disability. While there is nothing stated as such, the USO provider may take this to mean that the Directory Assistance Helpline should be provided.
CA	Ø	People who are unable to use the directory and have proved eligibility are exempt from paying local and long distance Directory Assistance and Automatic Directory Assistance Call Completion charges.	There is no obligation on telecoms to provide free access to directory services. It is typical for callers to be charged for phoning the directory service number for local numbers and not to be charged for phoning directory services for long distance numbers. However, control of such charges is within the tariffs or each individual telecom.
NO	Ø	Older people with reading disabilities and visually impaired have the	Telenor the main telecoms operator provides the service under its Universal Service Obligation

	Pr	ovisions	Policy context
	possibility to use a telephon	e enquiry service at reduced charges.	
US	Special Needs Program. This an "allowance" of calls using	lly or physically impaired, AT&T offers a program provides eligible customers with Directory and Operator Assistance. AT&T ry assistance at no charge for customers ty.	Telecommunications legislations stipulate that a provider of telecommunications service shall ensure that the service is accessible to and usable by individuals with disabilities, if readily achievable. Although this does not include a dedicated obligation to provide free access to directory services special arrangements for people with disabilities have been put in place by some market players.

3.1.2 Payphones

Traditionally, provision of public payphones has been a part of universal service obligations in many countries. However, with growing telephone ownership - particularly of mobile telephones – demand for public payphones has experienced a decline during recent years. As can be seen from Figure 3-2, operation of public pay phones has even discontinued in some countries (FI, EE, NL). At the same time, it is still required by telecommunications legislation/regulation in many others. The Canadian regulatory authority has for instance concluded from an investigation that, although demand for pay telephone service is declining, this is still an important public service that wireless services have not rendered obsolete⁷. It is likely that public payphones will continue to play an important role in many countries for the foreseeable future for people who do not possess a mobile phone - for whatever reason - or those who do not have a fixed-line phone at home.

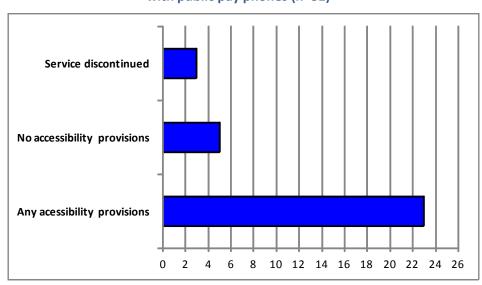


Figure 3-2 No. of countries with provision of any accessibility features with public pay phones (n=31)

Against this background, the availability of public telephone facilities that are accessible to people with disabilities can still be considered an important theme when it comes to ensuing equality of access to telecommunications services for users with disabilities. As can be seen from Figure 3-2, particular accessibility related provisions are made in 19 European Member States (AT, BG, CY, CZ, DK, FR, DE, EL, HU, IE, IT, LT, PL,PT, RO, SK, SI, ES, UK,) and in all of the non-European countries covered by this study (AU, CA, NO, US). However, there is a lot variation across countries when it comes to the particular types of accessibility features implemented and quantity of their provision (for details see Table 3-2). For instance, while some accessible pay phones have been installed at the main airport in one country (e.g. EL) almost all installed public pay phones may provide some accessibility features in another one (e.g. CZ, PL, US). Accessibility feature provided may for instance include:

- Wheel chair accessibility
- Telephone booth with foldable seat
- Specifically marked numeric keys for people with visual impairments
- Specifically marked card coin inlet/outlet
- Displays with simple fonts and suitable colour contrast
- Verbal announcement of information indicated on the display

⁷ http://www.crtc.gc.ca/eng/archive/2004/dt2004-47.htm

- Facilities enabling use of headphones
- Text messaging capabilities
- Volume control
- Handsets with induction loop
- Build-in data jacks connectable to portable computers
- Public text telephone units

The policy context in this area again mirrors the status picture quite well - in most countries where accessibility features are provided with public pay phones, some form of policy has been put in place (e.g. AT, BG, CY, CZ, FR, EL, HU, LT, NO, PL, PT, SI, ES, UK, AU, CA, US) . This may include a general obligation to ensure accessibility of public pay telephone services to people with disabilities or specific requirements concerning particular disability groups. In some cases quantitative targets have been set in terms of certain proportions of the installed pay phone base which must provide accessibility features (e.g. HU, LT, SI). In some countries (e.g. IE, IT) it seems that traditional efforts to provide accessible payphones may be being continued even if there is not a formal policy obligation on the telecoms operators; on the other hand, in some countries (e.g. NL), obligations that have been previously in place in this area have been removed although existing accessibility provisions may continue to be in place for the time being.

Table 3-2 – Availability of public pay telephones with accessibility features directed towards users with disabilities

	Public pay phone with accessibility features		
	available at all	no. of items	Policy context
АТ	&	217	The Universal Service Provider has installed public telephone boxes accessible to people with disabilities. According to telecommunication legislation (§ 27), there is a general obligation that the proportion of public payphones to be operated by the Universal Service Provider must be aligned with the requirements of the end users, including disabled end users, with regard to geographical coverage and usage of mobile communications services. Dedicated features that must be made available to users with disabilities have not been specified by legislation/regulation.
BE	0	-	There is a legal obligation on the Universal Service Provider to maintain a minimum number of public pay phones (appr. 2000 for the whole of Belgium). There is no reference to accessibility of public pay phones for people with disabilities in particular.
BG	&	no data available	According to current telecommunications legislation (Section 2, Art. 187) and subsequent Ordinance operators of universal telecommunications services must implement special accessibility measures, including accessible payphones. These include 'PIP' sign on button 5 to enable orientation by people with visual impairments and also a sign indicating the direction of placing the phone card in the telephone.
CY	&	94	Implemented accessibility features concern wheelchair users. Also, keyboards are suitable for people with sight loss. According to current legislation ease of access by people with special needs to public phones is to be ensured, as well as quality of the service. Further specification on the accessibility provisions of public phones are however not included in the legislation/regulation. (περί Ρυθμίσεως Ηλεκτρονικών Επικοινωνιών και Ταχυδρομικών Υπηρεσιών Νόμου του 2004, N112(I)/2004)
CZ	⊌	15.000	Implemented accessibility features concern people with physical impairments and people with hearing impairments. Current legislation (Electronic communications law 127/2005 Sb.) imposes an obligation on the Universal Service Provider to satisfy the citizens' needs in terms of number of payphones, geographical coverage, quality and accessibility for people with disabilities. According to the respective rules of Czech telecommunication office, which were changed last in 2011, at least one public payphone is to be provided in every municipality up to 1999 inhabitants, and in larger municipalities one public payphone for every additional 5000 inhabitants. It is stipulated that barrier-free access must be ensured. A related public notice (369/2001 Sb) specifies general technical requirements addressing accessibility by people with disabilities people: • Ground slope in front of a public payphone has to be 5% maximum and of minimum size 1000 x 1200mm. • Payphones (namely its manipulation parts) have to be installed at a height between 600mm and 1200mm
			 An area by the payphone must equipped with foldable seat at the height of 500mm from the ground in the close vicinity to the payphone Payphones must be equipped with a device allowing headphones usage (for people with hearing impairment)

	Public pay phone with accessibility features		Policy context
	available at all	no. of items	
DK	Ø	no data available	Implemented accessibility features concern wheelchair accessibility and support for visual impaired in all major cities
EE	0	-	Operation of public payphones has been discontinued in late Autumn 2010. The service has been discarded due to extremely low demand (approximately 1 call in a day) and adoption of a new currency (Euro) on 01.01.2011. Continuation of the service would thus have required costly updating of the installed pay phones base (Communications Act RT I, 29.12.2011, 214)
EL	Ø	20	Public pay phones that are accessible to wheelchair users have been installed at the main airport in the country as well as public Teletext devices. Telecommunications legislation stipulates that the national regulatory body may impose obligations to telecommunications companies to ensure payphone accessibility (Law 3431/2006, article 49.)
ES	&	no data available	Implemented accessibility features include volume control and adaptations special devices used by deaf people. Disability legislation imposes an obligation on telecommunications operators to adapt public pay phones for blind and deaf persons as well as for wheelchair users and for persons with low stature. With respect to blind persons the public pay phones need to be accessible in relation to both the dynamic /interactive and static information shows by means of a display. (Ley 51 2003 and Real Decreto 1494/2007)
FI	0	-	Operation of public pay phones has been discontinued due to the high penetration rate of mobile telephony
FR	Ø	no data available	Regulation imposes an obligation on the Universal Service Provider to provide public payphones that are accessibility to people with motor or visual handicaps at sufficient number, given the population concerned (Decree n°2012-436 of 30 March 2012 published on 31 March 2012, articles R20-30-4 à R20-30-11)
DE	&	no data available	A new generation of public pay phones enables people with hearing/speech impairments to send text messages (SMS) to landline, mobile and fax numbers. According to current telecommunications legislation, the regulator may require dedicated measures concerning accessibility of telecommunications services in the framework of universal service provision for people with disabilities. Current telecommunications legislation stipulates that providers of publicly available telecommunications services must consider the interests of end users with disabilities when planning and delivering their services. Access to services by end users with disabilities is to be enabled in a manner that can be considered equal to the access provided to the majority of end users. To ensure provision of relevant services and service features, the national regulator can impose an obligation on service providers. (§45 of the German Telecommunications Act of 22nd June 2004 as amended in 2009 and 2012) Up to now, no obligation has been imposed on telecommunications providers in relation to accessible public payphones.

	Public pay phone with accessibility features		Policy context
	available at all	no. of items	, and the second
ни	⊘	148	Implemented accessibility features concern wheelchair accessibility. Also all public pay phones are equipped with volume control to take the needs of people with hearing impairments into account. Current telecommunications legislation stipulates that at least one public payphone must be installed in every settlement. (2003. évi C. törvény az elektonikus hírközlésről, §117.b., §160). Moreover, it is stipulated that 3% of the total number of payphones have to be accessible by people with hearing and physical impairment (97/2010 III.31.). Subsequent regulation stipulates in larger settlements at least one payphone must be installed per 2500 habitants, and again 3% of the installed payphone base must be accessible to people with hearing impairment. (Korm. rendelet az egyetemes elektronikus hírközlési szolgáltatás nyújtásának részletes pénzügyi és műszaki feltételeiről és követelményeiről, §9, §10, §12). Specific technical requirements are recommended in an appendix including for example the ITU-T E.138 document setting out Human Factors aspects in relation to public telephones with view to improving their usability for older people (1. melléklet a 97/2010. (III. 31.) Korm. rendelethez).
IE	Ø	all	All public pay phones are hearing aid compatible. No obligations have been imposed by regulation/legislation in relation to accessibility of public pay phones in particular.
IT	Ø	no data available	Implemented accessibility features concern width and heights to accommodate the need of wheelchair users. No obligations have been imposed by regulation/legislation in relation to accessibility of public pay phones in particular.
LV	0	-	No accessibility features have been implemented in relation to public pay phones. No obligations have been imposed by regulation/legislation in relation to accessibility of public pay phones in particular.
LT	⊘	160	Overall, 16% of the installed public pay phone base provides dedicated accessibility features. These concern access by people with physical impairments. Also, there is a marked 5 button to enable identification by blind users. There is a legal obligation on telephone companies to provide accessible telephone services via payphones. It must be ensured that instructions are written in at least 16 Kegel font size and be illuminated during the night. Areas where those payphones are installed must meet the requirements of the Technical Building Regulation requirements (2.03.01:2001, section 6.2). The number of payphones that are accessible for disabled people must be not lower that 10% of all payphones. In the center of every municipality at the following locations there must be at least one payphone that meets accessibility requirements: railway station, airport and seaport, bus station, central (regional) health care facilities, Social Security department, State Patient Fund, Territorial Patient Fund, stationary universal postal service places, municipalities, Labour Exchange (if these are at the centre of the municipality) (section 6.3). Also, an accessible pay phone must be installed at centres of rehabilitation for the disabled (section 6.4).
LU	0	-	No accessibility features have been implemented in relation to public pay phones. No obligations have been imposed by regulation/legislation in relation to accessibility of public pay phones in particular.

	Public pay phone with accessibility features		Policy context
	available at all	no. of items	
МТ	Ο	-	Telecommunications regulation stipulates that a designated undertaking (usually the USO provider) shall ensure that public pay phones or other comparable services are provided to meet the reasonable needs of end-users in terms of the geographical coverage, the number of telephones or other services, the accessibility to disabled end-users and the quality of such services. It is furthermore stipulated that the regulatory authority may specify terms and conditions applicable to the provision of public pay phones or other comparable services so that the above requirements are met. Up to now no terms/condition have been specified in relation to how accessibility of payphones for disabled people is to be implemented. (Regulation 25 of the Electronic Communications Networks and Regulations, 2011, (L.N. 273 of 2011) amending the ELECTRONIC COMMUNICATIONS (REGULATION) ACT (CAP. 399) of 200)
NL	0	-	There used to be a legal obligation on the Universal Service Provider concerning landline payphone coverage. This obligation has been relieved in 2008 due to increasing mobile telephony penetration. At present, there is no accessibility-related legislation or regulation concerning public payphones.
NO	&	no data available	Implemented accessibility features concern access by wheelchair users. Also, there is a marked no. 5 button to enable identification by blind users. There is an agreement with Telenor, the Universal Service Provider, stipulating that a sufficient number of payphones must be accessible. The agreement does not stipulate an exact figure about how many pay phones must be accessible, nor are any dedicated accessibility features or disability groups mentioned.

	Public pay phone with accessibility features		Policy context
	available at all	no. of items	
PL		9.789	Apart from detailed accessibility features that must be provided according to current legislation, public payphones enable a user to send text messages by means of SMS and e-mail. According to § 6 of the Regulation of the Minister of Infrastructure of 24 March 2005 on detailed requirements for universal service provision and requirements concerning the provision of broadband Internet access services to eligible entities, the designated undertaking: • installs public telephones which are adapted, to the extent specified in Annex 5 of the Regulation, for use by persons with disabilities; • places the public telephones referred to in paragraph 2 in a manner and location that allows them to be used by a disabled person using a wheelchair or a hearing aid; • marks the public telephones referred to in paragraph 2 in a manner that allows persons who are visually handicapped to use them: a) by applying contrasting colours to the most important functional elements of these devices, b) by placing inscriptions using simple fonts and colours that are clearly different from the background colour; • marks the public telephones referred to in paragraph 2 with a sign according to the standard specified in Annex 2 to the Regulation; • marks telephone cards in a manner that allows persons who are blind or visually handicapped." According to Annex 5, public telephones adapted for use by persons with disabilities should be equipped with: 1) headphone amplifier with adjustable gain; 2) induction loop in the handset; 3) keypad with at least one key made distinguishable in a way that facilitates its identification by persons who are blind or visually handicapped to identify its location; 5) verbal announcement of information indicated by light signals or shown on the display. The regulatory agency (Urząd Komunikacji Elektronicznej) has further specified in 2006 the undertaking designated to provide universal service in the whole country is required to install in the individual municipalities (the smallest Polish territor
PT	Ø	no data available	Implemented accessibility features concern persons with mobility impairments. Also, number keys are labelled in Braille and it is possible to control sound volume. Telecommunications legislation imposes a generic obligation on the Universal Service Provider to install and operate payphones in order to access fixed telephonic service in sufficient number to meet the needs of the population, including people with special needs (Law nº 5/2004 as amended by Law nº 51/2011). The universal service provider must make special previsions to ensure access by disabled users, in an equivalent manner to other users to telephonic services, including payphones with text services or equivalent measures for deaf or disabled in oral communication (Art. 91).

	Public pay phone with accessibility features available no. of items		Policy context	
RO			Implemented accessibility features concern a dedicated access platform placed nearby phones, lower placement for using the phone from a wheel chair and placement of public phones in easy to reach positions. There seems to be no explicit reference in current telecoms regulation/legislation in relation to accessibility of public pay phones for people with disabilities.	
SK	&	3.042	Overall 97% of the installed public pay phone base includes accessibility features. There concern blind-friendly buttons, volume control and wheelchair accessibility. Up until 2011 at least 25% of the public pay phone base installed by the Universal Service Provider had to be accessible to people with disabilities according to telecommunication regulation. The obligations in area are however no longer valid due to large penetration of mobile telephony.	
SI	⋖	no data available	Telecommunications legislation imposes an obligation on the Universal Service Provider to maintain public pay phones which are inter alia accessible to people with disabilities (Art. 11 of The Electronic Communications Act). In particular the operator designated as USO provider must: 1) provide access to pay phones with wheelchairs, 2) phones have to be set lower, so that users on wheelchairs can reach them and 3) numeric keyboards have to have marked number 5, so that blind people can easily find it and orient by it. At least 20% of all public pay phones in a geographic area must be accessible for wheelchair users.	
SE	0	-	Some local government tried a couple of years ago to offer accessible payphones. There is however no regulation concerning public pay phones today. Today, most of the payphones are taken away since most people use mobile phones.	
UK	accessible by wheel chair end-users with a disability. In addition, Communications providers of Public Call Boxes in the UK (except the Hull Area) are required that at least 75% of those public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes are reasonably accessible to wheelchair bound end users are reasonably accessible to wheelchair bound end users are reasonably accessible to the provides a		 accessibility to wheel chair users amplification features text direct system. There is a general obligation on the Universal Service Provider to ensure the accessibility and functionality of public pay telephones use by end-users with a disability. In addition, Communications providers of Public Call Boxes in the UK (except the Hull Area) are required to ensure that at least 75% of those public call boxes are reasonably accessible to wheelchair bound end users and where it provides public call boxes in the Hull Area, at least 50% of those Public Call Boxes are reasonably accessible to such end users. (Consolidated General conditions of 	

	Public pay phone with accessibility features		Policy context
	available at all	no. of items	
AU	&	170	Accessibility related provision include TTY features. Telecommunications legislation requires that payphones are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business (Telecommunications Act 1999). Section 23 of the Telecommunications Universal Service Management Agency Act 2012 also references payphones. Telstra is the current universal service provider and its Standard Marketing Plan includes information about installation and removal of payphones. Telstra fulfils its obligation through the Marketing Plan. The Industry Guideline G630:2006 Accessibility of Payphones provides guidance in the design and provision of payphones to ensure their accessibility for people with disabilities.
			Implemented accessibility features include: • hearing-aid compatibility • capability for connection with and signal compatibility for customer-provided portable TTYs and VCO devices
			allow connection to Bell Relay service
			built-in data jacks which can be connected to a portable computer
CA	&	no data available	 volume control button Most accessibility features apply to all payphones. The national regulatory authority (CRTC) concludes that, although demand for pay telephone service is declining, pay telephone service is still an important public service that wireless services have not rendered obsolete. The Commission notes that the provision of pay telephone service in Canada constitutes the provision of a telecommunications service under the Act. Subsection 27(2) of the Act prohibits a Canadian carrier from unjustly discriminating or giving an undue or unreasonable preference towards any person or subjecting any person to an undue or unreasonable disadvantage in relation to the provision of a telecommunications service. In 2004 the following obligations have been imposed by the regulator in particular: For all new pay telephone installations and pay telephone replacements in banks of pay telephones, the Commission directs Bell Canada et al. and TCI to equip at least one of the pay telephones with a TTY unit.
			• For all new pay telephone installations and pay telephone replacements in each community where there are no banks of pay telephones and at least one member of the community is registered with Bell Canada et al. or TCI as a TTY user, the Commission directs Bell Canada et al. and TCI to equip at least one stand-alone individual pay telephone with a TTY unit.
			• The Commission directs Bell Canada et al. and TCI to upgrade all of their pay telephone banks of four or more pay telephones by equipping at least one pay telephone with a TTY unit by no later than 31 December 2006.
			• The Commission directs Bell Canada et al. and TCI to upgrade all of their pay telephone banks of two or three pay telephones by equipping at least one pay telephone with a TTY unit by no later than 31 December 2007.
			• The Commission directs Bell Canada et al. and TCI to upgrade all of their stand-alone individual pay telephones located in each community where there are no banks of pay telephones by equipping each pay telephone with a TTY unit by no later than 31 December 2010, if a member of the community is registered with Bell Canada et al. or TCI as a TTY user.

		ay phone with bility features	Policy context	
	available at all	no. of items		
U	ĕ	no data available	Disability legislation (ADA) requires public phones: • to be wheelchair accessible, • equipped with volume control • to be hearing-aid compatible • and have Braille or raised numbers. Some are equipped with connections for portable computers. New construction regulation requires TTY availability in public facilities.	

3.1.3 Relay services

Whilst the needs of some disabled people in relation to voice telephony can be met by accessibility features included within standard handsets, some people (especially those with hearing and speech impairments), need to be able to communicate in a medium other than voice. For them, interactive text communication (or sometimes video communication) offering the same set of features in terms of conversationality as voice does for hearing people (e.g. information flows in real time, possibility to interrupt at any stage in the conversation) is necessary if they are to be able to have the equivalent to a voice conversation over the telephone. Therefore store-and-forward text communications such as email or SMS, although useful, cannot be regarded as a full equivalent to voice telephony, despite being popular among people with disabilities as well. Also, access to common telephony services such as emergency numbers is a crucial issue for those who rely on text telephony for the purpose of interpersonal communication. In addition, people who rely on sign language as their first language may need or prefer signing with help of video telephony. In both cases, the availability of a relay service enables communication with voice telephony users.

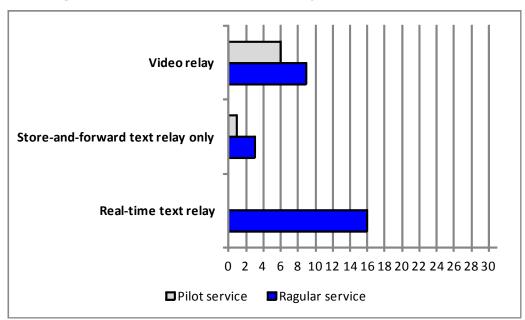


Figure 3-3 No. of countries in which a relay service is available (n=31)

As can be seen from Figure 3-3, a real-time text relay service is available as a regular offering in 16 out of the 31 countries investigated for the purpose of the current study (BE, CZ, DE, DK, ES, EL, FI, IE, IT, NL, SE, UK, AU, CA, NO, US). In France implementation of a text relay service was scheduled for 2010 but has been delayed several times. The service is now expected to become available during 2013. In Belgium a text relay service is only provided for the Dutch-speaking population whereas no such service is offered to the French-speaking population. In Italy, the service is offered only in some regions and users dialling in from the other regions may need to bear higher costs due to long-distance call charges.

Also, individual service offerings vary quite a lot when it comes to the availability of quality related service features such voice-carry-over, text—carry-over and handling of emergency calls (for details see Table 3-3). In four countries, text relay is offered only in a store-and-forward communication mode by means of SMS, fax or email (AT, CY, SI, SK), whereby such a service is currently available only as a pilot offering in Austria. In many countries text relay is available to people with disabilities during 24 hours on seven days a week (CY, CZ, DK, ES, FI, IE, NL, SE, SI, SK, UK, AU, CA, NO, US). However, there are some countries where service availability is restricted to particular service hours (AT, BE, DE, IT). In the majority of countries no dedicated service charge is imposed on the end users beyond the cost incurring for an ordinary line connection, with three exceptions (DE, NL, NO).

The organisational and policy frameworks within which text relay services are operated vary across countries (for details see Table 3-3). In some countries such as NL, SK, and UK the relay service is provided by telecommunications operator, usually the Universal Service Provider. In other cases (e.g. AT, DE, ES, FI) the service is provided by disability organizations or social enterprises which may be related to disability organisations in one way or another. In many countries service provision is based on telecommunications legislation/regulation (e.g. BG, CY, DE, FR, IE, NL, UK, AU, CA, US) or general equality legislation/policies (e.g. BE, ES, FI, IT) or some combination of these (e.g. SE). In other countries, service provision seems to be driven rather by the idea of self-help (AT, SI).

Overall, just over one-half of the EU Member States have a regular text relay service available. In most cases the provision is policy-driven in some manner, although there is variability in terms of whether the service is provided as an integral part of the telecoms services or not, and whether or not the theme is addressed in telecoms policy, per se. There is also considerable variation in the nature and quality of services available.

When compared with text relay, video relay is available in fewer countries (Figure 3-3). Our data show that such services are today available in 15 out of the 31 countries under investigation. However, video relay is offered as a regular service only in nine of these (DE, DK, ES, PT, SE, SI, UK, NO, US) and in terms of a pilot service in the remaining six countries (AT, BE, FI, IT, AU, CA). Other than in the case of text relay, operation of video relay is often restricted to particular service hours. Only in five countries is the service operated on a 24/7 basis (BE, DK, ES, SI, US). A dedicated service fee beyond the ordinary line connection is imposed on the end users in some countries (BE, DE, PT, UK, NO).

Table 3-3 – Availability of text relay services

	Service provision	& policy context	Service hours & end user charges
AT	communication devices. However, a pilot service has and SMS relay. Service availability is restricted to par service fee. The pilot service is provided by Service Coprofit organisation working towards societal inclusion enabling people with hearing/speech impairments to available by means of voice telephony, e.g. telephon National Ministry of Social Affairs and the National Lie	bugh a telephone line or internet enabled real time text been launched in May 2012 providing email relay, fax relay ticular service hours. Users don't have to pay a dedicated entre ÖGS (Austrian Sign Language Association), a nonnof of Austrian sign language users more generally. It aims at access information and communication services commonly entolines. The current pilot project is supported by the abour Office in the framework of a national policy initiative ungsoffensive der österreichischen Bundesregierung). There	Service hours for private use: • Monday to Friday • 10:00 h to 14:00 h. Service charge: none
BE	service for the French-speaking part of the country. It through a dedicated web site and not by means of the with speech/hearing impairments can utilize the service making an appointment with a doctor. Utilization of international outgoing calls are possible. A single relative overall. A dedicated button is available on the service is restricted to particular service hours. End users do provided by the Flemish Government. Service operated Flemish government which also operates the main government to telephone information services offered by the line. The relay service is provided in the framework of		Service hours: • Monday to Friday from 8:00 h to 19:00 h • Saturday from 10:00 h to 18:00 h Service charge: none
BG	not applicable		not applicable

	Service provision & policy context	Service hours & end user charges
СУ	There is no text relay service enabling people with hearing/speech impairments to use real-time text communication, e.g. a text telephone connected through a telephone line or internet enabled real time text communication devices. However, fax relay and SMS relay is offered by the national telecommunications provider (Cytamobile), the designated Universal Service Provider, through a subsidiary (CYTAMobile): • For communication from deaf to non deaf people, deaf people can send an SMS or a fax at 1408 number for CYTA mobile acting as mediator and forwarding the message to non deaf people (this is free service) • For communication from non-deaf to deaf people, non deaf people can call the voice phone number 1409 and request a message to be advanced through SMS to deaf people (this is a free service) Service availability is not restricted by particular service hours. Users don't have to pay a dedicated service charge. There seems to be no regulation mandating provision of a text relay service in the country.	Service hours: • 7 days a week • 24h Service charge: none
cz	A country wide relay service is available to text telephone users. Text relay and SMS relay is offered as well fax. The service is intended to enable people with hearing/speech impairments to communicate with public authorities, to order goods, ask for telephone numbers and communicate with individuals. Service access is not restricted to particular service hours. Users don't have to pay a dedicated service charge. The relay service is operated by a telecommunications operator (Telefónica), the designated as universal service provider. There is no telecoms regulation explicitly mandating provision of a text relay service. A general obligation imposed by regulation on the Universal Service Provider to provide dedicated services to people with disabilities has however been interpreted in a way requiring provision of the service.	• 7 days a week • 24h
DE	A country wide text relay service is available to text telephone users as regular offering. Voice carry-over is possible. IP-relay is available as well and a dedicated software can be downloaded free of charge from the service provider's web site. Service availability is restricted to particular service hours. Users need to subscribe different service packages distinguishing between private and occupational service utilisation. End users have to pay a service charge. Further funding comes from the national government and all telecommunications companies operating on the German telecommunications market. The national telecoms regulator (Bundesnetzagentur) has assigned a contract for relay service provision to a social enterprise which is owned be a national umbrella organisation representing people with hearing impairments (Deutsche Gesellschaft der Hörgeschädigten – Selbsthilfe und Fachverbände e.V.). The German telecommunications law (§45 TKG) represents the legal basis for this. It requires consideration of end users with disabilities when planning and delivering telecommunications services for the general public. Albeit this is not required by telecoms regulator, the service provider enables subscribed customers on a voluntary basis to contact dedicated emergency service numbers (police and ambulance) during the service hours free of charge. Incoming emergency calls are specifically indicated to the interpreters and handled with priority.	 Service nours for occupational use: Monday to Thursday from 8:00 h to 18:00 h Friday from 8:00 h to 17:00 h Service charge for private use: monthly subscription charge of 5€ service change of 0,14 € per minute Service charge for occupational use:

		Service provision & policy context	Service hours & end user charges
DK	&	A country wide text relay service is available through a web based interface. The service can be used upon registration on the service provider's web site. Service availability is not restricted to particular service hours. Users don't have to pay a dedicated service charge. The service is operated by a telecoms operator (TDC), the designated Universal Service Provider in the country. The National IT and Telecom Agency (the regulator) has imposed text relay (and other) accessibility obligations on the USO provider.	Service hours: • 7 days a week • 24h Service charge: none
EE	0	not applicable	not applicable
EL	&	A country wide text relay service is available to text telephone users. Service availability is restricted to particular service hours. End users don't have to pay a dedicated service charge. The service is operated by a telecoms operator (OTE), the designated Universal Service Provider in the country. There is no telecoms regulation explicitly mandating provision of a text relay service. A general obligation imposed by regulation on the Universal Service Provider for providing dedicated services to people with disabilities has however been interpreted in a way requiring provision of the service	Service hours: • 7 days a week • "normal working hours" Service charge: none
ES	⊘	A country wide text relay service is available to text telephone users. Fax relay, SMS relay and email relay is offered as well. The service is not restricted to particular service hours. End users don't have to pay a dedicated service charge. A dedicated number is available for emergency calls. The service is operated by a SERTEL, a social enterprise specialised in providing call centre service and staffed by more than 70% with disabled employees. Funding seems to come from the national Ministry of Labour and Social affairs. There seems to be no telecoms regulation mandating provision of a text relay service.	Service hours: • 7 days a week • 24h Service charge: none
FI	&	A country wide text relay service is available to text telephone users. Fax relay, SMS relay and email relay are offered as well. Service availability is not restricted to particular service hours. End users don't have to pay a dedicated service fee. The service is operated by a disability organisation in cooperation with a mainstream call centre. It is funded by a slot machine company under a special arrangement called Valkea alo ("White House"). The Finnish Association of the Deaf has been monitoring the development of the service. The main purpose of Finland's Slot Machine Association (RAY) is to raise funds through gaming operations to promote Finnish health and welfare (www.ray.fi). Its administration and procedures are stipulated by law. The profits from RAY's games are used for promoting health and social welfare in Finland. Funding is annually distributed to various health and social welfare organizations based on applications. The fund allocation is guided by policies created by RAY's Executive Committee and a result agreement prepared with the Ministry of Social Affairs and Health. Nearly 900 organizations receive funding each year. The final funding decision is made by the Finnish Government.	Service hours: • 7 days a week • 24h Service charge: none
FR	()	An obligation to establish a country wide text relay service has been imposed by telecommunications legislations in 2008 already (Dekret Nr. 2008-346 vom 14. April 2008 - art. 1). Implementation had been initially scheduled for 2010 and was delayed several times. The service is now expected to become available during 2013.	not applicable
HU	0	not applicable	n.a.

		Service provision & policy context	Service hours & end user charges				
IE	S	A country wide text relay service is available to Minicom users. Service availability is not restricted to particular service hours. End users don't have to pay a dedicated service charge. There is a dedicated number for emergency calls. Provision of a text relay service is mandated by national telecommunications regulation. The service is operated by a telecommunications service provider, eirecom, which has been designated as the Universal Service Provider with specific obligations including the provision of dedicated services to users with disabilities. Service hours: 7 days a week 24h Service charge for end					
IT		There is no country wide text relay service. Such a service is only available in some in some regions (Veneto, Tuscany, Abruzzi, Lazio) to text telephone users. Email relay, Fax relay and SM relay are available as well. Service access is restricted to particular service hours. End users don't have to pay a dedicated service charge. The service is provided by the regional government in the framework of regional equality policy. Service operation has been subcontracted. Tax reductions for the purchasing end user equipment are available under general disability framework legislation (Law No. 104/1992).	Service hours: • Monday to Friday from 9:00 h to 19:30 h • Saturday from 9:00 h to 13:00 h Service charge for end users: none				
LT	0	not applicable	not applicable				
LU	0	not applicable	not applicable				
LV	0	not applicable	not applicable				
МТ	0	not applicable not applicable					
NL	&	A country-wide text relay service is available to text telephone users. Service availability is not restricted to particular service hours. End users are charged on a per-minute basis, whereby the pricing scheme differentiates between relayed calls to fixed line telephone numbers and mobile telephone numbers. A dedicated number is available for emergency calls. Provision of a relay service is mandated by national telecommunications legislation. Up to now, the service has been operated by the former telecommunications monopolist KPN. At the time information was collated for the purpose of this study, the Ministry of Economic Affairs (ELI) was in the process of preparing a tender for text and video relay service provision over the coming years. New regulation is expected to specify detailed requirements to be met, e.g. in terms of technology features and service hours (text-speech 24/7, video less hours). The launch of the new service is expected for summer 2013.	Service hours: • Seven days a week • 24h Service charge for end users: • service charge of 0,10 € per minute for calls to fixed line telephone numbers • service charge of 0,45 € per minute for calls to mobile telephone numbers				
PL	0	not applicable	not applicable				
PT	0	not applicable	not applicable				
RO	0	not applicable	not applicable				

		Service provision & policy context	Service hours & end user charges
SE	S	A country-wide text relay service is available to text telephone users. Internet relay and SMS relay are also available. Service availability is not restricted to particular service hours. End users don't have to pay a dedicated service charge. Access to emergency services is provided. The relay service is specified and procured by the National Post and Telecom Agency (PTS), the national telecom regulator in Sweden. It is provided by the regional health department and is funded through taxes	Service hours: • Seven days a week • 24h Service charge: none
SI	<i>i</i>	The Association of Deaf and Hard of Hearing People in cooperation with the Institute of Slovenians Sign Language jointly operate a call centre offering internet chat relay as well as email relay, fax relay and SMS relay. The service is available to registered users who wish to communicate with health institutions and the public administration. Service availability is not restricted to particular service hours. There is no dedicated number for emergency calls. End users don't have to pay a dedicated service charge. The service is operated by the Slovenian Association of the Deaf and Hearing Impaired. Service provision is assumed to be public responsibility in response to Article 21 of the Convention on the Rights of Persons with Disabilities, according to which the state must provide public information to people with disabilities in accessible formats and technologies appropriate to different kinds of disabilities, timely and without cost to the user. Costs are covered by the Ministry of Labour, Family and Social Affairs.	Service hours: • Seven days a week • 24h Service charge: none
SK	(i)	Slovakian Telecom operates an SMS relay service for people with speech/hearing impairments. Users can rent or purchase specific telephone devices from the operator. Reimbursement of costs is possible for severely impaired customers under national rehabilitation law. Users need to subscribe to a dedicated service package. Service availability is not restricted to particular service hours. There seems to be no dedicated number for emergency calls.	Service hours: • Seven days a week • 24h Dedicated service charge: 1,10€ monthly subscription fee

	Service provision & policy context	Service hours & end user charges
UK	A country-wide text relay service is available to text telephone users. Voice and hearing carry over are both available and the operators can leave voice or text messages on answering machines. Service availability is not restricted by dedicated service hours. A dedicated number is available to text telephone users for making calls to emergency services. End users don't have to pay a dedicated service charge. Calls are charged at the user's telecommunications provider's standard call rates. Due to the nature of text relay calls and typing speed, they can take longer than a voice call. For this reason deaf, hearing impaired or speech impaired people can get a refund for the text part of their calls in accordance with current telecommunications regulation. The provision of Text relay services in the UK falls within the obligations imposed by the Universal Service Order (USO) and the General Conditions of Entitlement pursuant to the Telecommunications Act 2003. The provisions were amended in October 2012 following a review by OFCOM, the regulator, with public consultation on the introduction of an improved relay service, called Next Generation Text Relay (NGTR), and driven by the changes to the Universal Service Directive requiring equivalence of access for disabled end users. To widen the choice of communication providers for text relay users (and not limit users to voice telephony services from British Telecom or from fixed line communications providers), OFCOM revoked Universal Service Condition 4 requiring British Telecom to (solely) fund a text relay service and provide wholesale access to users of other communications providers and also amended General Condition 15 of the General Conditions of Entitlement to require all fixed and mobile communications providers were required to implement NGTR within 18 months.	Dedicated service charge: none of d o s d-
AU	A country wide text relay service is available to text telephone users. Internet relay, voice carry-over and hearing carry-over are possible. Access to emergency services is enabled through a dedicated number. Service availabilities is not restricted to particular service hours. End users don't have to pay a dedicated service fee. The national relay service (NRS) operates under Part 3 of the Telecommunications Act of 1999 (TCPSS Act). It was originally implemented as a community service in 1994. The NRS is now under contract with the Commonwealth Government and is funded by a levy on eligible telecommunications carriers. The Australian Government recently announced an expansion of the national relay service including two-way internet relay, video relay and access to emergency services through SMS, a video relay service, which will be available between 7am and 6pm on business days as well as a web-based service that provides captioned telephony for people with hearing impairment. The contract will commence from July 2013.	Seven days a week 24h Dedicated service charge: none
CA	Country wide text relay services are available to text telephone (TTY) users from two telecommunications carriers, Bell and Telus. Internet relay, voice carry-over and hearing carry-over are possible. Service access is no restricted to particular service hours. A dedicated number for emergency calls is provided for some areas. User don't have to pay a dedicated service fee. Moreover, all provinces and territories have text relay services which are provided by the local landline telecommunications company. Provision of a text relay service by each telecommunication provider is mandated by national telecommunications regulation, based on the section 24 of the Telecommunications Act. The Canadian Radio-television and Telecommunications Commission requires telecommunications service providers to provide relay service to their telephony customers during 24 hours a day on seven days a week. In 2009, this requirement had been extended to include IP- relay in addition to the formerly required TTY relay from 21 July 2010 on. Telecommunications providers meet the obligation to provide a relay service by providing the operator service in-house or by outsourcing the service to another provider.	 Seven days a week 24h Dedicated service charge: none

		Service provision & policy context	Service hours & end user charges
NO	&	A text relay service is available to text telephone users throughout the country. Service availability is not restricted by dedicated service hours. End users are charged on a per-minute basis. Dedicated regional number is available for emergency calls. The service is operated by Telenor the main telecommunications operator under its Universal Service Obligation.	Service hours: • Seven days a week • 24h Service charge: • 0.70 NOK per 2 minute
US	⊗	Text relay services are available in all 50 states, the District of Columbia, Puerto Rico and the U.S. territories for local and/or long distance calls. Service providers – generally telephone companies – are compensated for the costs of providing relay services from either a state or a federal fund. There is no cost to the end user. Service availability is not restricted by dedicated service hours. Voice carry-over and speech carry over are possible. Internet relay is offered by several relay service providers, albeit it is not required by the telecommunication regulator (FCC). Access to text relay through a common number (711) is available for text telephone (TTY) users only. Users relying on IP-relay, i.e. those who use an internet enabled communication device, have to use the local number of the relay service operator. Provision of telecommunication relay services (TRS) in general and text relay services in particular are mandated by regulation from the Federal Communications Commission (FCC), based on telecommunications legislation (Telecommunications Act) and equality legislation (Americans With Disabilities Act).	Service hours: • Seven days a week • 24h Dedicated service charge: none

3.1.4 Special equipment

The needs of some disabled people in relation to telecommunications can be met by accessibility features included within end user devices and equipment, and the Universal Service Directive⁸ explicitly requires Member States to encourage the availability of terminal equipment offering the functional capabilities required by users with disabilities for having equivalent access to telecommunications service (Article 23). People with hearing impairments, for instance, may rely on hearing-aid compatibility of phone handsets, whether for wire or landline and wireless devices. Also, there are specific requirements on the design of phone devices so that these are accessible to and usable by people with visual impairments and with other disabilities. Such accessibility requirements include for instance designing for fine motor disabilities to "dial" and audio outputs to facilitate navigation of on-screen or menu information for people with visual impairments. Potentially, there is a wide range of solutions available today that enable people with different impairments to use telecommunications devices. Although an in-depth analysis of the European market for telecommunications end user equipment would be beyond the scope of the current study, the availability of hearing aid compatible phones and other accessible end user equipment by the two main land line operators and the two mobile operators in a given country represents a useful indicator for the purposes of the study. As can be seen from Figure 3-4, hearing aid compatible hand sets are available from at least one operator in 23 countries (AT, BG, CY, CZ, DE, DK, EL, ES, EE, FI, FR, HU, IE, LU, MT, PL, PT, SK, SE, UK, AU, CA, US) and other accessible end user equipment is available from at least one operator in 25 countries (AT, BE, BG, CY, CZ, DE, DK, GR, ES, EE, FI, FR, HU, IE, MT, PL, PT, RO, SI, SK, SE, UK, AU, CA, US).

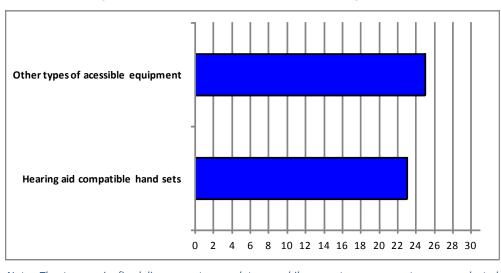


Figure 3-4 No. of countries where accessible end user devices are offered by at least one of the four main telecoms operators (n=31)

Note: The two main fixed line operators and two mobile operators per country were selected according to available market statistics.

However, the proportion of telecoms operators offering accessible equipment varies across countries (for details see Table 3-4 overleaf). Only in five countries (Figure 3-5) do all of the four operators investigated offer hearing aid compatible handsets as well as other accessible equipment, whereby at least two operators do so in nine further countries.

More generally, although it seems that many operators do make available at least some special equipment it is not clear to what extent such measures are actively promoted and/or proactively targeting users with disabilities. In addition, it is not clear the extent to which users must pay the full (including any extra) costs for such special equipment across the countries; this is an important issue that links to both affordability

-

⁸ Directive 2009/136/EC

and equivalence of access considerations. As can be seen in Table 3.4, the telecoms policy provisions in relation to these aspects vary considerably across the Member States. In this regard, it can also be noted that in some countries public policy on accessible telecommunications equipment appears to be implemented under dedicated assistive technology provision schemes rather than through the telecommunications market (for details see Table 3-4 overleaf).

No. of operators investigated in a given country which provide hand sets labled as hearing aid compatible (max = 4)

No. of operators investigated in a given country which provide any other equipment with accessibility features (max = 4)

The second of t

Figure 3-5 No. of telecoms operators offering accessible end user equipment per country

Note: The two main fixed line operators and two mobile operators were investigated in each country.

Table 3-4 Availability of accessible end user equipment by at least one of the main fixed or mobile telecoms operators

	Hearing aid compatible hand sets	Other accessible equipment	Policy context
AT	Ø	Ø	There seems to be no explicit legislative/regulatory requirement for the provision of terminal equipment for people with special needs.
BE	0	Ø	Telecommunications legislation imposes an obligation on Belgacom as the designated Universal Service Provider to provide accessible equipment
BG	Ø	V	Provision of terminal equipment that meets the needs of disabled users is included in Section 2, Article 187 of the Telecommunications Act (2007). It is also present in The Ordinance N 6 from 13.03.2008 for Requirements and Parameters for the Quality of the Universal Service and Special Measures for People with Disabilities and Selection of Operators Providing the Universal Service.
CY	Ø	Ø	There seems to be no explicit legislative/regulatory requirement for the provision of terminal equipment for people with special needs.
cz	&	&	The Czech telecommunication office determines a designated telecom operator who has to provide services for disabled users, currently Telefonica O2. The designated provider is obliged to provide appropriate equipment for disabled users. Detailed requirements are set out by public notice 161/2005 Sb. It specifies mostly mechanical and sound features of the special devices. It has to comply for all categories of disabled people. Telefonica O2 provides devices in 5 categories (deaf people, people with hearing impairment, blind or visual impairment people, physically handicapped people, physically partly limited people). All of these devices and equipment can be either bought or rented with monthly charge of 29CZK.
DE	Ø	Ø	Up to now, no obligation has been imposed on telecommunications providers in relation to accessible telecommunications equipment
DK	&	&	The equipment is provided by the commercial sector. Need for clarification: Can you elaborate a bit more which other legislation/regulation addresses the provision of accessible equipment to people with disabilities and what it saysData currently being validated
EE	&	ĕ	The Electronic Communications Act (RT I, 29.12.2011, 214) sets requirements for apparatuses and one of the requirements is § 123 (3). On the basis of a decision of the European Commission, the Government of the Republic may establish additional requirements for certain equipment categories or specific types of equipment with the objective to guarantee adaptability of apparatuses for the use of persons with special needs. Also, the Act contains a general provision mentioned earlier, namely that the Government of the Republic may establish technical requirements for the communications networks and requirements for the provision of communications services if this is necessary for providing communications services for people with special needs. (§ 87 (2)5))

	Hearing aid compatible hand sets	Other accessible equipment	Policy context
EL	Ø	Ø	Telecommunications legislation (ΦΕΚ 1667/B/18-08-2008) requires the Universal Service Provider to provide terminal equipment for text communication or other special equipment to people with hearing or visual impairments at cost price and with free repair service.
ES	⊘	*	According to disability legislation (Ley 51 2003 and Real Decreto 1494/2007), CEAPAT promotes the existence of sufficient and technologically updated special mobile telephony terminals, adapted to the different types of impairments. Several elements or facilities are hereby taken into account: voice dialling and managing the main functions through voice information through voice synthesis of the different options available in each moment and with respect to any change in the display voice generation to facilitate access of SMS connectors to install auxiliary equipment such as headsets, amplifiers, external screens, and keyboards high contract displays with big letters and the possibility of user configuration The operator is obliged to guarantee the existence of a sufficient and technologically updated offer of special terminals, adapted to the different type of impairments, such as text phones, video telephones or phones with amplification for persons with hearing impairments, or solutions for persons with visual impairments to access the contents of the displays of their terminals. The operator has the obligation of provide sufficient dissemination on these issues.
FI	Ø	Ø	Telecom operators do not have any obligation in this respect. Telephone equipment can be provided by social welfare authorities free of charge for disabled users as an assistive device on the basis of law (laki vammaisuuden perusteella järjestettävistä palveluista ja tukitoimista 3.4.1987/380).
FR	&	&	The operator shall introduce a label for its customers indicating terminals and services best suited to each category of disability, assessed on the basis of objective and transparent criteria. When the operator offerings include the provision of terminal equipment, it makes available to disabled endusers of terminals adapted to their handicap on the market. The operator also takes into account the specific needs of disabled people in the design of equipment associated with its offerings of fixed Internet access. The operator shall publish annually by June 30 a report on the progress of what it has to adapt and improve accessibility to electronic communications offerings to individuals with disabilities in terminals and services, and for different categories of disabilities. This report is submitted to the regulatory authority for electronic communications and postal services, - Autorité de régulation des communications électroniques et des postes – ARCEP (Code des postes et des communications électroniques Consolidated Version 6 août 2012)
ни	&	Ø	The law about electronic information (2003. évi C. törvény az elektonikus hírközlésről), §80.3.d. mentions that specified end user equipment has to be assured for disabled users. The law does not specify what kind of end user equipment has to be assured.

	Hearing aid compatible hand sets	Other accessible equipment	Policy context
ΙE	&	*	 There are specific requirements in the regulators rules: Inductive couplers which allow users with a hearing aid set to connect the set to their telephone in order to allow them to hear incoming speech clearly. Amplifier phones which allow the user to increase the volume of incoming speech. Teleflash Visual Alert which shows a flashing light, or makes a loud noise when the telephone rings. Push button telephone sets with speed and automatic redial buttons allowing pre-programmed telephone numbers (typically the most called numbers) or last called telephone numbers to be dialed without having to re-enter the telephone number. Hands free/loudspeaker phones means that the handset does not need to be used at all. Restricted vision telephones which can help people with restricted vision to find other numbers more easily The obligation only applies to the designated Universal Service Provider (Eircom)
IT	0	0	There are no obligations for telecom service providers to provide terminal equipment that meets the needs of disabled users
LT	0	0	There are no obligations for telecom service providers to provide terminal equipment that meets the needs of disabled users
LU	Ø	0	There are no obligations for telecom service providers to provide terminal equipment that meets the needs of disabled users
LI	0	0	There are no obligations for telecom service providers to provide terminal equipment that meets the needs of disabled users.
МТ	*	ĕ	The Malta Communications Authority (MCA) designated GO plc. as the Universal Service Provider in the Universal Telecommunications Services decision of 2003. The operator has the responsibility of providing special terminals, including text telephones, amplified telephone sets and large button telephone sets to disabled users. In its proposed decision 6, the MCA had proposed the designated undertaking to make specialised handsets available to persons with disability at a fixed location at affordable rates. These included: • handsets which allow a hearing aid to be connected to the set • amplified telephone sets with the possibility of increasing the level of either incoming or outgoing speech • portable amplifiers attached to the telephone handset amplifying income speech • tone callers that increase the telephone's ringing tone • silent call indicators which flashes a bright light when the telephone rings • large button telephone sets which include a large keypad designed for visually impaired persons • text telephones in which a conversation may be typed displayed on screen. Since it transpired from consultations with stakeholders that such devices (incl. terminal equipment) are widely available on the market, the MCA in its Decision on Universal Service Obligations on Electronic Communication Services of April 2010 (Updated March 2011) decided to waive the obligation on the universal service provider to provide specialised handsets as provided in the EU's Universal Service Directive. There are also no further references about obligations of providers and equipment specifications in other relevant policy documents such as the Electronic Communications (Regulation) Act, Cap.399 and the Electronic Communications Networks and Services (General) Regulations, LN412 of 2004

	Hearing aid compatible hand sets	Other accessible equipment	Policy context
NL	0	0	There are no obligations for telecom service providers to provide terminal equipment that meets the needs of disabled users. Text telephony and video telephony belong to 'assistive technologies' for communication. They are covered by health insurance policies (RegelingZorgverzekeraars section 1.6.t and 2.26). Starting in 2013, specific assistive mobile phone apps will be covered by standard health insurance policies, but not the mobile phone equipment itself.
NO	0	0	There is no obligation on Telecoms service providers to offer accessible end use equipment. The universal service obligation imposed on Telenor rather concerns particular services directed to people with disabilities including a text telephone service and free access to directory inquiries for people with visual impairments.
			 Article 89 of the applicable Telecommunications Law stipulates that a designated undertaking [Telekomunikacja Polska] shall provide access for persons with disabilities to the provided universal service by offering: terminal equipment adapted for use by persons with disabilities, where the use of such equipment is necessary for ensuring access to universal service; facilities that facilitate the use of universal service by persons with disabilities."
PL	&	V	The Regulation of the Minister of Infrastructure of 24 March 2005 on detailed requirements for universal service provision and requirements concerning the provision of broadband Internet access services to eligible entities specifies in Annex 5 requirements concerning the adaptation of public telephones for use by people with disabilities. Moreover, to help eliminate communication barriers, the State Fund for Rehabilitation of Persons with Disabilities (Państwowy Fundusz Rehabilitacji Osób Niepełnosprawnych – PFRON) grants subsidies to disabled persons having a certificate of disability, for purchase of equipment. There is no special list specifying what sort of equipment can be purchased under that subsidy; each application is examined on a case by case basis by the District Family Support Centre (Powiatowe Centrum Pomocy Rodzinie – PCPR). A subsidy can be granted up to 80% of the purchase cost of the equipment, but to no more than the 15-fold value of the average salary. In the case of subsidies granted as a part of elimination of barriers to communication, the income criterion which excludes the possibility of receiving aid does not apply. Furthermore, equipment of this type can be purchased as a part of the implementation of the PFRON programme "Computer for Homer"; the programme provides financial assistance for purchase of basic equipment (a computer) as well as special equipment for people with hearing and visual disabilities, which makes it possible to, for example: • convert information into synthetic speech, including information generated by a computer's CPU, for example: hardware speech synthesizers, dictionaries with audio pronunciation; • record and/or convert graphics and/or text to synthetic speech and/or digital data, such as reading machines, • convert various kinds of communication systems used by persons without disabilities (printed text, mathematical notation, sheet music, speech, graphics, etc.) into any type of communication systems accessible to people with disabilities (such as Brai
			The software may also apply to mobile phones.
PT	&	Ø	The universal service operator (Portugal Telecom) must provide handset amplifier and flashing light calls equipment, free of charge for citizens with special needs (Law nº 91/97, Decree-law Nº 432/88).

	Hearing aid compatible hand sets	Other accessible equipment	Policy context
RO	0	&	The telecoms regulator (ANCOM) has adopted new bylaws on the Implementation of Universal Service in the Field of Electronic Communications to reflect the new approach. Amongst others it has been stipulated that ANCOM may impose to USPs measures taken in favour of disabled users. With regard to the new USO regulation market research was planned in 2012 in order to assess the needs of disabled users and based on its findings ANCOM may impose obligations on all undertakings.
SI	0	&	There are no obligations for telecom service providers to provide terminal equipment that meets the needs of disabled users. According to 17th Article of Law on Equal Opportunities for Persons with Disabilities, disabled people with sensory impairments may exercise co-financing of technical equipment they need in life to overcome communication barriers for enabling safe and independent living. Technical equipment is mainly used for access to information, for communication and for adaptation of the living environment. The supplier of such equipment once a month issue an invoice for supplied technical devices to the ministry responsible for persons with disabilities (Ministry of Labour, Family and Social Affairs). Funds for the technical aids are provided in the budget of the Republic of Slovenia. For disabled people, co-financing of 85% of the value of a particular technical device is provided. For disabled people who receive social assistance or have the status of physically and mentally disabled persons, it is ensured payment of devices in the total value.
SK	&	&	According to Act No. 351/2011 on Electronic Communications, the provider of universal service is obliged upon request of people with hearing and speech impairment to provide equipment enabling them to communicate. The provider of universal service is, according to Telecommunication Office's Decision No. 3125/OTR/2012, obliged to hire or sell one specially equipped telecommunication device appropriate for the disability of the user for the price of basic telecommunication device.
SE	&	Ø	No obligation has been imposed on the operators. Personal equipment seen as assistive technology is paid for by taxes and every individual in need of this equipment has to apply for it.
UK	Ø	Ø	There is no obligation to supply terminal equipment to end users on an individual basis. The only legal and /or regulatory obligations that exist are in respect of public pay telephones. (Consolidated General conditions of Entitlement as at 19/07/2012)
AU	&	&	Section 6 of Telecommunications (Consumer Protection and Service Standards) Act 1999 makes direct reference to the Disability Discrimination Act (DDA) 1992 in terms of connection to the standard telephone service for people with disability where there is a requirement to supply equipment to the end-user with a disability in order to comply with the DDA. The Telecommunications Equipment for the Disabled Regulations 1998 specifies the kind of customer equipment that is to be supplied to a person with a disability for use in connection with the standard telephone service. Examples of equipment include a teletypewriter (TTY), a computer modem (for those who already have a computer) and a telebraille (for those who are blind and also deaf, hearing or speech impaired). AS/ACIF S040:2001 Requirements for Customer Equipment for use with the Standard Telephone Service - Features for special needs - defines the technical requirements relating to the features of the equipment that is designed to cater for some of the special needs of persons with disabilities. This includes a requirement for raised pip on digit 5 on keypad and hearing aid coupling.
CA	Ø	Ø	CRTC's Broadcasting and Telecom Regulatory Policy CRTC 2009-430 requests that, by 21 October 2009, all WSPs offer and maintain in their inventories at least one type of wireless mobile handset that will provide access to wireless service by persons who are blind and/or have moderate-to-severe mobility or cognitive disabilities.

	Hearing aid compatible hand sets	accessible	Policy context
U	s	*	Mobile operators are required to offer a proportion of handsets that are hearing aid compatible. The Telecommunications Equipment Distribution Program (TEDP) funded by individual states makes telecommunications equipment and accessories available for free to qualified deaf and hard of hearing citizens. The equipment includes: • amplified telephones • CapTels • speaker telephones • TTYs • video-phones • and telephone equipment for deaf-blind citizens.

3.1.5 Emergency access

Access to emergency services (presence of police, fire brigades, rescue need, medical emergency) is commonly ensured by telephone-based emergency schemes in modern society. The Universal Service Directive of 2009 explicitly regulates the accessibility of emergency service to people with disabilities. In particular, Member States shall ensure that access for disabled end users to emergency services is equivalent to that enjoyed by other end-users ((Article 26 (4)). Measures taken to ensure that disabled end users are able to access emergency services whilst travelling in other Member States shall be based to the greatest extent possible on European standards, and they shall not prevent Member States from adopting additional requirements in order to pursue the objectives set out in the Directive.

People with disabilities relating to communication face difficulties in accessing emergency services through voice communication alone (e.g. hard of hearing, deaf, speech impaired etc.). Indeed, access to these services is in most cases dependent on access to telephony. The availability of alternative access modes for people with disabilities therefore represents a useful indicator of the accessibility of telecommunication based emergency schemes. In some countries access to emergency services is still restricted to voice telephony today (for details see Table 3-5 overleaf). As can be seen from Figure 3-6, SMS is the most common alternative communication mode (16 countries) by which emergency services can be accessed by those who are unable to use voice telephony. Other alternative access modes include fax (eight countries), text telephony (three countries) and email (one county). Emergency services can also be reached through relay services, at least in principle. However, in four countries (AT, BE, DE, IT) text relay is not offered on a 24/7 basis, which restricts its usefulness as a means to access emergency services (see also section 3.1.3).

Access through video relay service

Access through text relay service

Direct Fax access

Direct SMS access

Direct text-phone access

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

Figure 3-6 No. of countries where access to emergency services is provided by alternative communication modes (n=31)

Note: More than one access option may exist in a given country

In many countries where alternative access modes to emergency services are available to people with disabilities a dedicated obligation has been imposed by regulation/legislation. This may include telecoms regulation/legislation (AT, BE, BG, EE, FR, EL, LT, MT, SI, SK, UK, AU, CA, US) but also more general disability legislation/regulation or provisions for people with disabilities under emergency policy more generally (CZ, ES, FI, PT, SE).

Overall, the results suggest wide variation across the Member States in the provisions for accessibility to emergency services, as well as variation in the extent to which obligations are targeted towards the telecoms sector or emanate from more general disability policy and/or broader emergency service policy.

Table 3-5 Accessibility of emergency services to people with disabilities through alternative access modes

		Direct access Indirect access			_		
	Text phone	SMS	Email	Fax	Text relay	Video relay	Policy context
AT	0	&	Ü	ij/	0		There are several emergency numbers including 144 (ambulance), 133 (police) and 122 (fire brigade). Text messages can be sent to a dedicated number (0800 133 133) operated by the police. Emergency calls can in principle be made via a video relay service, or via SMS, fax or email currently piloted by a disability organisation. However, the pilot system is not equipped with separate emergency line nor is it currently staffed for process emergency calls. Telecommunications Law (§ 20) stipulates that operators of public telephone networks or operators which provide a communications service which include outgoing calls to telephone numbers under the Austrian numbering plan must ensure that users with disabilities are also able to make calls to all emergency numbers. In accordance with an ordinances issued pursuant to §17 (2), operators of emergency call services have to ensure that users with disabilities have access to services which is equivalent to that of the majority of other end-users.
BE	0	%	0	Y			Several regional operational centres exist but they are slowly fusing together into one single service reachable through emergency numbers "100" or "112". The police operates a nationwide number (101). The Europe-wide dedicated number (116000) to be called in case of sexual abuse or disappearance of children is also operational (www.hotline116000.eu/). Access by communication modes other than voice telephony is available by fax for "112" only. Access through relay services is not available on a 24/7 basis. On Nov 14, 2011 the Belgian Law on Electronic Communications (2005) was amended to require implementation of technical provisions enabling citizens to reach the emergency number through text messages. SMS access is currently available only in some provinces. In
BG	0	0	0	0	0	0	some cases a public number is used for SMS alerts, whereas in others potential users have to register before they can use the service. An accessible smartphone app for "112" is under development. Generally, access to emergency number 112 is mentioned in Section 2, Article 187 of the Telecommunications Act (2007). This theme is also present in The Ordinance N 6 from 13.03.2008 for Requirements and Parameters for the Quality of the Universal Service and Special Measures for People with Disabilities and Selection of Operators Providing the Universal Service.
CY	0	0	0	0		0	There is a nationwide emergency line for voice telephony alerts (112, 999). There is no reference to accessibility of emergency services to people with disabilities in current legislation/regulation. A fax and SMS relay service is offered by the national telecommunications provider (CYTA), the designated Universal Service Provider, on a 24/7 basis.

	Direct access			Indi acc	rect		
	Text phone	SMS	Email	Fax	Text relay	Video relay	
CZ	0	V	V	0	&	0	There is a nation-wide emergency line (112) to contact ambulance services, the police, the fire brigade, air rescue service, water rescue service, canine specialists and the red cross. In 2006 a project was set up aiming at new solutions for people with hearing impairment. The Czech Police in cooperation with T-Mobile established a special line (603 111 158) dedicated to this group. Also, there is a form available on the internet that can be submitted on-line in case of an emergency. Text messages can be sent to the police directly. If the text message is incomplete or inaccurate, the emergency service operator will text back immediately and request additional information. The email is operated directly by central dispatch in Prague. After this email is received and evaluated, it is immediately resent to closest operating police unit (closest to the caller) with a notice that they will be dealing with a person with disability. The service has been widely used since then. This solution has however not been mandated by legislation/regulation. Rather it was initiated by disability organisations. Also a relay service is available to text telephone users on a 24/7 basis which offers text relay, SMS relay and fax relay.
DE	0	0	0	&			There are two nation-wide emergency lines, 112 for ambulance services and the fire brigade and 110 for the police, through which local response services can be reached. In case a caller cannot identify his location himself it can be located within 70 seconds provided the emergency call is made by a mobile phone. Up to now, no obligation has been imposed on telecommunications providers in relation to accessible emergency number. There is also a fax form available that can be used by people with disabilities. There is however no single fax number that works nation-wide and local numbers need to be used. Albeit this is not required by telecommunications regulation, the provider of a country wide text and video relay service enables subscribed customers on a voluntary basis to contact dedicated emergency service numbers (police and ambulance) during particular service hours free of charge. Incoming emergency calls are specifically indicated to the interpreters and handled with priority. The service is however not available on a 24/7 basis.
DK	0	Ø	0	0	Ø	Ø	There is one emergency number (112) that works on a country wide basis. A dedicated number (1999) can be used by people with disabilities to submit emergency alerts by SMS. A relay service is available through a web based interface on a 24/7 hours basis as well.
EE	0		0	(0	0	The emergency response centre (Häirekeskus) of the Estonian Rescue Board (Päästeamet) is a national government institution governed by the Ministry of the Interior. The Centre operates country-wide a single emergency number (112). The police operates a dedicated number (110) and this line is in the process of being merged with the 112 (by 2014). In 2011 a dedicated project entitled "SMS-112" was launched to address people with hearing and speech impairments. The project allows disabled people to send emergency text messages to the emergency number 112 free of charge and without delay regardless of which mobile operator they are subscribed. There is also a fax option as an alternative for disabled persons. The Electronic Communications Act does not include a direct reference to accessibility of emergency services to disabled users. The general obligations imposed on operators seems to have been interpreted in a way that the access to emergency services is to be guaranteed to all people, including disabled users. For the latter purpose, according to the amendments to the Act, since January 2012, access to the emergency number "112" via SMS must be ensured.
EL	0	&	0	0	(! /	0	Dedicated emergency lines are operated by the police (100), the fire brigade (199) and the National Centre for Emergency Care (166). People with disabilities can send free SMS alerts to all three numbers. Moreover, these services can be reached through a country wide text relay service (18855). The text relay service is available, albeit only at particular service hours. Telecommunications legislation (Law ФЕК 1667/B/2008) requires the Universal Service Provider to enable people with hearing or speech impairments to access emergency services free of charge via text messaging through a fixed or mobile phone line.

	Direct access				rect ess							
	Text phone	SMS	Email	Fax	Text relay	Video relay						
ES	0	&	0	&	&	0	There is a nation-wide emergency line (112) enabling contact with 17 regional emergency services accessibly Fax. In some of the 17 regions it is possible to send an emergency SMS directly to the regional service. A national relay service allows users to get in touch with the emergency service. Spain participates in a European pilot project (REACH 112) to implement Total Conversation solutions to improve accessibility of emergency services for people with disabilities. Current legislation/regulation does not seem to impose an explicit obligation to provide access to emergency services to people with disabilities. However, the Universal Service Provider seems to have interpreted a general legal requirement for enabling people with disabilities to access telecommunication services in a way that access to emergency services by means of a relay service is guaranteed on a 24/7 basis (Ley 51 2003, Real Decreto 1494/2007).					
FI	0	Ø	0	0	&	0	There is a single emergency number working free of charge across the country (112) for the police, rescue service, ambulance service and social service. Moreover, in each region there is a dedicated emergency service number available which can be accessed by people with disabilities by means of SMS. A relay service is available on a 24/7 basis. A governmental decree (1/2012) safeguards the interests of visually impaired people by securing their right to a clear and easy access to customer service of a universal service connection.					
FR	0	~	0	©	0	0	A dedicated emergency number for people with disabilities (114) was launched in 2011. It operates on a 24/7 basis. Currently it works only in a metropolitan area. In a next step the line will be opened to departments and overseas territories. Through a single emergency line people with hearing difficulties are to be enabled to reach the ambulance service SAMU (15), the police (17) and the fire brigade (18). In a first phase Fax and SMS communication can be used. Email and video chat will be introduced in a second phase. An obligation to introduce an emergency relay service for the deaf people has been imposed by disability legislation (law 11 February 2005 – art. 78 b) and telecom regulation (Code des postes et des communications électroniques - Article D98-8 and a subsequent Decree). Future developments are studied within a European Project entitled "Reach 112". Telecommunications legislation stipulates that users with disabilities must have equivalent access to emergency services when compared with the majority of users (Code des postes et des communications électroniques, Consolidated Version 6 août 2012)					
ни	0	Ø	0	Ø	0	0	The police, ambulance services or the fire brigade can be contacted by national emergency lines (104, 105, 107 or 112). Access by means of SMS is possible as well. For ambulance services and the fire brigade five regional numbers do exist (for example in central Hungarian region +36204116426). For the police there is one national number (+36209000107). Telecommunications legislation/regulation includes a general statement that emergency numbers have to be accessible.					
IE	0	Ø	0	0	&	0	A pilot service has been launched ("112 SMS") which lets deaf, hard of hearing and speech-impaired people send an SMS text message to the Emergency Call Answering Service (ECAS) where it will be passed to the Police, the Ambulance service, the Fire service, or the Irish Coastguard. Also, a relay service is available on a 24/7 basis. There seems to be no specific references in current telecommunications legislation/regulation to accessibility of emergency services to people with disabilities.					
IT	0	بني	0	0	(1)	0	There are two nation-wide emergency lines, "112" and "113". Accessibility by SMS is only available in Varese area. Also, in some regions a text relay service is available, albeit only during particular service hours. The Italian Communication Regulatory Authority does not impose any obligations in relation accessibility of emergency services to people with disabilities.					

	Direct access access			_							
	Text phone	SMS	Email	Fax	Text relay	Video relay					
LT	0	0	0	0	0	0	A single emergency number is available throughout the country (112). In 2010, a pilot project had been launched to enable deaf people to access the emergency service (112). The results were not satisfactory due to problems encountered in relation to public procurement procedures for purchasing required equipment. Currently the Emergency Response Centre in cooperation with a mobile service provider (Tele2) is testing a system enabling access to the 112 number by means of SMS. Should the results be positive, the emergency number "112" will be made accessible by SMS during 2013. Telecommunications legislation stipulates that all electronic communications service providers must ensure that end users with disabilities can access the services of emergency institutions. (Eng. The Law of Electronic Communications).				
LU	0	Ø	0	W	0	0	There is a national emergency line. The emergency service is accessible by SMS and fax.				
LV	0	Ø	0	0	0	0	There is a nation-wide emergency number (112). People with disabilities can send an SMS requesting help fire brigade and rescue service. The national emergency centre responds to the corresponding message. In order to receive the help the address or location must be presented. Current telecommunications legislation/regulation does however not impose any obligation in relation to accessibility of emergency services to people with disabilities.				
МТ	0	0	0	0	0	0	The national emergency number is 112 and can be accessed from any mobile phone, fixed and public pay phone. This number is only available for voice calls and not by SMS. Regulation states that an undertaking shall ensure that access for disabled end-users to emergency services is equivalent to that enjoyed by the majority of end-users, provided that measures taken to ensure that disabled end-users are able to access emergency services whilst travelling in Malta shall be based to the greatest extent possible on European standards or specifications published in accordance with the provisions of Article 17 of the Framework Directive, provided further that these standards and/or specifications shall not prevent the Authority from adopting additional requirements in order to pursue the objectives set out in this regulation." (43 (2) of the amended Electronic Communications Act of 2011)				
NL	~	&	0	0	&	0	The Ministry of Security and Justice is responsible for emergency services. The nation-wide emergency number 112 is running a 24/7 accessible text relay service with back-up systems. The system is directly accessible for text phones used through a dedicated number (0800-8112). Since July 2012, an "SMS 112" service is available to people registered as hearing disabled. The Netherlands participate in a European pilot project (REACH 112) implementing Total Conversation solutions to improve accessibility of emergency services for people with disabilities. Accessibility of the national emergency number is required by Telecommunications law. The law does not specify in which way accessibility is to be secured, just that the emergency service is accessible for people with hearing and speech disabilities. A decree of 2004 (Decree universal service provision and end user interests) referring to the Telecommunications law, repeats the requirement of accessibility.				

	Direct access				rect ess		
	Text phone	SMS	Email	Fax	Text relay	Video relay	
PL	0	Ü		V	0	0	There is a nationwide emergency number (112), along with traditionally used emergency numbers for the police (997), the fire brigade (998) and ambulance services (999). Some areas have additional local emergency numbers such as the municipal police, fire brigade, police, lifeguards, Mountain Rescue, etc. For people who cannot use voice telephony special arrangements have become locally available in some regions. The region of Przemysl may serve as an example. Here, the deaf community and people with hearing and speech difficulties can use a dedicated emergency number to reach the city guards by means of SMS. The web site of the city guards provides instructions how to use this number. A similar emergency number has been introduced in opolskie voivodeship to enable people with disabilities to contact the fire brigade. In Gliwice people with disabilities have the possibility to send an emergency request via SMS, e-mail or fax. It is however not possible to access the nation-wide emergency scheme (112) by means of text communication. There is no reference in current telecommunications legislation/regulation to accessibility of emergency services to people with disabilities.
РТ	0	&	0	0		Ŕ	There is a nation-wide emergency call scheme. People can call to 112 and their requests are directed to local response teams (National Institute of Medical Emergency, police, fire brigade, criminal police, etc). A project entitled 'SMS-Segurança' (SMS-Safety) enables persons with disabilities to send text alerts to a distinct number (961010200). Moreover, two private operators, in collaboration with support associations for deaf persons, provide access to a service centre staffed with video-interpreters which enables access to the emergency services, albeit only at specific service hours. Legislation imposes a general requirement to enable access to emergency services by users with disabilities. Specific solutions or access media are however not mandated by legislation/regulation.
RO	0		(i)	V	0	0	There is a nation-wide emergency line (112) to contact police, the fire brigade and ambulance services. Disabled people can contact 112 by fax with help of predefined forms. Moreover there are rescue services operating at the regional/local level, e.g. SMURD which was originally set up in Târgu Mureş, a city in the middle of Transilvania, in 1990 shortly after the revolution because of the critical situation of the traditional ambulance system. Today SMURD operates as a complementary service and is expanding across the country. A medical helicopter emergency service (HEMS) has been implemented in three cities (Târgu Mureş, Bucharest and Iaşi) while in other cities the system is only ambulance based or in exceptional cases police and army helicopters are used.
SE	0	&	0	0	8	0	There is a nation-wide emergency line (112) enabling access to various emergency services such as police, fire brigade, ambulance, mountain and sea rescue. The common number can be contacted by SMS. There seems to be no legal obligation concerning accessibility of emergency services to people with disabilities. A text relay service is available on a 24/7 basis.
SI	0	&	0	0	&	&	There is a nation-wide emergency line (112) connecting to a network of regional rescue centres. The Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, at the initiative of the Slovenian Association of the Deaf and Hard of Hearing (which has for years pointed to the unavailability of emergency numbers for deaf and hard of hearing), has implemented dedicated solutions addressing people with disabilities, so called WAP 112 and SMS 112. A Slovenian sign language interpreter at a dedicated call centre takes an emergency message, forwards it to the relevant institution and passes a response back to the user. The call centre can be contacted by SMS, video call, e-mail, online live chat, or via fax. Users have to register in advance through the web http://kc.tolmaci.si Also, an SMS can be sent directly to 112. Based on telecommunications legislation, a Decree requires the Universal Service Provider to enable the disabled clients to make emergency calls using voice or sign language and other forms of non-spoken languages. (Article 72 of The Electronic Communications Act).

	Direct access			Indi acc	rect ess					
	Text phone	SMS	Email	Fax	Text relay	Video relay				
SK	0	(V)	0	0	V	0	There is a nation-wide emergency line (112) together with other emergency numbers (150, 155 and 158). In all cases a human operator can be contacted by voice calls. Access by SMS is currently tested exclusively within a sample of disabled users. Moreover there is a relay service operating on a 24/7 basis. Telecommunications legislation imposes an obligation on all providers of public services to ensure equal access to emergency service by people with disabilities (Act Nr. 351/2011 about Electronic communications).			
UK	0		0	0	⊘	0	There is a nation-wide emergency line (999) enabling access to various emergency services including police, fire brigade, ambulance, coastguard, mountain rescue and cave rescue. The European emergency number 112 can also be used for access to all the above services. It is also possible to contact emergency services via SMS and text phone, but these not with direct access. The BT service Text Direct has a special emergency number which will give a call priority routing via the text relay to the 999/112 bureau. If the bureau cannot get a response from the caller, a 'silent call' procedure is used, which usually involves tracing the call and alerting the police. SMS calls are routed through the relay service, so the 999/112 operator speaks to the relay intermediary. There seem to be some local/regional emergency services which may have text phone numbers, but this would be outside the nation-wide 999/112 system. Condition 15.4 of the General Conditions of Entitlement requires providers of publicly available telephone services to ensure that any end- users using the relay services have access to the emergency services using short code numbers. In the current UK Text Relay service it is possible to contact the emergency services using the Text Relay prefix 18000 emergency number. In addition, Condition 15.7 obliges publicly accessible telephone service providers to supply mobile SMS access to emergency organisations (by using emergency call numbers 112 and 999) free of charge to end-users with hearing or speech impairments.			
AU		0	0	0	*	0	A nationally mandated emergency scheme is implemented by local call centres. Telecommunications (Emergency Call Service) Determination 2009 sets out the responsibilities and obligations of the emergency call persons, carriers and carriage service providers in relation to the provision of the Emergency Call Services. The 112 emergency line is not available for emergency alerts by means of SMS. Direct access by text phone is only available in some areas. In general, emergency services must be contacted through the national relative in three ways, i.e. by text telephone (dial 106), by internet relay and ask for Triple Zero (000)- the general emergency call number – or by ordinary phone for Speak and Listen customers, e.g. people with speech impairments) (dial 1800 555 727 and ask for Triple Zero). The Triple Zero service also has a Caller No Response (CNR) initiative to help genuine callers receive emergency response even if they are unable to speak.			
CA	⊗	0	0	0	&	0	There is a nation-wide emergency line (911) through which regional emergency centres can be reached. At present, persons without hearing or speech disabilities communicate directly with 9-1-1 operators via voice calls. Relay services can be used to connect to 911 for those persons unable to contact 911 on their own. Canadians who cannot communicate clearly via a voice call, because of a hearing or speech disability, must establish 9-1-1 communications either through a direct TTY-to-TTY call or through a TTY (text telephone) Relay call. The regulator has initiated further investigation into possible improvements to emergency 9-1-1 service, including text messaging to 9-1-1 (CRTC's Broadcasting and Telecom Regulatory Policy CRTC 2009-430). The regulator (CRTC) does seem to not have mandated any particular requirements in this regard however.			

	Direct access			Indirect access			
	Text phone	SMS	Email	Fax	Text relay	Video relay	
NO	0	Ø	0	0	Ø	0	There are dedicated emergency lines for the fire brigade (110), police (112) and ambulance services (113). A text relay service provides a special number for users that need to contact them via SMS. The SMS is then handled by the regular emergency body. The text phone and SMS option is only available under the 1412, which is for deaf people. This service does not apply to the general emergency number 110 (Fire), 112 (Police) and 113 (Ambulance).
us	⊗	0	0	&	⊗	&	There is a nation-wide emergency line (911) through which regional emergency centres can be reached. It is a primary responsibility of the FCC to ensure that emergency alerts and 911 services are available and accessible to U.S. consumers, including those with disabilities. 911 accessibility for individuals with disabilities is mandated nationally through the FCC but handled locally. Since the mid-1990s, all 911 emergency call centers, or Public Safety Answering Points (PSAPs), have been required to provide direct access to text telephone (TTY) users. Since 2009, the FCC has required that Video Relay Service and IP Relay users have access to enhanced 911 (E911) services. The FCC rules require that all televised EAS alerts be provided in visual and aural format and accessible to people who are deaf or hard of hearing. This means that critical information about an emergency must be provided through closed captioning or other visual means. The Emergency Alert System (EAS) is a national public warning system that requires TV and radio broadcasters, cable television systems, wireless cable systems, satellite digital audio radio service (SDARS) providers, direct broadcast satellite (DBS) service providers and wireline video service providers to provide communications capability to address the American public during a national emergency. In 2008, the FCC issued a series of orders adopting requirements for a Commercial Mobile Alert System (CMAS), a system by which commercial mobile service (CMS) providers may transmit emergency alerts to their subscribers, if they choose to do so. The FCC ensures that such CMS alerts are distributed as fully accessible text messages. CMAS rules require that CMAS-enabled telephones must announce those alerts using a unique vibration cadence.

3.2 Other aspects

This section looks first at the issue of equivalence of choice in relation to telecoms services for people with disabilities, and then at some other relevant issues that were not addressed in the main presentation of results in section 3.1.

3.2.1 Choice

It has been recognised elsewhere (e.g. by BEREC⁹) that the conceptualisation of what constitutes equivalence of choice for people with disabilities in the telecoms field is not very well developed at present, and that this is something that needs further consideration and consultation by regulatory bodies at European and Member State levels. In this study, the issue of choice was looked at in a number of ways, although it was not possible to go into the complexities of this in too much depth. One aspect concerns the extent to which accessibility-related measures are being offered across the different telecoms providers in each country. Another aspect concerns how the policy side has addressed the issue of choice, for example, what operators are included within the scope of the accessibility obligations as well as the extent to which the choice theme has been explicitly/actively taken up in the telecoms policy/regulatory context.

For the relevant measures (equipment provision, information, special tariffs), some of the key findings from the study were:

- data concerning accessible end user equipment show that at least some end user
 equipment is available from more than one landline operator in only 4 countries, and the
 range of equipment available seems to vary quite a lot across operators.
- data concerning special tariffs show that special tariffs directed towards people with disabilities in particular are available from more than one operator in only 7 countries.
- data concerning accessibility related product/service information provided on the operators' web sites suggest that in only 8 countries such information is available from more than one operator.

It can be concluded that the overall picture is quite mixed and generally not very well developed. Only in a minority of countries do end users seem to have much choice in relation to selection of landline operators operating these types of measures.

The policy situation generally mirrors the status picture (further details can be found in Annex 9), with the following being some of the key features:

- the issue of choice is generally not so far being given much explicit attention in legislation/ regulations or policy, even if the text from the EU Directive has been implemented in the national legislation/regulations
- many countries apply the obligations only/mainly to the USP
- a smaller number appear to apply the obligations to all operators
 - o sometimes this seems to relate mainly/only to special tariffs (e.g. CZ, FR, IT)
 - o in other cases it seems to include other accessibility measures as well (e.g. DK, ES, ET, FI, SK, UK)
- some countries have given or are giving active consideration to this issue, for example:

Electronic communications services: Ensuring equivalence in access and choice for disabled end-users http://berec.europa.eu/doc/berec/bor_10_47.pdf

- IE: regulator has ongoing consultation process on accessibility provisions with all operators
- MT: regulator is looking at the issue of choice in some detail (e.g. cost benefit issues around various accessibility measures)
- UK: the regulator has conducted 'mystery shopping' to assess whether the various operators are providing information to consumers about accessibility provisions.

Overall it can be concluded that the issue of choice of services for people with disabilities seems not well-developed in policy or practice across the Member States so far.

3.2.2 Other themes

Special tariffs

The situation as regards provision of special tariffs for telecoms users with disabilities is complex and presents a mixed picture across the Member States. Although measures addressing general affordability of telecoms for people with disabilities (as well as for other low income groups) are quite commonly to be found across the countries, the situation in relation to measures to ensure that disabled users can have equivalence of access, without having greater telecoms costs in order to achieve this, seems to be a lot more variable.

Overall, it was reported that in a majority of countries (21) the main universal service provider offers some type of special tariff for people with disabilities. These vary in their form, most commonly involving social tariffs (often provided for low income groups and/or particular disability groupings) as well as sometimes addressing more accessibility-related issues (e.g. costs for directory service calls for people with visual impairments, or call/service costs for deaf users of text telephony, text relay or sms). Where special tariffs are found, they are mainly offered by the universal service provider only and, as mentioned already in relation to choice, special tariffs seem only to be provided by other operators in a very few countries. In addition, in the main, special tariffs are a lot more commonly provided by landline operators than by mobile operators.

Although it is difficult to generate an exhaustive or completely consistent picture of the situation across Europe as regards policy and practice in the special tariffs field (this would really need a dedicated study on the special tariffs topic alone), the following is an indicative view of some of the main patterns that can be detected on the basis of the information generated in this study.

Apart from more general social tariffs for people with disabilities, special tariffing in relation to directory service usage costs seem to be the most common type of provision. This aspect of special tariffs is reported to be addressed in a number of the Member States, generally in terms of free or low cost calls for people with vision impairments (e.g. AT, CY, DK, EL, ES, IE, SI, SK, UK). However, no provisions of this nature were mentioned for the majority of Member States, whereas such provisions were mentioned in all four of the third countries (NO, AU, CA, US).

Free or reduced costs for **text telephony calls and/or text relay service usage** were specifically mentioned in just a few countries (e.g. ES, IE, NL, SK, UK), although again these types of provisions were mentioned in all of the third countries (NO, AU, CA, US). More generally, where countries have a text relay service in place (or text telephony access to the operator's customer support services), the special service seems to most often be provided free of charge, although there are some exceptions (e.g. DE, NL, NO). In a few countries, other types of special tariffs were mentioned, such as **reduced sms charging for deaf people** (e.g. EL, IT, SI)

The policy context for this also represents a variable picture across the Member States. Many of the countries have some form of obligation on the telecoms sector or other form of public policy provisions in relation to general affordability of telecoms for people with disabilities through reduced tariffs. However, the policy approach seems to be uneven and more oriented towards

social tariffs rather the specific goal to ensure equivalent access without having to pay greater telecoms costs to achieve this. Aspects of this are also picked up in the reports on the situation for directory services (discussed above) and for mobile telephony (discussed below).

As in the case of special equipment, provision of special tariffs for accessibility-related purposes is an important issue that links to both affordability and equivalence of access considerations. Overall it can be concluded that provisions in this area vary widely across the Member States.

Customer services and business procedures

Apart from accessibility of the actual telecoms services themselves, the wider issue of accessibility in relation to telecoms customer services more generally has also been a theme on the accessibility agenda in the telecoms sector for many years now. There are a number of aspects to this, including measures to ensure that key documentation (e.g. bills, contracts) is accessible as well as measures to ensure that people with disabilities are informed about and/or can get information about the telecoms accessibility measures that are provided by the operators.

Provision of information about accessible equipment by the main universal service provider on their website is reported in about two-thirds of the Member States (AT, BE, CY, CZ, DE, DK, EL, ES, ET, FI, HU, IE, MT, PL, PT, SI, SK, UK) and three of the four other countries (AU, CA, US). However, this is much less common amongst the other operators across the countries, which is in line with the findings that special equipment is anyway generally not so often provided by these other operators in the first place. On the policy side, the provision of information about accessibility measures provided is one of the themes addressed in the EU Telecoms Package in relation to accessibility. Although this aspect was not systematically examined in this study, the available evidence suggests that there is variability across the Member States in terms of whether/how this provision has been explicitly addressed in the national legislation/regulations.

More generally, some type of accessibility provisions for business procedures are reported for more than half of the EU Member States (AT, BE, CY, CZ, DE, DK, ES, HU, IE, MT, PL, PT, SI, SK, UK) and for all four other countries (NO, AU, CA, US). Apart from directory service accessibility (addressed in an earlier section above), other types of provisions mentioned include accessible documents (e.g. bills in Braille etc.) as well as accessible customer service facilities (e.g. possibility to make customer service calls by text telephone and/or videotelephony) etc. On the policy side, requirements in relation to provision of accessible documents were mentioned for about half of the EU Member States and in all four of the third countries.

Overall it can be concluded that measures in this area are in place in quite a few countries, but many are not addressing these aspects. The situation in the EU27 overall is less well developed than the third countries and, in the EU27, such measures are generally provided by USP only, much less commonly by other operators.

Mobile telephony

In general, across the Member States the focus of most of the legislative/regulatory provisions in the telecoms accessibility field has been mainly towards fixed (landline) telephony. Apart from some inclusion of mobile telephony within the context of affordability (social tariff) provisions, only in a few countries was specific policy attention to accessibility issues in relation to mobile telephony reported. Some examples are provided below.

In **Spain**, the main laws - Ley 51 2003 General legislation on the access of people with disabilities to the Information Society through ICT; Real Decreto 1494/2007- also refer to mobile operators. The operator is obliged to guarantee the existence of a sufficient and technologically updated offer of special terminals, adapted to the different type of impairments, such as text phones, video telephones or phones with amplification for persons with hearing impairments, or solutions

for persons with visual impairments to access the contents of the displays of their terminals. The operator has the obligation of provide sufficient dissemination on these issues.

In **France**, Decree no 2006-268 7 March 2006 completing the Code des postes et des communications électroniques states: "The operator shall publish annually by June 30 a report on the progress of what it has done for adapting and improving accessibility of mobile services for disabled people in terms of terminals and services, for the different categories of disabilities. This report is submitted to the regulatory authority for electronic communications and positions (ARCEP).""The operator places a label for its customers indicating the terminals and services best suited to each disability considered, evaluated on the basis of objective and transparent criteria, among the range of devices and services marketed by the operator." [However, it is reported that ARCEP hasn't published reports since 2008].

In Malta, some obligations on operators regarding mobile telephony accessibility can be found in the Malta Communications Authority Decision entitled "Universal Telecommunications Services - Report on Consultation and Decision" of July 2003. In this decision, there was designation of a mobile operator responsible for the provision of handsets to be used by people with hearing impairments. In terms of the transitory provisions of the Act, the 2003 designations were valid until varied or revoked by the MCA and hence they had been extended into the current legal framework of the 'Universal Service Obligations on Electronic Communication Services' of April 2010 (Updated March 2011).

In the **UK**, mobile telephone providers are subject to the same obligations imposed upon providers of Electronic Communications Services or Networks by the General Conditions of Entitlement as the Conditions apply to all providers of Electronic Communications Services or Networks including 'mobile and fixed' voice telephony. Therefore, providers of mobile Publically Available Telephone Services are also subject to the provisions of Condition 15 of the General Conditions of Entitlement requiring special measures in respect of end users with disabilities and all the legal obligations imposed by that condition (i.e. provision of text relay services; rebates for text relay calls; access to the emergency services using short code numbers etc.) except condition 15.5 for the provision of a priority fault service. Furthermore, Condition 15.7 was amended (Implementing the revised EU Framework) to explicitly include reference to mobile SMS Access to emergency services and requires communications providers to provide such access to the emergency call numbers 112 and 999 at no charge to end users with hearing or speech impairments.

In **Australia**, there is the AS/ACIF S040:2001 Requirements for Customer Equipment for use with the Standard Telephone Service - Features for special needs: Requirement for raised pip on digit 5 on keypad. Apart from this, the other obligations relate to information on accessibility features rather than the features themselves. C625:2009 "Information on Accessibility Features for Telephone Equipment" specifies obligations on customer equipment importers and manufacturers to provide information on the features of their equipment that will meet people's communications need.

In **Canada**, there is a requirement to provide at least one type of wireless mobile handset that will provide access to wireless service by persons who are blind and/or have moderate-to-severe mobility or cognitive disabilities.

In the **US**, Section 716 of the Twenty-First Century Communications and Video Accessibility Act (CVAA) and section 255 of the Telecommunications Act of 1996 cover accessibility of mobile, as well as fixed, telephones and services (http://www.afb.org/ection.aspx?FolderID=2&SectionID=4&TopicID=327). In addition, the Hearing Aid Compatibility Act of 1988 (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.

When Congress passed the Act in 1988, it specifically exempted "telephones used with public mobile services" (wireless telephones) from these requirements. To ensure that the HAC Act kept pace with the evolution of telecommunications, however, Congress granted the FCC a means to revoke or limit the exemption for wireless telephones. On August 14, 2003, the FCC determined that continuation of a complete exemption for wireless telephones would have an adverse effect on individuals with hearing disabilities, and that limiting the exemption was technologically feasible and in the public interest. Based upon these findings, the FCC established rules for the hearing aid compatibility of digital wireless phones. The Federal Communications Commission (FCC) has passed a set of rules designed to make mobile phones more accessible to persons with disabilities. These rules implement Section 255 of the Communications Act. Where access is not readily achievable, Section 255 requires manufacturers and service providers to make their devices and services compatible with peripheral devices and specialized customer premises equipment that are commonly used by people with disabilities, if such compatibility is readily achievable. To ensure that sufficient hearing aid-compatible digital wireless phones complying with the ANSI standard are available, the FCC 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. Specific benchmarks are applied as regards the offering by operators of models with good acoustic coupling and models with good inductive coupling, as well as labelling requirements.

Also relevant in the mobile domain is the EU Regulation No 531/2012 of 13 June 2012 on roaming on public mobile communications networks within the Union (recast). Article 14: *Transparency of retail charges for roaming calls and SMS messages* states that roaming providers "shall provide blind or partially-sighted customers with the basic personalised pricing information referred to in the first subparagraph automatically, by voice call, free of charge, if they so request". This applies across all Member States, although was only spontaneously mentioned in some countries, suggesting that it had not achieved wide awareness at the time of the information gathering for this study.

In some of the countries there are also requirements around sms access to emergency services, but these have already been mentioned in the section on emergency services above.

In practice, mobile operators in about half of EU countries were reported to make at least some provisions in relation to accessibility. The two most common approaches are the provision of special tariffs, mainly focusing on affordability (social tariffs), and/or the inclusion of accessible handsets amongst the product range offered (e.g. easy to use for people with dexterity problems, text-to-speech for people with visual impairments, hearing aid compatibility, etc.) Overall, there is a lot of variability across the Member States, with an apparent tendency for measures to be emerging voluntarily rather than in a systematic manner guided by regulation/policy.

Internet telephony

There seems so far to have been very little policy attention given to accessibility of Internet telephony across the Member States to date. Some mention was reported in a few countries although, overall, attention to this seems to have been greater in the third countries to date, mainly in relation to relay service provision/access.

In **Finland**, under the USO there is now a minimum speed requirement for the Internet connection in order to enable certain services for disabled users. The new wording of Section 60 c (363/2011) on universal service obligation in the Communications Market Act takes into account the needs of the disabled. The subscriber connection that is offered must be such that all users, including disabled end-users, can use the emergency services, make and receive domestic and international telephone calls, and use other normal telephone services. The connection must also enable all users to have appropriate internet access, taking into account the connection speed in use among the majority of users, technical feasibility and costs. The telecommunications operator

can also provide services to the above effect through several connections if this does not cause unreasonable additional costs to the end-user. The Finnish Communications Regulatory Authority can provide more precise technical stipulations as to the technical set-up of the connection and the technical characteristics it should have so that it can also be used by disabled end-users. A Governmental decree to safeguard basic communications services for disabled users entered in force in January 2012. A videoconference with a minimum 512 Mbps symmetrical data speed should be available for hearing-impaired users and users having speech problems.

In **France**, the operator is required to take into account the specific needs of disabled people in the design of equipment associated with its offerings of fixed Internet access.

In the **UK**, Internet telephony services (VoIP services) that constitute PATS providers are subject to regulatory obligations of the General Conditions of Entitlement, including Condition 15 relating to special measures for end users with disabilities. What constitutes a PATS provider VoIP service depends upon whether the VoIP service has a billing relationship with the end user and its location; in addition, General Condition 4 of the General Conditions of Entitlement was modified in 2007 to require that as from 8 September 2008 all type 2 (VoIP services that allow users to make calls out to traditional fixed phones or mobile phones) and type 4 VoIP services (to and from traditional fixed phones or mobile phones), except "Click to Call" services, that allow users to make calls to national numbers, must provide 999 / 112 access without charge and meet requirements on providing caller location information to the emergency organisations handling the calls. (This amendment was not explicitly for the benefit of end users with disabilities, but could be of indirect benefit to such users widening their choice of accessing the emergency services).

In **Australia**, there is a contractual requirement with the current NRS provider for one-way Internet relay through the National Relay Service.

In **Canada**, CRTC's Broadcasting and Telecom Regulatory Policy directs all LECs, including wireless CLECs, and VoIP providers that are required to provide TTY Relay to provide IP Relay, 24 hours a day, 7 days a week, by 21 July 2010.

In the **US**, the FCC has determined that interconnected Voice over Internet Protocol (VoIP) providers must comply with Section 255. In particular, 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. Interconnected VoIP providers and equipment manufacturers also must ensure that, consistent with Section 255 of the Communications Act, their services are available to and usable by individuals with disabilities, if such access is readily achievable.

3.3 Evolution in recent years

Finally, in order to give a more dynamic picture of how the policy approaches to telecoms accessibility are evolving, Annex 10 presents information reported on recent evolution as well as any plans that could be identified in this area for the near future. Based on this, it seems that the revised EU Telecoms Package of 2009 has provided an important stimulus for policy in relation to telecoms accessibility in many of the Member States. Existing policies have been widened / strengthened in a number of countries and, in some cases, concrete measures in this area have been introduced for the first time. Nevertheless the picture presented here reinforces the more detailed picture presented in earlier sections of this Chapter - the ways that the provisions of the Directive are being interpreted and implemented seems to vary quite widely across countries.

When it comes to the actual e-accessibility status situation in the telecoms domain, some progress can also be observed since the first benchmarking study of this kind (MeAC 1) was

conducted in 2007. However, it must be noted that the methodology applied for the purposes of the current study is not entirely identical with the one applied in 2007, and there is only a limited set of indicators available enabling comparison of over time. As can be seen from Table 0-1, there have been increases in the number of countries with relay services (text and/or video) and in provision of information about accessibility provisions by both fixed and mobile operators.

Table 0-1 Development over time according to selected indicators

		Number of I	EU countries
		MEAC1 (25 countries covered)	MEAC3 (27 countries covered)
Text relay	Any service (incl. pilot)	13	16
	Regular service offering	10	16
Video relay	Any service (incl. pilot)	7	15
	Regular service offering	3	9
Online information	First landline operator (or USP)	14	18
provision - hearing aid compatible models	Second landline operator	1	2
	First mobile operator	5	10
	Second mobile operator	4	6
Online information	First landline operator (or USP)	13	22
provision - other e- accessibility	Second landline operator	2	3
information	First mobile operator	7	16
	Second mobile operator	5	13

3.4 Synthesis and conclusions

In the following, some key results from the work on Telecoms accessibility are summarised and some possible implications for further efforts in this field are identified.

Key results

- There has apparently been some progress across the Member States in the extent to
 which measures in relation to telecoms accessibility are in place; the accessibility
 provisions in the revised EU Directives seem to have provided a stimulus for this in a
 number of the countries
- Nevertheless, there remains much room for improvement of telecoms accessibility across
 Europe as a whole, in regard both to equivalence of access and equivalence of choice for
 users with disabilities
- There is considerable variation across Member States in terms of what telecoms accessibility measures are in place and in the quality of the measures that have been implemented
- Better results seem generally to be achieved where there are specific obligations imposed
 in legislation and/or by the regulators; in the absence of such obligations, there seems to
 be a lot less likelihood that the relevant accessibility measures are being provided by
 telecoms operators in a country

Possible implications for further European efforts in the field of Telecoms accessibility

- Prevailing variations across Member States in terms of which aspects of telecoms
 accessibility are being given emphasis and in the quality of the measures that are
 implemented suggest that the establishment of an ongoing mechanism for providing
 guidance to Member States and the national regulatory bodies in meeting the objectives
 of the Universal Service Directive and for identifying and sharing good practice (i.e.
 benchlearning) might be considered.
- Although the issue of equivalence of choice is generally not well developed in terms of
 accessibility policies and provisions, some countries have given or are giving active
 consideration to this matter and there may also be merit in developing a focused
 benchlearning effort on this aspect as well.

4 Television

This Chapter presents the results of the work on benchmarking the current situation and evolution of e-accessibility in relation to television services (TV). This is also quite a complex and dynamic field where, in principle, quite a wide range of accessibility dimensions are relevant be considered. On the one hand, there is the basic requirement to ensure that the contents of broadcast TV programmes are accessible for people with disabilities, and this was the main focus of the benchmarking in this study. A range of other aspects of relevance for TV accessibility were also addressed in the study, although in lesser depth.

4.1 Accessibility of broadcast TV programme contents

To ensure that people with disabilities can access and enjoy TV broadcast programmes in the same manner as everyone else, a variety of accessibility provisions – frequently called access services - need to be made available. These include subtitling and sign language interpretation for people with hearing impairments and audio description for people with visual impairments. Subtitling provides an on-screen text based representation of what is being said in a broadcast programme, and sometimes includes descriptions of background sounds. It can be visible continuously (open subtitles) or the user can select to include with the picture as desired (closed subtitles). Signed TV programmes provide a real-time signed interpretation of the spoken content, which is a key requirement for those who depend on sign language. Audio description involves provision of an additional narration track for blind and visually impaired viewers, where the description narrator talks through the presentation, describing what is happening on the screen during the natural pauses in the audio (and sometimes during dialogue if deemed necessary).

Today, provision of at least some TV content with subtitling is available in most countries covered by the current study (Figure 4-1). However, the amount of content actually broadcasted with subtitles varies considerably, ranging from almost all programmes in some countries to merely a single news programme per day in others (for details see Table 4-1). Also, in some countries foreign language programmes such as movies are commonly broadcasted with subtitling rather than dubbing in national language, albeit in these cases provision of subtitling is not directed towards making TV content accessible to people with disabilities in particular but to the national language speaking population more generally. Although subtitling of programmes in foreign languages may therefore be relatively common in some countries, there is often considerably less subtitling of national language programming. Where this is the case, people who rely on subtitling (e.g. deaf people) face a very unequal situation as regards access to national language programmes.

However, in many countries legal/regulatory obligations have been imposed to provide at least some programmes with subtitling. In this context, dedicated quantitative targets have sometimes been specified by the regulator/legislation which must be reached by the broadcasters concerned. Also, specific types of programmes are sometimes identified by the regulator/legislator which are to be broadcasted with subtitling such as news programmes, programmes around elections, emergency alerts.

Our data also suggests that in the European Union public broadcasters generally tend to provide larger volumes of programmes with subtitles when compared with commercial channels (Figure 4-2). The average share of programmes broadcasted in the EU Member States with subtitles by the two main public channels reaches for instance between 56% and 61%, respectively, while the share for the two main commercial broadcasters amounts to only 44% and 48% respectively

Figure 4-1 No. of countries with any subtitling (n=31)

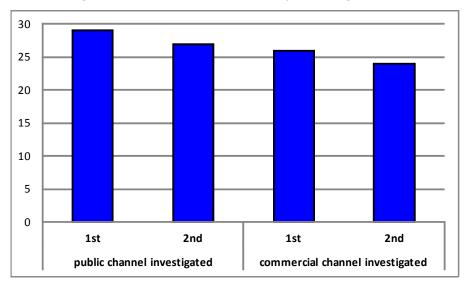
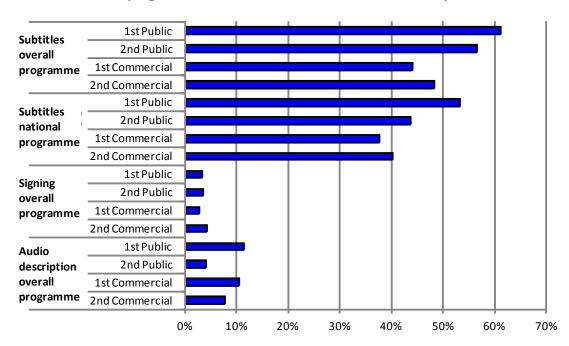


Figure 4-2 Average share of programmes with access services in the overall programme across all countries included in the study



From the perspective of TV viewers with hearing impairments, accessibility of broadcasting content concerns not only sheer volumes but also the quality of subtitles. Some broadcasters therefore apply dedicated quality standards for subtitling provision. Such standards may be applied on a voluntary basis, as for instance in the case of the German public broadcasters ARD. Here, subtitles are always presented in white font colour on black background. The pace is adapted to the reading speed. There is no scrolling of the subtitles since that would make it even harder to follow. If there is more than one speaker, this is marked in the subtitles with several colours. For sport events, the subtitle is on the top of the screen in order not to hide the sport-related insertions. Also, quality requirements may have been specified by the regulator. For instance, in Canada, at licence renewal, the broadcasters will be required to follow quality standards published by the regulator in 2012. Also, in the UK the regulator OFCOM requires for

instance broadcasters to whom its regulation applies to submit quarterly returns for target figures and to make sound and vision recordings of every programme included in their service from 60 days after being broadcast and make copies of such recordings available for inspection by the regulator.

When compared with subtitling, sign language interpretation is less widely available. As can be seen from Figure 4-3, in a substantial number of countries public broadcasters provide at least some programmes with signing. When it comes to commercial broadcasters signing is provided in even less countries. Also volumes of programmes that are provided with sign language interpretation are considerably lower when compared with subtitling, on average well below 5% of the overall programmes across all countries covered by this study (Figure 4-2). The focus is often put on particular programs, often main news programmes. When compared with subtitling, sign language interpretation is legally required in fewer countries (Table 4-1 overleaf).

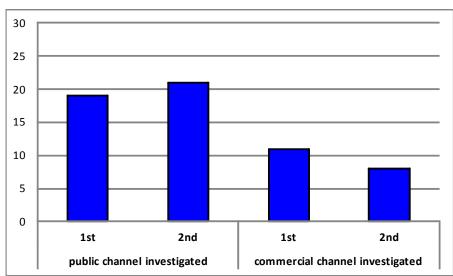


Figure 4-3 No of countries with any signing (n=31)

Programmes with audio description are currently broadcasted in quite a number of countries by, at least by one public broadcaster. Average volumes broadcasted with this type of access service range between 4% and 11% (Figure 4-2). Audio description is legally required in some countries (for details see Table 4-1 overleaf).

As can be seen from Figure 4-5 and Figure 4-6 public broadcasters tend to provide a larger variety of access services when compared with commercial broadcasters. In nine countries, both public broadcasters provide all three types of access services (subtitling, signing, audio description). When it comes to commercial broadcasters this is the case only in three countries. On the contrary, in 14 countries commercial broadcasters only provide a single type of access services (mainly subtitling), whereas public broadcasters provide one single type of access service only in two countries. Also, there are even three countries where none of the access services are available from two commercial broadcasters investigated, and in five countries access services are only available from one broadcaster.

Figure 4-4 No. of countries with any audio description (n=31)

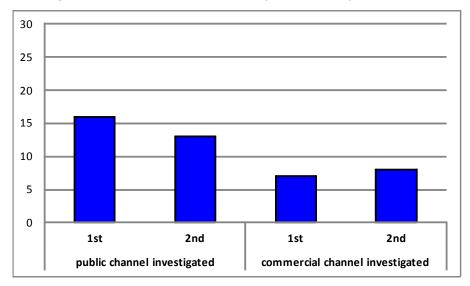
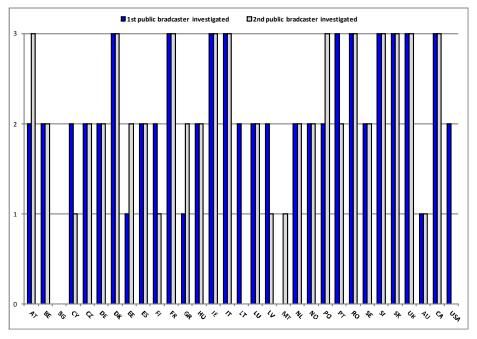
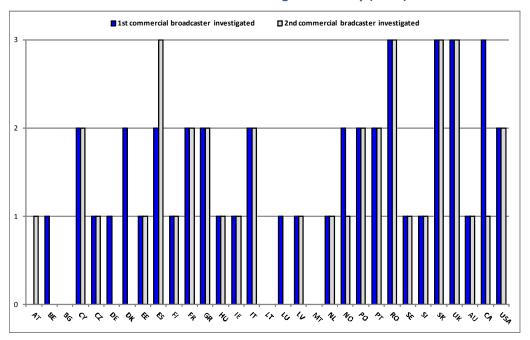


Figure 4-5 No. of types of access services available from the two main public broadcasters in a given country (n=31)



Note: Each of the two public broadcasters can provide up to three types of access services (subtitling, signing, audio description). So the maximum score is 3. In relation to the US data apply to public broadcasting in general rather than a single broadcaster due to the peculiarities of the public broadcasting domain.

Figure 4-6 No. of types of access services available from the two main commercial broadcasters in a given country (n=31)



Note: Each of the two public broadcasters can provide up to three types of access services (subtitling, signing, audio description). So the maximum score is 3

100

Table 4-1 Provision of TV access services by selected TV channels in 2011

						of 14 decess services by serected 14 channels in 2011				
		Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context				
	1 st public channel	54 %	54 %	no data available	0 %	Provision of access services is mandated by legislation/regulation. A staged plan has been set out for the public broadcaster, ORF, to successively achieve quantitative targets by 2012 as follows: 60% of				
	2 nd public channel	43 %	43 %	no data available	≤1 %	the overall programme to be broadcasted with subtitles in accordance with the ORF quality standards, a proportion of the overall programme to be broadcasted with sign language interpretation (including the main news programme) and up to 550 hours of programme to be				
AT	1 st commercial channel	0 %	0 %	0 %	0 %	broadcasted with audio description. When it comes to commercial broadcasters, legislation includes a general anti-discrimination clause. Dedicated obligations or quantitative targets concerning provision of access services by commercial broadcasters do however not seem to exist. Programmes				
	2 nd commercial channel	no data available	no data available	0 %	0 %	originally produced in a foreign language (e.g. foreign movies) are to be generally broadcasted with dubbing rather than subtitling.				
	1st public channel	92 %	92%	0 %	≤1 %	Provision of subtitling is mandatory only for the Flemish part of the country. New targets for subtitling (also for programmes in Dutch) were announced by the Flemish government in 2012.				
	2nd public channel	25 %	25%	10 %	0 %	Within the next three years, public broadcasters have to provide 80% of their programming with subtitling. An increase of programmes provided with audio description and the availability of spoken subtitling are suggested, but no quantitative targets are set. When it comes to commercial				
BE	1st commercial channel	50 %	50%	0 %	0 %	broadcasters a Decree is currently prepared by the Flemish government which is expected to set differentiated targets for subtitling to be achieved in accordance with market shares. In Flanders				
	2nd commercial channel	0 %	0 %	0 %	0 %	programmes originally produced in a foreign language (e.g. foreign movies) are generally broadcasted using subtitling. In Wallonia dubbing in French is often used.				
	1st public channel	no data reported	no data reported	no data reported	no data reported	There is no policy or legislation that mandates provision of access services.				
	2nd public channel	no data reported	no data reported	no data reported	no data reported					
BG	1st commercial channel	no data reported	no data reported	no data reported	no data reported					
	2nd commercial channel	no data reported	no data reported	no data reported	no data reported					
CY	1st public channel	8 %	0 %	≤1 %	0 %	Provision of a news programme accessible to people with sight or hearing loss between 18:00 and				

		Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context			
	2nd public channel	71 %	0 %	0 %	0 %	22:00 over the duration of at least 5 minutes per day is mandated by legislation. This applies to all broadcasters in the country. Programmes originally produced in a foreign language (e.g. foreign			
	1st commercial channel	10 %	0 %	≤1 %	0 %	movies) are generally broadcasted with subtitling rather than dubbing in national language.			
	2nd commercial channel	4 %	0 %	≤1 %	0 %				
	1st public channel	82 %	82 %	3 %	0 %	Provision of access services to people with disabilities is mandated by legislation. Public broadcasters are required to provide at least 70% of their programming with open or closed subtitles. At least 2% of their programme is to be produced in Czech sign language or provided with			
	2nd public channel	80 %	77 %	4 %	0 %	sign language interpretation. At least 10% of their overall programme is to be made accessible to people with visual impairments. Lower quantitative targets are set out for commercial broadcasters in relation to subtitling (15% of the overall programme). Commercial broadcasters are obliged to			
CZ	1st commercial channel	18 %	18 %	0 %	0 %	"make accessible" at least 2% of programming for people with visual impairments under law 231/2001 Sb. It is not explicitly given that this accessibility should exist in a form of audio description. Commercial TV stations were warned by the regulator about breaking the law by not			
	2nd commercial channel	22 %	22 %	0 %	0 %	meeting these limits. Programmes originally produced in a foreign language (e.g. foreign movies) are generally broadcasted with dubbing			
	1st public channel	42 %	42 %	0 %	4 %	Provision of access services to people with disabilities is not mandated by legislation. The broadcasting sector is regulated at the regional governance level (Bundesländer). Regional			
	2nd public channel	38 %	38 %	0 %	2 %	governments have concluded an Interstate Broadcasting Treaty (Medienstaatsvertrag) which is going to be amended in regular intervals. No obligations concerning provision of access services			
DE	1st commercial channel	2 %	2 %	0 %	0 %	have been included yet. Broadcasters do however provide access services on a voluntary basis. Programmes originally produced in a foreign language (e.g. foreign movies) are generally			
	2nd commercial channel	0 %	0 %	0 %	0 %	broadcasted with dubbing in national language rather than subtitling.			
DK	1st public channel	71 %	no data available	no data available	≤1 %	Provision of access services to people with disabilities is mandated by regulation. Although no explicit quantitative targets seem to have been contractually agreed, the public broadcaster, DR, is required to give priority to subtitling of programs in two of its channels, DR1 and DR2, during 2012. In particular, all news programs must be provided with subtitling at least two times per evening on working days and one time per day during weekends. Around elections to the national parliament,			

		Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context
	2nd public channel	91 %	no data available	no data available	≤1 %	all party presentation programs, party leader discussions and the presentation of the results on the election day is to be broadcasted with subtitles and sign language interpretation. For 2013, the obligation has been extended to further channels of the public broadcaster. Beyond 2013, a dedicated end user council is to prioritise further programmes for being subtitled, covering additional channels and internet based programs and services. Beyond subtitling, DR is to broadcast a minimum of two news programs in one of its channels between 17:00 and 20:00 with sign
	1st commercial channel	no data available	no data available	no data available	0 %	language interpretation. These are to be repeated between 20:00 and 21:00. Licensing agreements with the commercial broadcaster TV2 include accessibility related requirements as well. Provision of subtitling is to be prioritised with a view to ensure that most programs are provided with subtitling by 2012. At a minimum, two news programmes per day are to be provided with subtitles during working days. As in the case of the public broadcasters, programmes around general elections and events of public interest are to be broadcasted with subtitles. Also, at a minimum two news
	2nd commercial channel	0 %	0 %	0 %	0 %	programs in channel 1 or 2 are to be broadcasted with sign language interpretation during 17:00 and 20:00. There is no requirement concerning the provision of audio description. Programmes originally produced in a foreign language (e.g. foreign movies) are always subtitled. Some foreign programmes for children can be dubbed.
	1st public channel	25 %	3 %	0 %	0 %	A general requirement is imposed by legislation on public and commercial broadcasters to make their services accessible to people with visual or hearing impairments. Quantitative targets for
	2nd public channel	13 %	≤1 %	≤1 %	0 %	particular access services do not seem to have been specified in the legislation. An implementation plan 2012 to 2015 for Estonian Public Broadcasting states however that 30% of the programme
EE	1st commercial channel	80 %	no data available	0 %	0 %	should be provided with closed subtitles through digital television. Foreign language programmes are generally broadcasted with subtitles rather than as dubbing in national language.
	2nd commercial channel	55 %	no data available	0 %	0 %	
	1st public channel	26 %	0 %	0 %	0 %	Provision of access services to people with disabilities is mandated by legislation. Public and private broadcasters considered as so called "informational media" have to provide four hours per week of
	2nd public channel	12 %	0 %	6 %	0 %	their usual programmes with subtitles in national language, and another four hours per week of their news programmes respectively. Also, there seems to be an obligation that at least 7 minutes
EL	1st commercial channel	14 %	0 %	≤1 %	0 %	per week of the news broadcasted between 17:00 and 23:00 are to be provided with sign language interpretation. Programmes originally produced in foreign language seem to be generally provided
	2nd commercial channel	16 %	2 %	≤1 %	0 %	subtitling rather than dubbing in national language
ES	1st public channel	75 %	75 %	0 %	0,5 %	Provision of access services to people with disabilities is mandated by legislation/ regulation. A staged approach as been adopted towards setting quantitative targets. Public and commercial

	Ĭ	Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context
	2nd public channel	72 %	72 %	≤1 %	0 %	broadcasters have to provide 70% of their programmes with subtitles by the end of 2012, and 90% by the end of 2013 respectively. Also, public broadcasters have to provide at least 7 hours of their programming with sign language interpretation and audio description by the end of 2012, and 10
	1st commercial channel	29 %	29 %	≤1 %	0 %	hours by the end of 2013 respectively. Commercial broadcasters have to provide 1,5 hours of their programming with sign language interpretation and audio description by the end of 2012, and 2
	2nd commercial channel	31 %	31 %	≤1 %	≤1 %	hours by the end of 2013 respectively. Programmes originally produced in foreign language are generally broadcasted with dubbing in national language rather than subtitling.
	1st public channel	72 %	51 %	≤1 %	0 %	Provision of access services to people with disabilities is mandated by legislation. A staged approach has been adopted towards setting quantitative targets. Public broadcasters have to provide 60% of
	2nd public channel	72 %	51 %	0 %	0 %	their programming in Finnish and Swedish language with subtitling in 2012, and 100% by 2016 respectively. Commercial broadcasters have to provide 25% of their programming in Finnish and Swedish language with subtitling in 2012, and 50% by in 2016 respectively. Also, targets for text-to-
FI	1st commercial channel	58 %	12 %	0 %	0 %	speech translation of subtitles seem to have been specified, requiring public and commercial broadcasters to achieve provision for 25% of the foreign language programming in 2012, and 50% in
	2nd commercial channel	79 %	24 %	0 %	0 %	2016 respectively. Programmes originally produced in foreign language are generally broadcasted with subtitles rather than dubbing in national language.
	1st public channel	100 %	100 %	no data available	no data available	There is a general legal obligation on broadcasters to provide access services to people with disabilities. Quantitative targets have been agreed in subsequent consultations with the
	2nd public channel	100 %	100 %	no data available	no data available	broadcasters. Public and commercial channels whose annual audience exceeds 2.5% of the overall television audience have to make their entire programming accessible to deaf and hard of hearing people since 2010. Also, a certain proportion of the programme must be broadcasted with audio
FR	1st commercial channel	100 %	100 %	0 %	no data available	description. Public channels must broadcast two programmes per week in 2012 with audio description and one programme per day in 2013. Programmes originally produced in foreign
	2nd commercial channel	100 %	100 %	0 %	no data available	language are generally provided with dubbing in national language rather than subtitling.
HU	1st public channel	62 %	62 %	≤1 %	0 %	Provision of access services is mandated by legislation/regulation. A staged approach has been adopted when it comes to setting quantitative targets for public and commercial broadcasters. In
	2nd public channel	60 %	60 %	≤1 %	0 %	2012 at least six hours of programming have to be broadcasted with subtitling or sign language interpretation between 6:00 and 24:00 each day. The target will be raised to 8 hours in 2013 and 10
	1st commercial channel	40 %	40 %	0 %	0 %	hours in 2014. From 2015 onwards it seems mandatory that particular types of programmes such as communications of public interest and news programmes have to be generally broadcasted with

		Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context
	2nd commercial channel	38 %	38 %	0 %	0 %	subtitling or signing. Programmes originally produced in foreign language (e.g. movies) are broadcasted with dubbing in national language
	1st public channel	79 %	79 %	≤1 %	≤1 %	Provision of access services to people with disabilities is mandated by legislation/regulation. A staged approach has been adopted when it comes to setting quantitative targets for public and commercial broadcasters in relation to subtitling. In 2012 between 78% and 83% of all programming
	2nd public channel	54 %	54 %	≤1 %	≤1 %	broadcasted by public broadcasters between 07:00 h and 01:00 h have to be provided with subtitling. The targets will be raised successively up to 85% to 90 % in 2016. Lower quantitative targets have been specified in relation to subtitling for commercial broadcasters on a case by case
IE	1st commercial channel	37 %	37 %	0 %	0 %	basis, ranging from 10% to 43% in 2012 up to 22 % to 54% in 2016. Quantitative targets in relation to sign language interpretation and audio descriptions have been set for public broadcasting only. In 2012 at least 1% of the programming has to be broadcasted with these access services, and 2% in
	2nd commercial channel	9 %	9 %	0 %	0 %	2016 respectively. Programmes produced in foreign language (e.g. movies) are generally broadcasted with dubbing in national language.
	1st public channel	<30 %	<30 %	<5 %	9 %	Provision of access services to people with disabilities is mandated by regulation/legislation. Quantitative targets have been set for public broadcasting in relation to subtitling, whereby an
	2nd public channel	<30 %	<30 %	<5 %	9 %	obligation seem to exist that particular programme types (e.g. particular editions of news programmes) must be broadcasted with subtitling or sign language interpretation in any case.
IT	1st commercial channel	<10 %	<10 %	≤1 %	0 %	Programmes produced in foreign language (e.g. movies) are generally broadcasted with dubbing in national language. Data provided in relation to public broadcasting are estimates and refer to all
	2nd commercial channel	<10 %	<10 %	≤1 %	0 %	channels of the public broadcaster (RAI) rather than an individual channels.
	1st public channel	3 %	3 %	3 %	0 %	A general legal requirement on broadcasters seem to exist requiring broadcasters to accommodate the needs of people with visual and hearing impairments in relation to particular types of
	2nd public channel	0 %	0 %	0 %	0 %	programmes. Quantitative targets for the provision of particular access services do not seem to exist. Programmes produced in foreign language (e.g. movies) are generally broadcasted with
LT	1st commercial channel	0 %	0 %	0 %	0 %	dubbing into national language rather than subtitling.
	2nd commercial channel	0 %	0 %	0 %	0 %	
LU	1st public channel	42 %	42 %	0 %	4 %	Provision of access services is not mandated by national legislation/regulation. The main channels received in the country are however broadcasted from neighbour countries (Germany, France)
	2nd public channel	38 %	38 %	0 %	2 %	where accessibility-related legislation/regulation may apply respectively. In these countries foreign

		Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context
	1st commercial channel	2 %	2 %	0 %	0 %	language programmes are generally broadcasted with dubbing in national language.
	2nd commercial channel	100 %	100 %	0 %	no data available	
	1st public channel	45 %	5 %	5 %	0 %	Provision of access services to people with disabilities seems not specifically mandated by legislation/regulation. There seems to be a policy initiative directed towards increasing programme
	2nd public channel	60 %	2 %	0 %	0 %	volumes broadcasted with sign language interpretation. Foreign language programmes (e.g. movies) are generally broadcasted either with subtitling or dubbing in national language.
LV	1st commercial channel	60 %	0 %	0 %	0 %	
	2nd commercial channel	65 %	0 %	0 %	0 %	
	1st public channel	0 %	0 %	0 %	0 %	There seems to be a regulatory requirement that at least 30 minutes of public broadcaster programmes should be accessible to people with hearing impairments. Foreign language
	2nd public channel	0 %	0 %	3 %	0 %	programmes (e.g. movies) are generally broadcasted with dubbing in national language.
MT	1st commercial channel	0 %	0 %	0 %	0 %	
	2nd commercial channel	0 %	0 %	0 %	0 %	
	1st public channel	100 %	100 %	2 %	0 %	Provision of access services by public and commercial broadcasters to people with disabilities is mandated by legislation/regulation in relation to subtitling. From 2011 on, 95% of national language
	2nd public channel	98 %	98 %	2 %	0 %	programmes broadcasted nation-wide have to be provided with subtitling. Commercial broadcasters have to provide subtitles with 50% of their national language programme. Foreign language
NL	1st commercial channel	no data available	53 %	0 %	0 %	programmes (e.g. movies) are generally broadcasted with subtitling. Only programmes for small children are dubbed.
	2nd commercial channel	no data available	54 %	0 %	0 %	
PL	1st public channel	18 %	18 %	0 %	≤1 %	Provision of access services by public and commercial broadcasters to people with disabilities is mandated by legislation/regulation. Overall, 10% of the programming volume broadcasted per
	2nd public channel	13 %	13 %	≤1 %	≤1 %	quarter (except advertising and teleshopping programmes) has to be provided with subtitling, sign

		Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context
	1st commercial channel	6 %	no data available	0 %	no data available	language interpretation or audio description. Foreign language programmes (e.g. movies) are frequently broadcasted with voice-over translation rather than dubbing or subtitling.
	2nd commercial channel	5 %	5 %	0 %	5 %	
	1st public channel	51 %	46 %	16 %	2,4 %	Provision of access services by public and commercial broadcasters to people with disabilities is mandated by legislation/regulation. At least 8 hours per week programming is to be broadcasted
	2nd public channel	11 %	11 %	13 %	0 %	with subtitling (including fictional and documentary content). The respective target for sign language interpretation is three hours per week (informational, cultural, recreational, and religious
PT	1st commercial channel	no data available	no data available	no data available	0 %	content), and for audio description it is 1,5 hours per week (fictional or documentary content). Foreign language programmes (e.g. movies) are generally broadcasted with subtitling rather than
	2nd commercial channel	6 %	6 %	7 %	0 %	dubbing in national language. The few dubbing contents in national language available are targeted to children's programmes (e.g. cartoons and animated feature films).
	1st public channel	no data reported	no data reported	no data reported	no data reported	No dedicated policy mandating provision of access services has been reported. Foreign TV shows and movies tend to be broadcasted in the original language with Romanian subtitles. Only children
	2nd public channel	no data reported	no data reported	no data reported	no data reported	programmes tend to be broadcasted with dubbing. Some news programmes seem to be broadcasted with signing.
RO	1st commercial channel	no data reported	no data reported	no data reported	no data reported	
	2nd commercial channel	no data reported	no data reported	no data reported	no data reported	
	1st public channel	no data available	no data available	no data available	0 %	Provision of access services to people with disabilities is mandated by regulation. Public broadcasters are required to provide 80% of their national language programme with subtitling by
	2nd public channel	no data available	no data available	no data available	0 %	2013. Foreign language programmes are generally broadcasted with subtitling. No dedicated quantitative targets seem to have been set for audio description and sign language interpretation.
SE	1st commercial channel	no data available	no data available	0 %	0 %	When it comes to commercial broadcasters a staged approach has been adopted towards setting quantitative targets, ranging from 50% of programming to be provided with subtitling or sign
	2nd commercial channel	no data available	no data available	0 %	0 %	language interpretation in 2013 to 90% in 2016. Also, 1% of the programming is to be provided with audio description or read out subtitles by 2014, and 3% by 2016 respectively. These targets apply to broadcasters with an audience comprising more than 1% of the overall population.
SI	1st public channel	95 %	15 %	≤1 %	0,5 %	There is a general legal/regulatory requirement on public broadcasters for providing access services to people with disabilities. No quantitative targets have been set however. Foreign language
	2nd public channel	95 %	15 %	≤1 %	≤1 %	programmes (e.g. movies) are generally broadcasted with subtitling rather than dubbing in national

		Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context
	1st commercial channel	no data available	0 %	0 %	0 %	language.
	2nd commercial channel	no data available	0 %	0 %	0 %	
	1st public channel	41 %	no data available	≤1 %	7,4 %	Provision of access services by public and commercial broadcasters to people with disabilities is mandated by legislation/regulation. When it comes to public broadcasters, 50% of digitally
	2nd public channel	36 %	no data available	5 %	10 %	broadcasted programmes have to be provided with subtitling (25% of non-digitally broadcasted programmes). Also, 3% of programmes broadcasted digitally in one channel are to be provided with
SK	1st commercial channel	9 %	no data available	9 %	3 %	sign language interpretation (1% of non-digital programs) and 20% with audio description. Commercial broadcasters have to provide 10% of programmes broadcasted digitally with subtitling,
	2nd commercial channel	15 %	no data available	15 %	7 %	10% with sign language interpretation and 3% with audio description. Foreign language programmes (e.g. movies) are broadcasted with dubbing in national language rather than subtitling.
	1st public channel	100 %	100 %	5 %	15 %	Provision of access services to people with disabilities by public and commercial broadcasters is mandated by legislation/regulation. Quantitative targets have been set by the regulator in relation
	2nd public channel	100 %	100 %	6 %	15 %	to subtitling, sign language interpretation and audio description as a percentage of their overall services (except advertising and shopping programs). When it comes to public broadcasting, current
UK	1st commercial channel	99 %	99 %	7 %	20 %	targets include 100% in relation to subtitling (35% for BBC HD), 5% in relation to sign language interpretation (2% for BBC HD) and 10% (except news) in relation to audio description (6.17% for
	2nd commercial channel	100 %	100 %	5 %	24 %	BBC HD). When it comes to commercial broadcasters' targets include 80% - 90% in relation to subtitling, 5% in relation to sign language interpretation and 10% in relation to audio description.
	1st public channel	90 %	90 %	0 %	0 %	Provision of subtitling by free-on-air broadcasters, both public and commercial ones, is mandated by legislation/regulation. A staged approach has been adopted when it comes to setting quantitative
	2nd public channel	95 %	95 %	0 %	0 %	targets, with a view to achieve 100% of the programming broadcasted between 6:00 h and 24:00 h being subtitled in 2015.
AU	1st commercial channel	85 %	85 %	0 %	0 %	
	2nd commercial channel	85 %	85 %	0 %	0 %	
CA	1st public channel	100 %	100 %	≤1 %	29 %	Provision of access services by public and commercial broadcasters is mandated by regulation. Quantitative targets have been set by the regulators for subtitling, sign language interpretation and
	2nd public channel	no data available	no data available	≤1 %		audio description. All broadcasters must provide 100% of their programmes during the day with

		Subtitling (share of overall programme	Subtitling (share of programme in national language)	Sign language interpretation (share of overall programme)	Audio description (share of overall programme)	Policy context
	1st commercial channel	99 %	99 %	≤1 %	17 %	subtitling (excluding advertising and promotional content). During emergency programming all messages have to be provided with sign language interpretation. Overall, four hours of described
	2nd commercial channel	99 %	99 %	0 %	0 %	video must be provided per week.
	1st public channel	no data available	no data available	0 %	0 %	Provision of subtitling to people with disabilities are mandated by regulation/legislation (LOV-1992-12-04-127, § 2-19). Nationwide TV channels of NRK shall provide subtitling with all pre-produced
	2nd public channel	no data available	no data available	0 %	0 %	programmes and all live programmes sent between 18-23 when technically and practically possible. Nationwide commercial channels with a market share of more than 5% viewer shall provide
NO	1st commercial channel	38 %	no data available	≤1 %	0 %	subtitling with all pre-produced programmes broadcasted between 18:00 h and 23:00 h and all live programmes broadcasted between 18:00h and 23:00 when technically and practically possible.
	2nd commercial channel	no data available	no data available	0 %	0 %	Foreign programmes are generally broadcasted with subtitling rather than dubbing national language.
	1st public channel	95 %	95 %	0 %	85 %	Provision of access services by public and commercial broadcasters is mandated by legislation/regulation. All broadcasters must provide 75% of their pre-rule non-exempt video
	2nd public channel	n.a.	n.a.	n.a.	n.a.	programming with subtitles. From 2011 onwards, 200 hours per year of programming originated by the main commercial broadcasting networks are to be provided with audio description. Data
USA	1st commercial channel	85 %	85 %	0 %	2 %	provided for public channels relate to Public Broadcasting Service (PBS) generally. Public television stations are independent and serve community needs. All public television organizations are linked
	2nd commercial channel	85 %	85 %	0 %	2 %	nationally, however, through three national organizations. Foreign programmes are generally broadcasted with subtitling rather than dubbing national language.

As shown in above, in many countries only some televisions programmes are currently broadcast with accessibility features. Because of this, it is important that users are informed of which programmes actually have accessibility features so that they can plan their viewing. Based on the reported situation at national level, it seems that a majority (about three-quarters) of public broadcasters provide at least some such information. Some examples of countries with clear obligations about giving information about and/or indication (e.g. using standard icons) of which programmes have accessibility features include ES, HU, IE, PT, SK, and UK. In general, provision of accessibility related information for EPGs is not very common (10 countries), and such information is more commonly provided through other (more traditional) channels. Provision of information about which programmes have accessibility features is a lot less commonly to be found amongst commercial broadcasters (only about one-third).

4.2 Other aspects

As discussed above, the main focus of the study was on the broadcast programme access services. Some attention was given to some other topics as well, although these were not looked at in much depth and in some cases it is difficult to get a robust picture without conducting a dedicated larger-scale investigation. Nevertheless some useful insights can be gained as well as pointing to some issues that might be topics for future more in-depth attention.

Digital television and switchover

Given the major changes in the television world that have occurred with the advent of digital television, one issue of interest concerns whether countries have explicitly addressed new/emerging accessibility issues as they arise in relation to digital television and/or the digital switchover process. On the basis of the information reported at the national level, it seems that there has been a lot of variability in regard to whether and how such issues have been addressed.

In some countries specific programmes of support provided for people with disabilities in the context of the digital switchover process were mentioned, for example, information for people with disabilities on technical issues and/or help with installation and set-up of set-top boxes. In some countries, also, there has been a specific policy objective to ensure that access services provided during the analogue era are accessible also with digital television. Some examples that were mentioned in these areas are outlined below.

In the **Czech Republic**, digital switchover was supervised by a National coordinating committee (Národní koordinační skupina) operating under the Ministry of Interior and the whole process of digital switchover in Czech Republic is now complete. During the digitalization process, the committee introduced a supportive campaign known as Switching to digital TV (Digitálně.cz) which involved various supportive features (web pages, helpline, expert on line help etc.) for everyone. For the people with disabilities however, a special service was offered in a sub-programme of the campaign with separate web pages, help lines and assistance for people with disabilities in need of help during the digital switchover process. These services covered various issues related to digital switchover. It helped disabled people to understand the purpose, answered technical questions and provided help with installation, since it was felt that set top box manufacturers do not provide sufficient guides or support for those with disabilities.

In **Poland**, the Act of 30 June 2011 on the launch of terrestrial digital television refers to the needs of people with disabilities and regulates the issue of informing the society about the changes being implemented. Broadcasters are required to transmit broadcasts with information on the digital television services (Article 12). Moreover, the Act stipulates as follows in Article 14: "Acting in agreement with the minister in charge of culture and national heritage as well as having sought opinion of the National Broadcasting Council, the minister in charge of communications may define,

by a regulation, detailed requirements for the content of the broadcasts referred to in Article 12 paragraph 1, with due regard for the necessity to publicize information listed in this provision, in particular among persons with impaired vision or hearing, and to ensure an effective launch of digital television on the territory of the Republic of Poland." Furthermore, the Act states in Article 16 that: "1. the minister in charge of communications shall carry out an information campaign on digital terrestrial television, comprising in particular: 3) the provision of a toll-free helpline and a web page to offer information on, in particular, the method of adapting television sets for the digital reception of television programme services, including the reception of television programme services by digital terrestrial diffusion – with consideration given to users with special needs, especially persons with impaired vision or hearing." In accordance with the Act, this campaign is going to be carried out until 31 July 2013.

The National Broadcasting Council (KRRiT) provides information on its web site (which is also designed with consideration given to the needs of persons with low vision) about the obligation on television service broadcasters to provide aids for people with disabilities. In the section "Media bez barier" ("Media without barriers", available in Polish version of the web site) it also presents some general information on how the transition from analogue to digital TV is going to improve its accessibility also for people with visual and hearing impairments. The web site of the National Broadcasting Council also provides Polish translation of a document on TV accessibility: "Making television accessible" ITU, G3ict, November 2011.

In the **UK**, digital switchover was implemented during 2008-2012 and recently completed in October 2012. The UK Government was responsible for digital switchover policy, timetable and establishing a scheme for those who needed practical assistance with the switchover. An independent non profit making company Digital UK led switchover during which time there were a number of major initiatives to address accessibility. As part of the UK Digital Switchover Project (2001- 2005), developed by UK Government and industry, the Switchover Help Scheme was set up by the BBC by agreement with UK Government and targeted older and disabled people likely to experience the most difficulty during the process. Those eligible for help included persons officially registered blind or partially sighted or eligible for or in receipt of disability or mobility living allowances. The Scheme included (free of charge for those eligible) the supply and installation of 'easy-to-use digital equipment' and a free 12 month after-care service.

Furthermore, in March 2007 the UK Department of Culture Media and Sport published 'Digital TV Receivers: Action Plan for Switchover (The Usability of Digital TV Equipment)' to encourage the development and availability in the UK marketplace of a wide range of digital TV receivers incorporating agreed "best practice" features in preparation for Switchover. This was last updated in January 2012 and makes reference to 'the Switchover Help Scheme; two reports on the equipment needs of those facing most difficulty with Digital Television (DTV) and Ricability reports on Set Top Boxes (STBs), Digital TV Recorders (DTRs) and Integrated Digital Televisions (iDTVs)' - Ricability being a UK national research charity which aims to provide independent information salient to the needs of disabled and older consumers.

Equipment / set-top boxes

Overall it seems that accessibility of equipment and/or set-top boxes is so far only addressed in a few countries in terms of direct obligations. Some examples that were mentioned are outlined below.

In **Spain**, although there is no legislation about set-top boxes there are recommendations. INTECO (National institute for communications) made specifications for an accessible talking set-top box as far back as 2008. This was finally made by IECISA, a telecommunications company, and it is being given to blind people through the Spanish organization for the blind.

In **France**, the National Council for Audiovisual Media (Conseil National de l'Audiovisuel, CSA) ordered a study and plan to encourage manufacturers and distributors to provide more accessible receptors.

In **Poland**, the Act on the launch of terrestrial digital television was implemented and the Telecommunications Law was amended with a new provision (Article 132): "3. The Minister competent for communications shall specify, by means of an ordinance, technical and operational requirements for consumer equipment used to receive digital radio and TV transmissions, having regard to ensuring interoperability of digital radio and TV transmissions services received by that equipment and facilitation of access for persons with disabilities." A regulation to this effect was issued by the Minister of Infrastructure on 18 December 2009. The Annex to this Regulation includes the following provision: "(7. Access to services) Equipment used to receive digital transmissions shall provide access to at least the following services: (...) c) selection of audio component of the service when there is transmission of many audio components within a single service; d) selection of subtitles (teletext or DVB), e) teletext". It also specifies the standards for teletext and DTB subtitles and stipulates as follows: "Decoding of teletext and DVB subtitles, which are received simultaneously, should be controllable by the user (paragraph 14.2)".

In **Portugal**, the legislation in force refers to the need to guarantee the interoperability of consumer digital television equipment and establishes specific measures for citizens with special needs regarding equipment purchasing. Financial support to acquire reception equipment (set-top box) is guaranteed to citizens with special needs: 50% of the DTV decoder equipment, up to a maximum of € 22.00, considering a cost of € 3.00 for the request process.

In the **UK**, the regulator (OFCOM) has a duty under Section 10 of the 2003 Communications Act to promote the development and availability of easy to use consumer equipment. OFCOM fulfils this duty in a number of ways including engaging with industry both directly and via groups such as the Digital Television Group which amongst its activities produces the D-Book specification for Digital Terrestrial Television products. (OFCOM has two seats on the DTG Accessibility working group – included in the Digital Television Action Plan initiatives previously referred to).

In **Australia**, there is a Digital TV Australian Standard 4933.1:2005 requires parsing and display of captioning. Also, there is a public programme that provides a talking set-top box for people with a visual impairment.

In the **US**, the Television Decoder Circuitry Act of 1990 took effect July 1, 1993, requiring all television receivers with screens 13 inches or larger, that were made in the United States or imported into the United States, to be capable of displaying closed captions. It also empowered the FCC to ensure that future video technology was also capable of displaying closed captions. When the Television Decoder Circuitry Act did not result in a substantial increase in captioning, Congress passed the Telecommunications Act of 1996 which directed the FCC to measure how much was captioned, and create a timetable for mandatory captioning.

The Decoder Circuitry Act of 1990 (Decoder Act), 47 U.S.C. §§303(u); 330(b), requires that television receivers with picture screens 13 inches or larger contain built-in decoder circuitry designed to display closed captioned television transmissions. The FCC has also applied this mandate to computers equipped with television circuitry that are sold together with monitors that have viewable pictures at least thirteen inches in diameter, digital television sets that have screens measuring 7.8 inches vertically (approximately the equivalent of a 13-inch diagonal analog screen), and stand-alone DTV tuners and set top boxes, regardless of the screen size with which these are marketed or sold. The Decoder Act also requires the FCC to ensure that closed captioning services continue to be available to consumers as new video technology is developed.

EPGs

It also seems that accessibility of EPGs is so far only addressed in relatively few countries in terms of direct obligations. Some examples that were mentioned are outlined below.

In **Cyprus**, according to Law/Presidential Decree ($K\Delta\Pi$) 117/2009 published by 13.3.2009, it is required in Annex II, (Article 7) that the EPG providers should comply with the relevant guidelines that the Commissioner specifies in regard to additional characteristics and information for people with hearing or sight loss.

In **Spain**, EPGs and other information have to be accessible for elderly and disabled people (law 7/2010) and this affects all digital broadcasters.

In **Portugal**, Regulation Nº36/2011 is of relevance:

- Art. 4th Identification Obligation: For TV broadcast programs it is mandatory to provide permanently, except during advertising, a visual element that allows the identification of each service.
- 6th Art. Obligation to provide information: The legislation states the obligation of television operators providing information of broadcast programming to EPGs providers, 7 days before of broadcasting. They are also required to provide other relevant data and metadata including: Classification of the programs and identification of the target population (by age groups) according to the contents, giving users the necessary information to manage their TV time; Identification, by appropriate icons, of each access services, in order to ensure the identification by people with special needs.
- 9th Art. Right to information: The legislation states that users of EPG (if they have the appropriate equipment for this purpose) must be able to access updated information from television broadcast programming. This information should be accessible to people with special needs, using the appropriate instruments.
- 11th Art. Public with special needs: Suppliers of EPGs should coordinate efforts with television operators and associations representing people with special needs, for the dissemination of information on accessibility.

In the **UK**, Section 310 of the Communications Act imposes a legal duty on OFCOM to draw up a code to give guidance on EPG practice. Under Section 310 (3) this code should contain the requirement for EPGs to include such features as OFCOM deems appropriate to ensure (a) that persons with visual and/or hearing impairments are able to use EPGs (as far as practicable) on the same basis as those without such impairments AND (b) that are made aware and are able to use 'whatever assistance for disabled people is provided in relation to the programmes listed or promoted'. These statutory obligations have been transposed into the OFCOM Code of Practice on Electronic Programme Guides (the Code) which imposes corresponding generic obligations on EPG providers.

The Code also gives comprehensive guidance on disability access features in EPG provision. For example, EPG providers are expected to consult disability groups in relation to meeting their obligations under the code and to work with them and broadcasters plus set top box manufacturers on methods of improving usability. Furthermore, EPG providers should indicate in their programme information the type of access service provided using standard abbreviations - subtitling (S), signing (SL) and audio description (AD) and should provide accessible information for people with disabilities on EPG usage.

End-to-end accessibility

Also very relevant is the wider issue of whether/how accessibility over the entire supply chain (broadcast content, carriers such as cable TV companies, set-top boxes, etc.) is explicitly addressed in

policy and practice. This is a key issue as it would not be of much value if the access services that were provided by the originating source do not end up being available to the viewer at the other end of the chain. This issue is not specifically addressed in the EU AVMSD although it is incorporated within the scope of the EU 'Telecoms Package'. However, is notable that this provision was only mentioned spontaneously in the reports from a minority of countries, suggesting that these issues have not received much attention so far.

In Malta, for example, according to the document published by the Malta Communications Authority entitled "Must-Carry Obligations - Designation of Obligations on Providers of Networks used for Television and Radio Distribution Services", Regulation 49 of the Regulations allows for the must-carry obligations to include "complementary services, particularly accessibility services to enable appropriate access for disabled end-users". The Commission guidance identifies teletext as one such broadcast service complementing the TV channel(s). The MCA requires the operator to retransmit alongside the respective GI TV channel: teletext and EPG services, where applicable; and those accessibility services, as defined by the BA from time to time and applicable to the GI TV channels.

More generally, it seems often unclear whether the scope of the accessibility obligations (e.g. the obligations to provide access services such as subtitling, signing and audio description) in a country apply only to traditional broadcast ('linear') television services or also apply to other interactive ('non-linear') services (such as on-demand services) as well as whether newer supply/access modes are within scope (e.g. TV services offered over the internet).

These are issues that would warrant more focused and in-depth examination in future benchmarking work on accessibility in the television field.

4.3 Evolution in recent years

Finally, in order to give a more dynamic picture of how the policy approaches to television accessibility are evolving, Annex 11 presents information on recent evolution as well as any plans that could be identified in this area for the near future. This shows that the EU's Audiovisual Media Services Directive seems to have provided a stimulus for policy in relation to TV accessibility in quite a number of the Member States. Existing policies have been widened and/or strengthened in a number of countries and, in some cases, concrete measures in this area have been introduced for the first time.

In practice, the number of countries where subtitling is available from the four main broadcasters has slightly increased since the previous measurement period in 2006 (Figure 4-7). This applies to both public and commercial broadcasting. A similar picture emerges when looking at sign language interpretation, albeit on a somewhat lower level overall (Figure 4-8). It is also worth to be noted that some public channels have shifted programmes broadcasted with sign language interpretation to "sister channels" within a larger broadcasting network. For methodological reasons such programmes may thus have fallen out of the scope of the current study, albeit they may in principle still be available in the country concerned.

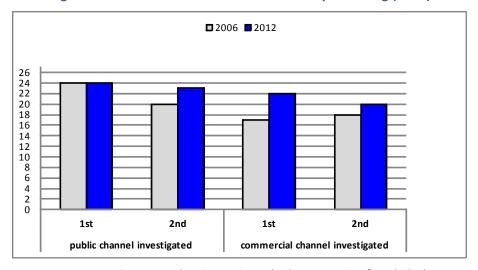


Figure 4-7 No. of EU Member States with any subtitling (n=25)

Note: Data concern 25 EU Member States, i.e. only those countries for which data was collected in the MeAC I study (2006) and in the current study.

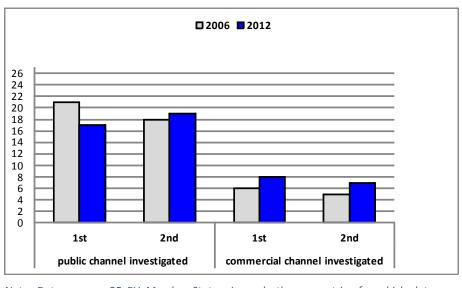


Figure 4-8 No. of EU Member States with any sign language interpretation (n=25)

Note: Data concern 25 EU Member States, i.e. only those countries for which data was collected in the MeAC I study (2006) and in the current study

A noteworthy increase in access service provision can be observed in relation to audio description, at least in relative terms. As can be seen from Figure 4-9, the number of countries where such service is available has roughly doubled across all channels under investigation, albeit on a rather low level overall.

26
24
22
20
18
16
14
12
10
8
6
4
2
0
1st 2nd 1st 2nd public channel investigated commercial channel investigated

Figure 4-9 No. of EU Member States with any audio description (n=25)

N Note: Data concern 25 EU Member States, i.e. only those countries for which data was collected in the MeAC I study (2006) and in the current study

The increase in access service provision is also reflected by the variety of services that are generally offered in a given country. As can be seen from Figure 4-10, the number of countries where public broadcasters provide only one type of access services (subtitling, signing or audio description) has decreased from three to one between 2006 and 2012, whereby the number of countries where all three access services are provided by public broadcasters has increased from six to ten during the same time span. Already in 2006 all public broadcasters did provide at least one access services type.

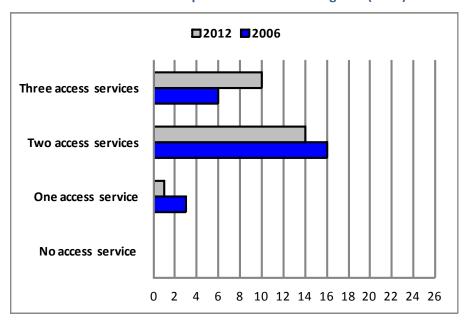


Figure 4-10 No. of countries with one or more types of access services available from main public channels investigated (n=25)

Note: Data concern 25 EU Member States, i.e. only those countries for which data was collected in the MeAC I study (2006) and in the current study

A similar picture emerges when it comes to commercial broadcasting, albeit on a lower level overall. Here, the number of countries where no access service is offered has decreased from five to three

between 2006 and 2012. At the same time, the number of countries where two access services are offered has increased from three to eight. And all three types of access services are offered by commercial broadcasters in three countries today, when compared with just one country in 2006.

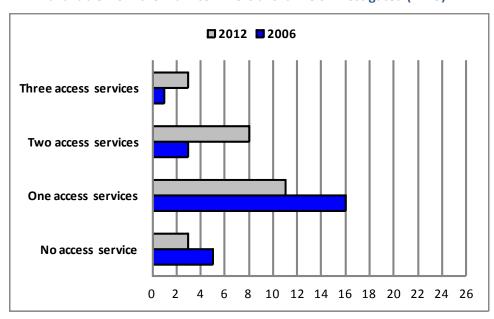


Figure 4-11 No. of countries with one or more types of access service available from the main commercial channels investigated (n=25)

Note: Data concern 25 EU Member States, i.e. only those countries for which data was collected in the MeAC I study (2006) and in the current study.

Nevertheless the picture presented here reinforces the more detailed picture presented in earlier sections of this Chapter - the ways that the provisions of the EU Directive are being interpreted and implemented seems to vary quite widely across countries, in terms of what aspects of accessibility are being addressed as well as in the nature and scope of the targets that are being set.

4.4 Synthesis and conclusions

This section summarises some key results from the work on TV accessibility and identifies some possible implications for further European efforts in this field.

Key results

- There has apparently been some progress across the Member States in the extent to which
 measures in relation to television accessibility are in place; the accessibility provisions in the
 EU's Audiovisual Media Services Directive seem to have provided a stimulus for this in a
 number of the countries
- Nevertheless, there remains much room for improvement of television accessibility across Europe as a whole
- There is considerable variation across Member States in terms of the extent to which different types of accessibility measures are in place for broadcast programme content, as well as in the proportion of programming that is covered by these
- Better results seem generally to be achieved where there are specific obligations imposed in legislation and/or by the regulators; in the absence of such obligations, there seems to be a lot less likelihood that the relevant accessibility measures are being provided by broadcasters in a country

 Aspects of accessibility that particularly arise in relation to technology-driven changes in the broadcasting domain, e.g. when it comes to the digital switch over, seem have been addressed in comparatively few countries by means of dedicated policies, and there is variability in regard to how these aspects are addressed.

Possible implications for further European efforts in the field of TV accessibility

- The variations across Member States in terms of the aspects of television accessibility that
 are being given emphasis and in the quality of the measures that are implemented suggest
 that the establishment of an ongoing European-level mechanism for providing guidance to
 Member States and the national regulatory bodies in progressing the objectives of the
 AVMSD Directive and for identifying and sharing good practice (i.e. benchlearning) might be
 considered.
- The scope of the work on television accessibility in the current study focused mainly on broadcast television programme content; there would be merit in considering a more extensive European benchmarking and benchlearning initiative in this field to address the entire supply chain for accessibility in the television field (broadcast content, carriers such as cable TV companies, equipment/set-top boxes, etc.), as well as the full range of relevant access/delivery modes today.

5 Conclusions

Based on the results presented in Chapters 2, 3 and 4, some common conclusions can be drawn in relation to the accessibility situation for each of the three domains (web, telecoms, TV). For each area of accessibility:

- Some progress in recent years can be detected, but there remains much room for improvement across the European Union as a whole
- There is considerable variation across Member States in terms of the extent of accessibility that has been achieved, as well as in the specific aspects that are being addressed
- Better results seem generally to be achieved where there are specific obligations imposed in legislation and/or by regulators; in the absence of such obligations, there seems to be a lot less likelihood that the relevant market players will have implemented accessibility measures
- The variations across Member States suggest that, in each of the three fields, initiatives to
 ensure that key aspects of accessibility are consistently addressed (to a good standard of
 quality) might be warranted.

In the telecoms and television fields, there are existing EU Directives that address accessibility issues and these seem to have provided a stimulus for accessibility efforts in a number of the Member States. However, given the continued existence of wide variations across countries in the approaches adopted and in the levels of accessibility that are being achieved, benchlearning and other initiatives may be needed in order to support the Member States and their regulatory bodies in their efforts to ensure that the objectives of the Directives are achieved.

In the web field, the continuing variation across Member States in terms of progress towards public website accessibility suggests that EU-level initiative in this field (possibly addressing obligations and monitoring) is warranted. Given that there are variations across Member States in terms of the likely web accessibility experiences of different user groups, a common EU-wide approach to ensure that key aspects of web accessibility are consistently addressed in all countries in a harmonized way is needed.

Annexes

<u>Note</u>

The information presented in these Annexes is based on what was provided by the national correspondents in each country. It should be borne in mind that the study was a multi-topic one, with relatively limited resources for addressing any given topic in a deep manner in each country. For this reason, the level of detail of the country-specific information will inevitably be variable. In addition, any interpretation or commentary on the situation in a given country should be taken as being the researchers, and not necessarily as reflecting the official position or a legalistic interpretation.

Annex 1 - Obligations in relation to public web site accessibility

		Obligations in relation to public web site accessibility	Reference
,	ΑT	The E-Government Law 2004, which was amended in 2008, requires as one of its three main principles 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. In conformity with the e-Europe Initiative, Austria has committed itself to adjusting all public web services according to the WAI level A, and this is an integral part of the E-Government Strategy. Overall, accessibility of websites is legally consolidated especially in: - The Federal Constitution: Article 7 of the Constitution formulates the principle of equality and also lays down a general ban on discrimination against handicapped people. It also expresses a common goal that it is the duty of law makers to ensure virtual equality for all. The Federal Government, the provinces and municipalities must provide for the equal treatment of all people, whether handicapped or not, in all areas of daily life. - The "Behindertengleichstellungsgesetz" (Disability Discrimination Act) - The Disability Discrimination Act foresees since 2006 that also non-official websites are covered within the scope of accessibility provisions. As legal consequence of discrimination in relation to this rule a compensation for the person concerned is foreseen. - The E-Government Law: In it the goal for implementing barrier-free access in official Internet sites for persons with disabilities by January 1 st 2008 is set down by law.	E-Government Law: http://www.ris.bka.gv.at/GeltendeFassung.wxe? Abfrage=Bundesnormen&Gesetzesnummer=200 03230 Behindertengleichstellungsgesetz (Disability Discrimination Act): http://www.ris.bka.gv.at/GeltendeFassung.wxe? Abfrage=Bundesnormen&Gesetzesnummer=200 04228&ShowPrintPreview=True
	BE	In Belgium there are NO legal regulations for imposing web site accessibility to any type of organisations. Nevertheless many government sites, local community websites and websites by major bank have been made accessible on a voluntary basis. At regional level, a Decision by the Flemish government (11 June 2004) imposed web accessibility requirements for all governmental sites. Technically this is implemented by imposing the Anysurfer label. In the Walloon region there is no recent information available on the earlier 'Wall-Online' initiative from 2001? Some aspects of accessibility can be found in the EASI-WAL project of the Walloon government The anti-discrimination legislation does not yet seem to have any direct relevance for web accessibility, as no formal complaints have been passed in court in relation to web site accessibility.	http://www.bestuurszaken.be/toegankelijke-websites-0 http://easi.wallonie.be/
•	BG	In Bulgaria, web-accessibility rights and conditions are addressed in the E-Governance Act and the related ordinances and sub-ordinances (mainly The Ordinance for Electronic Administrative Services and the related Instruction for Executive Power Administration Website Design Requirements). As a whole, web accessibility legislation in Bulgaria applies to the supply of public/administrative web services plus accessibility issues concerning the websites of executive power administration, while virtually no laws regarding the accessibility standards of private (commercial) website usability exist. In the E-Governance Act (Chapter Two, Article 10), it is stated that the supply of electronic administrative services (administrative web services) must be delivered in a dialog mode convenient for people with disabilities. In Section II, Article 20, Point 2, the law	E-Governance Act http://www.mtitc.government.bg/upload/docs/ ZAKON za elektronnoto upravlenie.pdf The Ordinance for Electronic Administrative Services http://www.mtitc.government.bg/upload/docs/ NaredbaElektronniAdmUslugi .pdf

	Obligations in relation to public web site accessibility	Reference
	Specifies that the interface must provide conditions for creating e-statements and electronic documents in accordance with the Acts on Electronic Document and Electronic Signature in a simple and understandable way for users, including persons with disabilities. Furthermore, in The Ordinance for Electronic Administrative Services, in Chapter 2, Article 3, Point 2, it is stated that electronic services must be supplied in an accessible way, including for people with disabilities. The same is re-stated under the same Ordinance (Chapter 3, Article 12 and Article 9), also specifying that documents available on the administrative websites must be accessible for the users with visual and/or hearing impairments, thus including the use of special software to synthesize speech or Braille display. In The Ordinance for Electronic Administrative Services, it is also stated that the administrative services websites must fulfil certain design requirements related to the usage of people with disabilities and the progress of implementation of the required design applications is to be monitored by specific tests. Linked to the Ordinance, the special Instruction for Executive Power Administration Website Design Requirements (based on Article 15, Paragraph 4 from the Ordinance) states that websites of the executive power administrations (implied to include central and local) must include additional and switchable visual zones. In Article 15, Point 6, it is stated that there should be special measures for accessibility (e.g. options for increasing font sizes and changing cascading style sheets). Furthermore, provision of administrative services online needs to fulfil WCAG 2.0 requirements. In the Ordinance for Electronic Administrative Services, Chapter III, Article 15a it says that websites of the providers of public administrative services must meet the level of accessibility under the class AA WCAG 2.0 (Web Content Accessibility Guidelines 2.0 of the World Wide Web Consortium). The website content should be presented in a stand	Instruction for Executive Power Administration Website Design Requirements http://netlaw.bg/uploads/resources/Instructions %20web%20pages 630.pdf plus (non-legislative): Common Strategy for Electronic Governance in the Republic of Bulgaria (2011-2015) http://www.mtitc.government.bg/upload/docs/ Obshta Strategia eGovernment 2011 2015.pdf
СУ	company in Bulgaria. There is not any national legislation or current policies on web accessibility of public websites. However, it is noted that the ratification of UN Convention for People with Disabilities and its optional protocol on 27/6/2012 (specifically articles 9 and 21 require all the necessary provisions for accessible information through ICT) has relevance. Also, Article 16 of the EC Regulation 1083/2006 that requires all actions that are funded through structural funds to ensure equal access to all and especially to people with disabilities.	Ratification of UN convention on people with disabilities and its optional protocol by Cyprus http://www.un.org/disabilities/countries.asp?navid=17&pid=166#C
cz	The law No.365/2000 Sb was released 23.10.2000. This is called Public administration information systems (PAIS) law. It was further amended with another No. 18/2012 Sb. This law defines rights and obligations for PAIS administrators and other subjects related to creation, usage, maintenance and development of PAIS. It is supposed to create such conditions for IS to be a high quality tool for public administration performance. This document addresses the following issues: 1) Long term management of PAIS test certificate 2) Reference boundary lines test certificate	Law 365/2000 Sb general description (in Czech) http://www.mvcr.cz/clanek/legislativa-zakon-c- 365-2000-sb-o-informacnich-systemech-verejne- spravy.aspx Law 365/2000 Sb in full (in Czech) http://portal.gov.cz/app/zakony/zakonPar.jsp?id Biblio=49763&nr=365~2F2000&rpp=15#local- content Public notice No. 64/2008 Sb. general

	Obligations in relation to public web site accessibility	Reference
	 3) Delivering data into PAIS 4) Web site accessibility 5) Form of information disclosure There is also public notice No.64/2008 Sb. declared on 28.2.2008, also called Accessibility public notice. It defines form of information disclosure related to performance of public administration in terms of web sites for disabled people. It amends the law 365/2000 Sb. 	description http://www.mvcr.cz/clanek/vyhlaska-c-64-2008 sb-o-forme-uverejnovani-informaci- souvisejicich-s-vykonem-verejne-spravy- prostrednictvim-webovych-stranek-pro-osoby- se-zdravotnim-postizenim-vyhlaska-o- pristupnosti-10.aspx Public notice No. 64/2008 Sb. in full (pdf in Czech) http://www.khslbc.cz/urdeska/64-2008.pdf
DE	General equality legislation – the so called "Behindertengleichstellungsgesetz" (BGG) - enacted in 2002 represents the legal basis for imposing an accessibility related obligation on public web sites. In particular, § 4 BGG stipulates that structural and other facilitities, means of transport, basic technical commodities and systems used for the purpose of information processing must be free of access barriers (Note: the term "barrier-free" is commonly used in Germany as a synonym for accessible) in a way that they can be utilised by people with disabilities in accordance with general usage, without aggravation and without assistance by a third party. Further to this general obligation, § 11 BBG stipulates two key requirements on public web sites in particular: • Bodies of the federal administration and bodies of the regional administration implementing federal law must ensure that their internet offerings can generally be used by people with disabilities • By means of so called 'target agreements', the federal government shall work towards achieving that commercial web offerings become accessible to people with disabilities The following types of online-offerings maintained by the parties concerned fall under the ambit of this regulation: • All internet offerings directed towards the general public • All other types of graphical software interfaces directed towards the public • All other types of graphical software interfaces directed towards the public When it comes to public web sites, the general obligation imposed by BGG has been further substantiated by subsequent Federal Ordinance. The Ministry of the Interior in agreement with the Ministry for Labour and Social Affairs has stipulated detailed implementation requirements by means of the so called "Barrier-free Information Technology Ordinance" (BITV) enacted in July 2002. A staged implementation schedule has been adopted when it comes to complying with the requirements catalogue stipulated by BITV as follows: • Any existing web site falling unde	Behindertengleichstellungsgesetz (BGG) of 2002 as amended on 19th Dec 2007: http://www.gesetze-im-internet.de/bgg/BJNR146800002.html BITV of 2002: http://www.einfach-fuer-alle.de/artikel/bitv/ BITV 2.0 of 2011: http://www.gesetze-im-internet.de/bitv 2 0/ Overview of Equality legislation enacted at the regional governance level: http://www.di-ji.de/index.php?option=com_content&view=category&layout=blog&id=76&Itemid=57⟨=de

Obligations in relation to public web site accessibility	Reference
Requirements that had to be met by subsequent web pages were equivalent to WCAG 1.0 A.	
A revised version of BITV – the so called BITV 2.0 – was enacted in Sept 2011. As this revision did not concern the basic law itse but only the subsequent federal ordinance, no involvement of the parliament was required. In this context, the existing list of 1 accessibility requirements was aligned with WCAG 2.0. Again a staged implementation approach was adopted:	
 All web sites particularly directed towards people with disabilities had to comply by March 2012 	
All other existing web sites have to comply by Sept. 2012.	
Beyond the alignment of the previously existing requirements with WCAG 2.0, new requirements were added. All web sites fall under the ambit of BITV must provide basic information to the users in German sign language and simple language at their hon pages by March 2014 at the latest. This includes a general explanation what the web site is about, information on how to navig through and an explicit indication of any further items that may be available on it in sign language and/or simple language furth down in the web site structure.	me gate
It is worth to be noted that the federal parliament has no powers to regulate web accessibility on the regional governance level Overall 16 regional parliaments exist in Germany, the so called "Länder" parliaments. All of them have in the meanwhile adoption own equality laws. These include similar obligations in relation to accessibility of web sites when compared with the federal law (BGG). A working group had been established following the adoption of BGG in 2002 which comprised of representatives of the federal government and all regional governments. Agreement was reached that any equality law to be adopted by a regional parliament should seek to follow the same basic principles as laid down in BGG, thereby taking account of the sovereignty of the regional parliaments. Similar to the federal governance level, subsequently some of the 16 regional parliaments have adopted dedicated ordinance to substantiate an accessibility obligation imposed by the general equality law in relation web sites where others have not done so.	need we
It is not possible within the framework of the current study to generate a comprehensive overview of the detailed obligations imposed on web sites at the regional governance level. Currently, the majority of regional BITVs do however seem to refer to the old version of the federal BITV (BITV 1.0). Also specific requirements seem to have been added in some cases.	he
The region of Schleswig Holstein can serve as an example for those regions which have not implemented a dedicated ordinance relation to web accessibility. Here the general equality legislation (LBGG) adopted by the regional parliament imposes a general obligation on bodies of the public administration, namely that "internet offerings and electronic user interfaces must be design in a way that they can be used by people with disabilities" (§ 12 LBGG). This general obligation is however not further substantiated in terms of a detailed requirements catalogue.	al
Overall, it can be concluded that all web sites owned by bodies of the public administration at the federal governance level have comply by September 2012 with a common requirement catalogue reflecting WCAG 2.0. Beyond this they have to make basic information available in sign language and simple language by March 2014 at the latest. When it comes to the regional governal level a mixed picture emerges. All regional parliaments have adopted some kind of regulation in relation to web accessibility in framework of generic equality legislation, whereby some refer to the federal BITV and some don't. The detailed accessibility requirements that have to be met seem to vary to some extent so that no common standard is applied below the federal governance level.	ance

	Obligations in relation to public web site accessibility	Reference
DK	Web accessibility is included as one of seven sets of mandatory open standards. The government and Danish regions and local governments made an agreement in September 2007 on the use of mandatory open standards for software in the public sector. The agreement means that all public authorities, from 1 January 2008, use the open standards in new IT solutions. The seven open standards that all public authorities have to follow include accessibility (WCAG 2.0 AA) since 2008. This is not a law but a mandatory rule for all public authorities to follow. They all have to state that they are WCAG 2.0 AA compliant or explain why not. There are not sanctions for the ones that don't comply. http://www.digst.dk/Moedet-med-borgeren/Tilgaengelighed/Standarder-krav-og-anbefalinger/Standard-for-tilgaengelighed.aspx Digitaliseringsstyrelsen have the responsibility of e-accessibility and they measure, inform and raise awareness. The measurements have been made 2008, 2010, 2012: http://www.digst.dk/Servicemenu/Nyheder/Nyhedsarkiv/Digitaliseringsstyrelsen/Offentlige-hjemmesider.aspx	http://www.digst.dk/da/Moedet-med-borgeren/Tilgaengelighed/Standarder-krav-og-anbefalinger/Standard-for-tilgaengelighed http://www.digst.dk/Arkitektur-og-standarder/Standardisering/AAbne-standarder-vejledning/De-syv-saet-af-obligatoriske-aabne-standarder
EL	Ministerial Decree YAII. Ф.40.4/1/989 on 10 th April 2012 obliges all public sectors (all sectors that receive state funds) to respect the WCAG 2.0 on the development of their websites of at least priority AA. (Validation Framework for delivery of e-Government services) [Relevant supra-national provisions that apply include: Ratification of UN Convention for People with Disabilities and its optional protocol with the law on May 2012. As a reminder, there are special provisions on accessible ICT for people with disabilities in the articles 9 and 21. Article 16 of the EC Regulation 1083/2006 that requires all actions that are funded through structural funds to ensure equal access to all and especially to people with disabilities.]	http://et.diavgeia.gov.gr/f/min-reform- egov/ada/%CE%924%CE%A9%CE%96%CE%A7- %CE%92%CE%92%CE%98
ES	Royal Decree 1494/2007 of 12 November, approving the Regulation on the basic conditions for access of disabled people to the technologies, products and services related to the information society and media. This imposes legislative obligations to public websites that cover accessibility for disabled people in accordance with UNE 139803/2004 (priority 2): the Spanish official norm that includes WCAG level AA. After publication of WCAG 2.0, UNE 139803/2012 became the official standard revoking the UNE 139803/2004 norm.	http://www.boe.es/buscar/doc.php?id=BOE-A-2007-19968 Norma UNE 139803/2004: http://www.tawdis.net/recursos/downloads/UNE 139803.pdf Norma UNE 139803/2012: http://www.aenor.es/aenor/normas/normas/fichanorma.asp?tipo=N&codigo=N0049614
EE	In Estonia, there are no separate policy instruments that would directly address and regulate the access of websites for people with disabilities in particular. Such measures are incorporated into a broader legislative context. The main obligations in terms of the overall accessibility of public information are outlined in the Public Information Act (RT I, 22.03.2011, 10). In addition, there are some framework documents and strategies that make reference to granting accessibility to people with special needs. § 1 of the Public Information Act says: The purpose of this Act is to ensure that the public and every person has the opportunity to access information intended for public use, based on the principles of a democratic and social rule of law and an open society /-/. § 32 of the same act sets requirements for maintenance of websites by state and local government agencies according to which (1) An agency which maintains a website shall: 1) inform the public of the opportunity to access the website by disclosing data communication addresses and changes thereto; /_/ 4) promptly apply measures in order to remove any technical problems which	Public Information Act (RT I, 22.03.2011, 10) Url: http://www.legaltext.ee/et/andmebaas/tekst.asp?loc=text&dok=X40095K5&keel=en&pg=1&ptyyp=RT&tyyp=X&query=Avaliku+teabe+seadus Estonian Ministry of Economic Affairs and Communications Interoperability of the State Information System (Endorsed with the Directive of the Minister of Economic Affairs and Communications 11-0377, 22.12.2011) Framework Version 3.0, 2011. Url:

	Obligations in relation to public web site accessibility	Reference
	hinder access to the website; /_ (3) It shall be possible to access directly the websites of agencies administered by the State Chancellery, ministries or county governments from the websites of the State Chancellery, ministries or county governments. The Framework of Interoperability of the State Information System (2011), which objective is to make the operation of the Estonian public sector more effective declares inclusion and accessibility as one of its underlying principles. According to the principle "IT must create for citizens and businesses equal opportunities with the help of open and inclusive services that are available without restrictions. /- / Citizens MUST have the right and opportunity to participate in making decisions, concerning them and society, through electronic environments. /- / People with special needs and the elderly SHOULD be guaranteed access to services on the same level with other population groups." It also requires the interfaces of information systems to comply with WCAG 2.0 standards, which guarantees their usability through Estonian language speech synthesisers. Interoperability of the State Information System Framework Version 1.0. Framework of Websites (2012) declares that "A website MUST conform to WCAG 2.0 AA level requirements." One of the principles for the development of Estonian information society of the Estonian Information Society Strategy 2013 is that "The information society is created for all Estonian residents, whereas particular attention is paid to the integration of social groups with special needs // It also set a target according to which public sector websites had to be brought into compliance with WAI quality criteria so as to ensure their accessibility for all by 2010. Everyone's Rights in e-State The e-State Charter by the National Audit Office of Estonia enlists 10 rights that people should have when communicating with administrative agencies in an e-state. It also includes assessment criteria for every right listed. According to the Charter	http://www.riso.ee/et/koosvoime/interoperability-framework.odt Estonian Ministry of Economic Affairs and Communications Interoperability of the State Information System (Endorsed with the Directive of the Minister of Economic Affairs and Communications 120106, 19.03.2012) Framework Version 1.0. Framework of Websites. Url: http://www.riso.ee/et/koosvoime/web-framework.odt Estonian Ministry of Economic Affairs and Communications Estonian Information Society Strategy 2013 (2007-2013) (entered into force 1.01.2007) Url: http://www.riso.ee/en/system/files/Estonian%2 0 Information%20Society%20Strategy%202013.pd f Everyone's Rights in e-State The e-State Charter (by the National Audit Office of Estonia/Riigikontroll, (2008) http://www.riigikontroll.ee/LinkClick.aspx?filetic ket= JWsv1feTii8%3d&tabid=113∣=760&languag e=en-US&forcedownload=true
FI	There is no law which specifically requires web site accessibility, per se. However, Section 6 of the Finish Constitution (731/1999) prohibits discrimination on the basis of disability. The Advisory Committee on Information Management in Public Administration, JUHTA, has been set up at the Ministry of Finance to promote cooperation in information management between the State and the municipalities. Its mandate has been strengthened by a new law (Laki julkisen tietohallinnon ohjauksesta 634/2011). The Committee plans cooperation in information management, makes reports and studies, and draws up recommendations for the public administration (JHS recommendations). Recommendation JHS 129 promotes usability and accessibility. The 'Act on Electronic Services and Communication in the Public Sector' (13/2003) stipulates that agencies will seek to use equipment and software that is in large part technically compatible with assistive technology tools, and from a customer standpoint, as user-friendly as possible. This legislation requires authorities to aim and offer web services so as to be used with the most widespread assistive technology tools.	http://www.vm.fi/vm/en/16 ict/053 juhta/inde x.jsp
FR	The Law for Equal Rights and Opportunities, Participation and Citizenship of People with Disabilities (Law n° 2005-102 of 11 February 2005), Article 47, makes accessibility of all public online services mandatory. Public digital communication services (public	Law: n° 2005-102 du 11 février 2005 pour l'égalité des droits et des chances, la participation et la citoyenneté des personnes

	Obligations in relation to public web site accessibility	Reference
	websites in particular, but also phone and TV services) must be accessible to people with disabilities according to international standards. A decree was published in 2009. It refers to a technical reference document (RGAA) that specifies requirements for Public digital communication services. This document is based on WCAG2.0	handicapées – consolidated 28 April 2012 http://www.legifrance.gouv.fr/affichTexte.do?ci dTexte=JORFTEXT000000809647&dateTexte= Decree: JORF n°0113 du 16 mai 2009 page 8245 http://www.legifrance.gouv.fr/affichTexte.do;jse ssionid=?cidTexte=JORFTEXT000020616980&dat eTexte=&oldAction=rechJO&categorieLien=id Reference document: Référentiel Général d'Accessibilité pour les Administrations (RGAA) http://references.modernisation.gouv.fr/rgaa- accessibilite/
ни	The 2009. LX. law about electronic public-utility service specifies that in the case of those services where the nature of matter allows it, the accessibility of disabled people have to be assured. The 225/2009. (X. 14.) governmental regulation prescribes the general rules of electronic public-utility service, accentuating that it have to be assured the accessibility of electronic public-utility service. The W3C Office of Hungarian Academy of Science have been translated the Guidelines, and now is promoting its wide-ranging application. However the recommendations are not strengthen officially (in the law) in Hungary. Most recently, the Government Decree 1056/2012 on the Action Plan for 2012-2013 of the Implementation of the New National Disability Program says that it have to establish the e-accessibility of public web pages. The deadline is 30 September 2013.	Hungarian translation of WCAG 2.0.: http://w3c.hu/forditasok/WCAG20/
IE	The Disability Act 2005 and the Code of Practice prepared by the National Disability Authority. Section 28 (2) of Disability Act 2005: Where a public body communicates in electronic form with one or more persons, the head of the body shall ensure that, as far as practicable, the contents of the communication are accessible to persons with a visual impairment to whom adaptive technology is available. Code of Practice prepared by the National Disability Authority: A public body can achieve this by: 1) establishing what is entailed in making electronic communications accessible and understanding the needs of those using adaptive technology; 2) reviewing existing practices for electronic communications in terms of accessibility against relevant guidelines and standards, e.g.: NDA IT Accessibility Guidelines for all computers, information kiosks, interactive services with an ICT front end; e-mail and other application software, and other Public Access Terminals used by the public; Double A level conformance with the Web Accessibility Initiative's (WAI) Web Content Accessibility Guidelines (WCAG). 3) planning to ensure that all such communications are produced, as far as practicable, in a format that is accessible to persons with visual impairment using adaptive technology such as, e.g. screen readers or speaking browsers, etc., as appropriate. The Code of Practice is a target for improvement and good practice only.	http://www.oireachtas.ie/viewdoc.asp?DocID=4 338 http://www.nda.ie/cntmgmtnew.nsf/0/3DB134 DF72E1846A8025710F0040BF3D?OpenDocume nt

	Obligations in relation to public web site accessibility	Reference
	 The Italian government has always been aware of the importance of the Web as a means of communication. The Italian Presidency of the Council of Ministers was in fact the first government to become officially a member of the World Wide Web Consortium (W3C). In order to grant everyone access to the benefits of the upcoming Information Society, following the works of the Web Accessibility Initiative (WAI), many recommendations and directives addressing e-accessibility were produced in Italy since 2001: March 2001 - Directive n. 3/2001 by the Ministry of Civil Service: "Guidelines for the organization, the usability and the accessibility of Public Administration Web Sites". September 2001 - Circular Letter by the Authority for Informatics in Public Administration: "Criteria and instruments to improve the accessibility of Web Sites and computer programs for disabled people". May 2002 - Directive by the Presidency of the Council of Ministers: "Information on the use of the '.gov.it' domain". The Italian legislation about accessibility has been based on the Stanca Act (Law n. 4, January 9, 2004) (Provisions to support the access to information technologies for the disabled) and on the technical decree and regulation. 	http://www.pubbliaccesso.gov.it/english/index.htm http://www.accessibile.gov.it/
IT	 Decree of the President of the Republic, March 1st 2005, No. 75 The most important accomplishment of this decree is the introduction the key concept of usability. Web sites must not only be barrier-free but also simple, effective, efficient and they must satisfy the user's needs. Ministerial Decree, July 8 2005 which contains the technical Web accessibility requirements, the methodology for the evaluation of Web sites and the requirements for accessible hardware and software. More recently, the Decree no. 179 of 18/10/2012 (converted into Law 221 of 17/12/2012) extended the Stanca Law to all subjects who receive government grants or subsidies for the provision of information services via the Internet. It introduced new obligations for public administrations and gave to the Italian digital Agency the task to control and update the technical rules according to the international standards of reference. Article 9 of the Decree no. 179 talks about digital inclusion. It obliges public authorities to publish on its websites the annual goals of accessibility. It also assigns to the Italian Digital Agency the task of monitoring and intervention on providers of public services. The Italian Digital Agency with the note 61/2013 has defined in detail the obligations of Public Administrations, providing a questionnaire that the Public Administrations can use to perform a self-assessment on the state of adaptation of its web sites and web services to the legislation on accessibility. 	
LT	The main legislation instrument which describes the obligation to have a web page accessible for people with disabilities is "Bendrųjų reikalavimų valstybės ir savivaldybių institucijų ir įstaigų interneto svetainėms apra@as" (Eng. General Requirements for the Websites of the State and Municipal Institutions and Agencies), originally from 2003. It states that public websites must be accessible to disabled individuals (section 7). In order to do that, websites must be designed according to the recommendations described by the Information Society Development Committee under the Ministry of Transport and Communications — "Nejgaliesiems pritaikytų internet tinklapių kūrimo ir testavimo metodinės rekomendacijos" (Eng. Methodological Recommendations for the Creating and Testing of the Websites adapted for the Disabled), originally from 2004. This document suggests following the technical requirements described in Web Content Accessibility Guidelines (WCAG) 2.0 (www.w3.org/TR/WCAG20/). It also suggests the tools that can be used in order to test the website for the accessibility (described at www.w3.org/WAI/ER/tools/) and technical requirements for testing (described at www.w3.org/TR/WCAG20-TECHS/).	Bendrųjų reikalavimų valstybės ir savivaldybių institucijų ir įstaigų interneto svetainėms aprašas (Eng. General Requirements for the Websites of the State and Municipal Institutions and Agencies) http://www3.lrs.lt/pls/inter3/dokpaieska.showd oc 1?p id=415705 [link2] Neįgaliesiems pritaikytų interneto tinklapių kūrimo ir testavimo metodinės rekomendacijos (Eng. Methodological Recommendations for the Creating and Testing of the Websites adapted for the Disabled)

	Obligations in relation to public web site accessibility	Reference
	The provided publication dates are the original (first) publication dates. There were several revisions and amendments to these documents later on.	http://www.ivpk.lt/uploads/wcag/isakymas.pdf
LU	The law of 2009 creates an agency dealing with all matters of IT (incl. websites) for the public sector in Luxembourg. The CTIE also develops a "normalisation" standard for the websites of the government. The Luxembourg RENOW quality standard is applied for public websites, and includes accessibility requirements. It adopts the WCAG 2.0 standards directly, and requires level AA. It is applicable to all governmental websites or sites at least 50% owned or funded by public funds. The "Plan Directeur" is a strategic document that declares the objective of revising current accessibility criteria for public websites in the period until 2014.	Loi du 20 avril 2009 portant création du Centre des technologies de l'information de l'Etat (CTIE), available at http://www.legilux.public.lu/leg/a/archives/200 9/0081/a081.pdf#page=2 Plan Directeur De La Mise En Œuvre Des Technologies De L'Information Au Sein De L'État 2010-2014 http://www.fonction-publique.public.lu/fr/publications/documents-strategiques/plan-technologies-information.pdf http://www.renow.public.lu/fr/renow-en-bref/champ-application/index.html
LV	Regulations of Cabinet of Ministers No 171 "Order how State Institutions insert information in Internet" determine the structure of website, its content, technical and security requirements as well as the order of domain establishment. Regulations require the possibility to send the letter to State Institution electronically. If for the service provision an application of certain form is necessary this application should be available electronically with a possibility to print it out from the website or to fill in this application in the website. The explanations how the application should be correctly filled in also must be available through the website. If the applications can be filled in several languages the explanations also should be in these languages. Regulations of Cabinet of Ministers No 536 "Changes in Regulations of Cabinet of Ministers No 171 from 06.03.2007 (Order how State Institutions insert information in Internet)" state that Regulations No 171 is mandatory also for municipalities. In addition these regulations (No. 536) widen the requirements with regard to publication of information about public procurement. Website must provide the possibility for user to choose the size of letters. Website must provide easy read part for people with learning disabilities.	Kārtība, kādā valsts institūcijas ievieto informāciju internetā (Order how state institutions must present information into internet) http://www.likumi.lv/doc.php?id=56301&from=off Grozījumi Ministru kabineta 2007.gada 6.marta noteikumos Nr.171 "Kārtība, kādā iestādes ievieto informāciju internetā" (Changes in Regulations of Cabinet of Ministers No 171 "Order how state institutions must present information into internet" http://www.likumi.lv/doc.php?id=212205
МТ	The Equal Opportunities (Persons with Disability) Act of 2000 (Chapter 413, Article 13) stipulates that no person with a disability shall be denied access to the services of any local or other public authority. It is therefore the main legislative tool in relation to public website accessibility. The Foundation for Information Technology Accessibility (FITA) is the principal advocate and coordinator for ICT accessibility in Malta. FITA advises and acts on behalf of the Kummissjoni Nazzjonali Persuni b'Diżabilita' (KNPD) on matters of ICT accessibility. Furthermore, the Government of Malta has adopted the Website Accessibility Standard v4.0 of 3 June 2011 (This version replaces the Website Standard (CIMU S 0051) Version 3.1, dated 15 April 2005). This document, which is part of the GMICT Policy Framework, seeks to ensure that all new public sector websites are accessible and in line with equal opportunity legislation. The <i>Government of Malta Website Policy</i> is an umbrella policy that seeks to ensure integrity, consistency, accessibility and security of Public Sector websites. The Government of Malta Website Directive defines basic requirements that Public Sector websites are expected to ensure. The Government of Malta Exemptions Policy (GMICT P 0048) shall apply in cases where it may not be	The Equal Opportunities (Persons with Disability) Act 2000 http://www.justiceservices.gov.mt/ DownloadDocument.aspx?app=lom&itemid=887 9&l=1 Government of Malta Web Content Accessibility Guidelines v4.0 https://www.mita.gov.mt/MediaCenter/PDFs/1 GMICT S 0051- 3 Website Accessibility Standard v4.0.pdf Web Content Accessibility Guidelines http://www.w3.org/TR/WCAG20 Policy documents that are also of relevance: Website Policy GMICT P 0051

	Obligations in relation to public web site accessibility	Reference
	technically feasible or cost-effective to comply with a particular (GMICT) policy requirement.	https://www.mita.gov.mt/MediaCenter/PDFs/1 GMICT P 0051 Website v1.0.pdf Website Directive GMICT D 0051 https://www.mita.gov.mt/MediaCenter/PDFs/1 GMICT D 0051 Website v1.0.pdf Exemptions Policy GMICT P 0048. http://www.ictpolicies.gov.mt
NL	At a general level, equal treatment of people with disabilities is covered by the constitution and anti-discrimination laws. Specifically, web accessibility is grounded in regulations since 2006, the Ministerial Decree BesluitKwaliteitRijksoverheidswebsites 2006 (specifying National Web Quality Guidelines, <i>Webrichtlijnen</i>). Implementation of web accessibility standards for governmental sites has been covered in the national e-government implementation plans, NUP (2009), i-Nup (2011).	For Besluit: http://www.webrichtlijnen.nl/english For National Implementation plans: http://e- overheid.nl/images/stories/English/10093%20en gels%20factsheet%20nup%20- %20november%202009.pdf
	The main legislation is now the DTL (Discrimination and accessibility) Law 2008-06-20 # 42. This anti discrimination law says that new public web sites (the main solution) are to be accessible by July 1, 2011, but only 12 months after the government has made the specifications on how to meet the regulation (the specifications are not yet ready). For existing public web sites, the deadline is January 1, 2021. Although the obligations for accessibility are described in the Discriminating and Accessibility Law of 2009, regulation concerning the paragraph for accessible ICT was adopted only in July 2013 (see further below).	http://www.lovdata.no/all/hl-20080620- 042.html http://www.lovdata.no/cgi- wift/ldles?ltdoc=/for/ff-20130621-0732.html#1
	There will be a supervision agency on accessibility, but it is still unclear what role this agency will have. As there will be a one-year latency period, the supervision will not be able to start until sometime during 2014 at the earliest. Some stages in the evolution of web accessibility policy:	
	"Manneråkutvalget" in 2001, the NOU 2001:22 From user to citizen had a chapter on ICT and access to information. This was the first paper suggesting a Norwegian law on accessibility including the Internet.	
NO	• Proposition 40 (2002-2003) Breaking down barriers, the strategy for objectives and measures in the policy for persons with disabilities. The aim was to invest in education / employment, accessibility and services.	
	• Soria Moria 1 (government declaration Stoltenberg Government) of 2005, introduction of anti-discrimination and an action plan which included ICT and accessibility, aiming at accessible technology and an ambitious ICT policy in the public sector. All technological development in ICT and media must be based on accessibility according to this document. Soria Moria 2 (the current government) was slightly looser but reiterated the promise on general accessibility.	
	• "eNorway 2009 - the digital leap" from 2005 had the goal that 80% of public websites must meet the quality criteria for accessibility by the end of 2007 - based on WCAG guidelines. In 2004 only 7% of the public sector websites met these criteria (source: Documentation Center)	
	• NOU 2005:8 equality and accessibility (Sysendalen Committee) proposed an anti-discrimination and accessibility legislation, which was the basis for the law we received in 2009. This was a huge study on existing legislation in the Nordic countries, Europe and the relevant parts of the world with the conclusion that a Norwegian law was needed. There was much discussion on whether ICT (and other elements) should be part of the law.	

Obligations in relation to public web site accessibility	Reference
 Report No. 17 (2006-2007) from 2007, "An information society for all" had a chapter on accessibility and ICT. It said that "The Government's objective is that all technological development within ICT and media shall be based on the principle of universal design. This will give all users added value using technology. The public sector has a clear responsibility to ensure that the various ICT and online services should not lead to new and extensive barriers for those with special needs. "Action: Follow up Sysendalen Commission's report NOU 2005:8 by impact study to have ICT as part of an Anti-Discrimination and Accessibility Act, developing guidelines and indicators required accessibility in ICT, etc. All redevelopment or development of government websites should be encouraging the use of WCAG criteria. New action plan for increased accessibility should be developed, where ICT should play a central role, and it should stimulate the development of solutions that give greater access to ICT. Proposition No. 44 "On the Act prohibiting discrimination on grounds of disability (Discrimination and Accessibility Act)" from 2008 was the final lead up to the current law came into force 2009-01-01. In this proposition standardization plays a central role as a tool to achieve universal design, and it is found that if a company accused of discrimination in terms of lack of accessibility has followed a standard, discrimination has not taken place. (This is the reason why Norway have the standards SN / K 520 and SN / K 546 today) It states: "The bill applies ICT solutions aimed at the general public. The bill defines thus the ICT solutions that target the individual. Consumables, such as mobile phones or television, is basically aimed at the general public as such, but will be there if they are deployed in the public domain for use by the public, for example in libraries or in public or private service providers. "That is why we recommended that sectoral legislation (building law, education law, transportation	
Measures IK1 Main Project to clarify the universal design of ICT. The measure includes mapping of what is to be procured, who is responsible, the organization of supervision, preparation of regulations, information material etc. The measure is linked to the Anti-Discrimination and Accessibility Act. It is allocated 5.5 million for the implementation of the measure. Implementation: Since 2009	
Responsible: Ministry of Government Administration and Reform Measures IKT2 Universal design on the internet. The newly created Directorate DIFI should be pushing for increased quality and availability of information and services on the Internet.	
Implementation: Since 2009 Responsible: Ministry of Government Administration and Reform Measures IKT3 Evaluation of digital learning platforms Ensure that digital learning platforms in schools meet the needs of users with disabilities.	
Implementation: 2009	

	Obligations in relation to public web site accessibility	Reference
	Responsible: Ministry of Education	
	Measures IKT4 Improved accessibility for the deaf and hard of hearing on TV and in the cinema.	
	It will be considered whether there should be general requirement for captioning and sign language interpretation on the television area. On 1 January 2013, amendments were made to the Broadcasting Act. Under the new amendments to Norwegian texting all pre-produced programs and all live programs broadcast from 1800-2300 when it is practically and technically feasible. All commercial channels that have more than five percent of the total viewing figures will also subtitle pre-recorded programs broadcast from 1800-2300 and live programs at the same time when it is practically and technically feasible.	
	Grants for subtitling of Norwegian films in theatres for the hearing impaired is taken over by FILM & KINO from 2009. Over the next few years, the digitization of cinemas will probably make subtitling far cheaper and the distribution of subtitled movies easier. In the digital future it is discussed weather copies of Norwegian films that receive subsidies will include an opportunity for subtitles. The process of transition to digital cinema will take place in the period 2009-2014. Right now discussions are held on subtitling all Norwegian films with production subsidy.	
	Implementation: 2009-2014	
	Responsible: Ministry of Culture and Church Affairs	
	Measures IKT5 Development of technology for speech recognition	
	The opportunity for the development of speech recognition technology in Norwegian is under investigation.	
	Implementation: 2009-2013	
	Responsible: Ministry of Culture and Church Affairs	
	• 2009, the Anti-Discrimination and Accessibility Act, which included demands for accessibility on ICT, but it was specified that this applied when a statute would exist from 2011-07-01 onwards. From this date all new ICT should be universally designed while existing ICT should be accessible from 2021-01-01 (after the normal 10-year rule). Regulation was adopted in July 2013 following a public hearing that ended in February 2013.	
PL	The law which directly imposes the obligation to provide public web site accessibility is the Act on the computerisation of the operations of the entities performing public tasks, adopted on 17 February 2005. On the basis of the provision (introduced on 12 February 2010) concerning the necessity to ensure that information resources be accessible to disabled users by specifying the minimum requirements for ICT systems (Art. 18), the Council of Ministers issued a Regulation on 12 April 2012 concerning the National Interoperability Framework, the minimum requirements for public registers, the exchange of information in electronic form, and the minimum requirements for ICT systems, which, among other things, specifies the ways to provide disabled people with access to public entities' information resources. This Regulation stipulates for instance in Art. 19 that "It must be ensured that the ICT system of an entity performing public tasks, intended to present information resources, is in compliance with the requirements of the Web Content Accessibility Guidelines (WCAG 2.0), including level AA". The specific requirements are listed in	The Act of 17 February 2005 on the computerisation of the operations of the entities performing public tasks http://isap.sejm.gov.pl/DetailsServlet?id=WDU20050640565 The Regulation of the Council of Ministers of 12 April 2012 on the National Interoperability Framework, the minimum requirements for public registers, the exchange of information in electronic form, and the minimum requirements for ICT systems: http://isap.sejm.gov.pl/DetailsServlet?id=WDU2

	Obligations in relation to public web site accessibility	Reference
	the Appendix No. 4 to the Regulation. In addition it is worth to mention that in 2011 the State Fund for Rehabilitation of Disabled Persons released an extensive and detailed publication about web accessibility: "Accessibility of web services –the manual about good practices in web design accessible for people with different types of disability" (Dostępność serwisów internetowych – podręcznik na temat dobrych rozwiązań w projektowaniu dostępnych serwisów internetowych dla osób z różnymi rodzajami niepełnosprawności)	O120000526 State Fund for Rehabilitation of Disabled Persons publication: http://www.pfron.org.pl/ftp/publikacje/Podrecz nik_Dostepnosc.pdf, access: 05.08.2012
	There have been various Resolutions of relevance for web accessibility since as far back as 1996: Resolution of the Council of Ministers Nº 96/99 This resolution established the 'National initiative for citizens with special needs in the Information Society', as a factor of social	http://www.acessibilidade.gov.pt/acesso/res969 9 en.htm
	integration and improvement of quality of life. In addition, it also established the Framework Document for the National Initiative for Citizens with Special Needs in the Information Society, which, in turn, intended to create an appropriate legislative framework for the integration of people with special needs in the information society.	http://www.acessibilidade.gov.pt/acesso/res979 9_en.htm
	Resolution of the Council of Ministers Nº 97/99 The resolution's purpose was to ensure that the benefits of the information society are accessible to all citizens, independently of their individual characteristics. The resolution states that public central administration websites should allow or facilitate access by	http://dre.pt/pdf1sdip/2003/08/185B00/489549 05.pdf
	citizens with special needs. It also states that websites that are accessible should use a clearly recognisable symbol. As well, it recognizes that accessibility should address, as a minimum requirement, the relevant information for understanding and searching the website's content. Websites created after the date on which the present Legislative Act takes effect must be immediately compliant with accessibility requirements. In fact, these measures are included in the implementation of the National Initiative established in the Resolution nº 96/99.	http://www.inst-informatica.pt/legislacao-e-directivas/sociedade-da-informacao-1/63946397.pdf http://www.acessibilidade.gov.pt/legis/rcm_120
PT	Resolution of the Council of Ministers № 110/2003	_06_paipdi.pdf
	The National Programme for the Participation of Citizens with Special Needs in the Information Society was an active policy promoting:	http://www.acessibilidade.gov.pt/legis/rcm_155 _07.htm
	a) full access to the information society by citizens with special needs;b) the benefits that the information society can provide for citizens' quality of life.c) the development of scientific and technological knowledge.	http://dre.pt/pdf1sdip/2007/01/01200/0366037 7.pdf
	The National Programme for the Inclusion of Disabled People in the Information Society, in Action 1.2 of this resolution, established a mechanism for monitoring and receiving suggestions and claims concerning public websites accessibility and general ICTs used in public services.	http://www.esop.pt/uploads/2011/10/OpenStandardsPT.pdf
	Ordinance № 1354/2004	http://dre.pt/pdf1sdip/2012/11/21600/0646006
	Created the Digital Inclusion funding line – Line of financial support to the National Programme for the Participation of Citizens with Special Needs in the Information Society.	465.pdf
	This legislation supports initiatives aiming at the participation in the labour market of people with disabilities, in particular through labour information systems, adaptation of software and enhancement of telework initiatives such as the adaption of telematic platforms for citizens with disabilities.	

	Obligations in relation to public web site accessibility	Reference
	It also stimulates the cooperation between public and private sectors and end-users in the development of technological advanced products, adapted to citizens with special needs.	
	Resolution of the Council of Ministers № 120/2006	
	Strategy 1.2 "Promoting access to communication and information" placed in the 1 st section on "Accessibility and information" specifies, aiming at ensuring the right of equal opportunities, policies and actions related to accessibility , communication, culture, sport and leisure activities as well as awareness and information.	
	In particular, this resolution establishes the need to ensure, in coordination with UMIC, the application of specific rules for web pages accessibility, especially in Public administration web portals.	
	In addition, the resolution states the creation of a commission to promote Braille recognition and validation, as well as the creation of a sign language commission in favour of a better recognition and functioning of the Portuguese sign language.	
	Resolution of the Council of Ministers Nº 155/2007 This resolution establishes that public administration websites should ensure the level "A" of accessibility of WCAG1.0 and W3C and the ones that allow the performance of transactions should be level "AA".	
	Resolution of the Council of Ministers № 9/2007	
	This resolution establishes the National Plan for the Promotion of Accessibility 2007-2015. Action 2.5.b) "Electronic access to public services" intends to ensure accessibility for citizens with disabilities (namely people with sight and hearing problems). The organizations responsible for the execution of this action include several ministries (Ministry of Justice, Ministry of Economy and Innovation, and the National Bureau for the Rehabilitation and Integration of Persons with Disabilities - SNRIPD). According the RCM document, the deadline for the execution of this measure was February 2008.	
	Law Nº 36/2011 of June 21st and Resolution of the Council of Ministers Nº 91/2012 of November 8th	
	The Law "sets the adoption of open standards in the computer systems of the State" and the Resolution ("National Regulation of Digital Interoperability") explicitly mentions to WCAG 2.0 in these terms:	
	-Internet sites that deliver only information (definition of RCM 155/2007) must to comply (is mandatory) with WCAG 2.0 level 'A' since 8 February 2013. Is recommended to achieve 'AA' or 'AAA'.	
	- Internet sites that deliver online services (definition of RCM 155/2007) must to comply (is mandatory) with WCAG 2.0 level 'AA' since 8 February 2013. Is recommended to achieve 'AAA'.	
RO	Based on the information provided, it seems that is not any direct legislation, regulation or other form of obligation in relation to accessibility of public websites	
SE	All authorities under the Swedish government are obliged to follow an Ordinance SFS 2001:525. It states in 2§: The authorities shall in particular work to ensure that their premises, operations and information are accessible for people with disability. The Ordinance states that the authorities shall, when there is cause to do so, consult with the Swedish Agency for Disability Policy	A translation of the ordinance in page 7. http://www.handisam.se/Filer/English/Riv%20Hindren%20English .pdf
SE	Coordination on the structuring of initiatives under this Ordinance. For implementation of the Ordinance, the Swedish Agency for Disability Policy Coordination has drawn up guidelines "Break the barriers" which in the latest version refers to the e-Government Delegation. They have official guidelines for web development with the recommendation to follow WCAG 2.0 AA level.	http://www.webbriktlinjer.se/r/1-utga-fran-wcag-2-0-niva-aa/

	Obligations in relation to public web site accessibility	Reference
	Act on the Equalization of Opportunities for Disabled Persons (from 2010) draws attention on access to information, communication and other services and emergency assistance, but the measures in regard to accessibility of websites are only indirect.	Act on the Equalization of Opportunities for Disabled Persons (http://www.uradni-list.si/1/content?id=100876)
SI	Strategy of Work and Development of the Public Administration in Slovenia on World Wide Web was adopted by the Slovene Government in 2004. The Strategy defines that all information and services of Public Administration on the Internet should be equally accessible to all citizens. One of its goals is to ensure that all public administration web sites work well for all users (including disabled people) and that they can be easily accessed. It recommends that Slovene public administration bodies should follow the guidelines and standards on accessibility of websites for people with disabilities. Therefore Public Administration, in providing content, information and services on the Internet, strictly follows the guidelines and standards prescribed by the Initiative for general accessibility of web content - WAI (Web Accessibility Initiative). The Ministry of Public Administration is responsible for implementation and monitoring the Strategy of Work and Development of the Public Administration in Slovenia on World Wide Web. One of 12 goals that will be reached under Action Plan for Disabled Persons 2007-2013 is to ensure disabled people have access to the built environment, transportation, information and communications. Under that goal, provision 3.9 states that information and other services of the government on the World Wide Web should be equally accessible to all citizens. Provision 3.11 promotes the usage of ICT for better integration and communication of disabled and functionally impaired people in the field of e-accessibility, including the use of the internet, hardware and software. This Plan has been adopted by the Slovene Government at the end of year 2006. The Ministry of Labour, Family and Social Affairs is responsible for monitoring. A study on e-accessibility of websites of national administrations prepared by the European Public Administration Network (EPAN) and the United Kingdom (during its EU Presidency in 2005) showed that only 3% of the Member States met the W3C WAI level A standards of access	Strategy of Work and Development of the Public Administration in Slovenia on World Wide Web (http://mid.gov.si/mid/mid.nsf/V/K6C08D4EE25 C03327C1256F0300203BB9/\$file/Strategija sple tnega nastopa koncna 20040902.pdf) Action Plan for Disabled Persons 2007-2013 (http://www.mddsz.gov.si/fileadmin/mddsz.gov.si/pageuploads/dokumenti pdf/api 07 13.pdf) Report on the implementation of Action Plan for Disabled Persons 2007-2013 – Intermediate report (2008) (http://www.mddsz.gov.si/fileadmin/mddsz.gov.si/pageuploads/dokumenti pdf/api 07 13 por oc08.pdf) Report on the implementation of Action Plan for Disabled Persons 2007-2013 – Final report (2011) (http://www.google.si/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&ved=0CD4QFjAF&url=http %3A%2F%2Fwww.irssv.si%2Findex.php%3Foption%3Dcom docman%26task%3Ddoc download% 26gid%3D219%26Itemid%3D&ei=j1JTUJmOHqOm4gTm2YHwCQ&usg=AFQjCNHxOtMghgliRx Fq 08wPqmll18a3g&cad=rja)
SK	Legislation Acts: Legislation Act Nr. 570/2009 which revises Legislation Act Nr. 275/2006 about Information Systems of Public Administration (effective from 1.2.2010).	Legislation Act about Information Systems of Public Administration: http://www.informatizacia.sk/ext_dok-
J.K	The law regulates: - rights and duties of relevant entities in the area of creation, operation, usage and development of public administration information systems,	zakon 275-2006 novela 570-2009/6468c Ministry Regulation about Standards for Information Systems of Public Administration: http://www.informatizacia.sk/ext dok-

	Obligations in relation to public web site accessibility	Reference
	- basic conditions for provision of integration and security of public administration information systems,	<u>vynos a prilohy 2010-312/7431c</u>
	- administration and operation of the central portal,	Methodic instruction related to this ministry regulation:
	- procedures of issuing electronic transcriptions of data from the public administration information systems, and outputs from the information systems of public administration.	http://www.informatizacia.sk/standardy-is- vs/596s
	This revised Act states that listed mandatory organizations have an obligation to ensure that information systems are in line with Public Administration Information Systems Standards (including eAccessability).	
	Ministry Regulations:	
	Ministry Regulation Nr. MF/312/2010 about Standards for Information Systems of Public Administration (connected to Act. 275/2006) (effective from 15.7.2010)	
	Methodical instruction related to this ministry regulation (Nr. MF/312/2010).	
	The ministry regulation and methodical instruction describe the standards, which are obliged to be followed, in more detail – it provides a list of particular rules based on WCAG2.0, which must be followed.	
	1. Accessibility of public websites is now covered by the Equality Act 2010 ('the Act') which came into force on the 1 st October	1. The Equality Act 2010
	2010. It replaced most of the Disability Discrimination Act 1995 (as amended) with overarching provisions aimed at simplifying and consolidating all previous UK anti-discrimination legislation and regulations and appears to apply to most public and private organisations that have contact with and/or provide services to the public. The Act identifies eight protected characteristics, including disability and makes it unlawful to discriminate either directly or indirectly against persons because of a protected characteristic.	http://www.legislation.gov.uk/ukpga/2010/15/contents 2. The Equality Act 2010 Statutory Code of Practice (Services, public functions and associations) http://www.equalityhumanrights.com/legal-
	Interpretation of the provisions of the Act is supported by a number of statutory Codes of Practice and non statutory guidance.	and-policy/equality-act/equality-act-codes-of-
	There are general provisions in Part 3 of the Act relating to 'Services and public functions' that make it unlawful for anyone	practice/
	concerned with providing such services to the public (whether in private public and voluntary sectors), to discriminate against a	2 EHRC Guidance for service providers http://www.equalityhumanrights.com/advice-
	person or persons (because of a protected characteristic) in their delivery of those services. The Act also imposes a positive duty (Sections 20 and 29(7)) on the service provider to make reasonable adjustments to ensure that persons with a disability can access	and-guidance/new-equality-act-
UK	services and is 'anticipatory' as it requires service providers to anticipate the need for reasonable adjustments of not just existing,	<u>guidance/equality-act-guidance-downloads/</u>3. Public sector Equality duty guidance :
	but also potential disabled customers.	http://www.homeoffice.gov.uk/publications/eq
	2. There are explicit references to the provision of services via web sites in the Equality Act 2010 Statutory Code of Practice	ualities/equality-act-publications/equality-act-
	(Services, public functions and associations) which contains (11.8) an example of reasonable adjustments in the provision of	guidance/equality-duty 4. UK Cabinet Office web standards and
	information by a local public council via its website. Guidance from the Equality and Human Rights Commission (EHRC) on the Act also explicitly mentions the provision of web and internet services as being covered by the Act.	guidelines
	3. Furthermore, accessibility of public sector websites may also be implicitly covered by the general equality duty imposed by	http://digitalstandards.cabinetoffice.gov.uk/delivering-inclusive-websites/minimum-standard-of-
	Section 149 of the Act which, inter alia requires public authorities to ensure that persons possessing protected characteristics have	accessibility/
	equal opportunities to those who do not. Guidance on the public sector equality duty states it applies to the provision of services. The Equality Duty is supported by specific duties which require public bodies to publish information demonstrating their	coi.gov.uk/documents/guidance/delivering- inclusive-websites.pdf
	compliance with the Equality Duty and to set themselves 'specific measurable equality objectives'	5 e-accessibility Action Plan (updated Oct 2011
	4. For public sector websites there is guidance from the UK Cabinet office on the minimum standard of accessibility of public	and July 2012 progress reports)

	Obligations in relation to public web site accessibility	Reference
	sector websites which, inter alia, requires the minimum standard of accessibility for all public sector websites as WCAG AA and compliance with the WCAG is acceptable at Level Double-A of version 1.0 or the equivalent level in version 2.0. These minimum requirements are also referenced in guidelines issued by the UK Central Office of Information ('COI') (TG102 - last updated in October 2009). Although the COI closed in March 2012, these guidelines do not appear to have been replaced. 5. In addition to the legislation, generic government policy on web accessibility is set out in the e-accessibility Action Plan, developed by the e-accessibility Forum, a coalition of UK Government, charity and private sector organisations, published by the Department of Culture Media and Sport Culture ('DCMS') and is described as being the Government 'action plan to support the improvement of public websites, IT equipment and online content to suit the needs of disabled people' and section 3.1 deals with the development and maintenance of eAcessibility of public sector on line services.	http://www.culture.gov.uk/publications/8375.as px
AU	The Online and Communications Council (OCC) endorsed WCAG 2.0, requiring all Australian, state and territory government websites to conform to the guidelines to meet WCAG 2.0 Level A by December 2012. The Secretaries' ICT Governance Board (SIGB) extended the requirement for Australian Government (<i>Financial Management and Accountability Act 1997</i>) (FMA Act) agencies to conform to WCAG 2.0 Level AA standard by December 2014. Under the Disability Discrimination Act 1992 agencies must ensure that people with disabilities have the same fundamental rights to access information and services as others in the community. Furthermore, in 2008, the Australian Government ratified the <i>UN Convention on the Rights of Persons with Disabilities</i> (UNCRPD), which specifically recognises (under Articles 9 and 21) that access to information, communications and services, including the internet, is a human right.	Web Accessibility National Transition Strategy (NTS) http://www.finance.gov.au/publications/wcag- 2-implementation/index.html http://webguide.gov.au/accessibility- usability/accessibility/ World Wide Web Access: Disability Discrimination Act Advisory Notes — recommends WCAG 2.0 for all sectors http://humanrights.gov.au/disability rights/stan dards/www 3/www 3.html A brief guide to the Disability Discrimination Act — explains the DDA (1992) http://humanrights.gov.au/disability rights/dda guide/dda guide.htm
CA	The Standard on Web Accessibility is a regulation directed at Web sites that are developed for the federal government. It does not apply outside the federal government. It applies to all Web pages that are public facing; the department is accountable for; and are provided through Government of Canada Web sites. It requires "ensuring each Web page meets all five WCAG 2.0 conformance requirements. Conformance requirement 1 (Conformance Level) defines the levels of conformance. It can only be met if the following are true: level AA conformance is met in full; common failures are avoided for all applicable success criteria; sufficient techniques are used to meet all applicable success criteria; sufficient techniques specific to each technology (that is relied upon) are used where applicable. Conformance requirement 2 (Full pages) defines what needs to be assessed for a Web page. Conformance requirement 3 (Complete processes) defines what needs to be assessed for a Web page that is part of a process. Conformance requirement 4 (Only Accessibility-Supported Ways of Using Technologies) defines the ways of using technologies that can be relied upon to satisfy the success criteria. It can only be met by use of the following technologies: XHTML 1.0 or later excluding deprecated elements and attributes, HTML5 or later excluding obsolete features, or technologies with sufficient techniques (specific to each technology) to meet all applicable success criteria. Conformance requirement 5 (Non-Interference) defines requirements for ways of using technologies which are not relied upon to satisfy the success criteria."	http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?section=text&id=23601

	Obligations in relation to public web site accessibility	Reference
US	In the US, there are numerous laws related to web accessibility. The primary laws include ADA, IDEA, and the Rehabilitation Act of 1973 (Sections 504 and Section 508). The Access Board is an independent Federal agency devoted to accessibility for people with disabilities. On December 21, 2000, the Board issued accessibility standards for electronic and information technology under section 508 of the Rehabilitation Act, as amended. Section 508 bars the Federal government from procuring electronic and information technology (E&IT) goods and services that are not fully accessible to those with disabilities, including the web. Section 508 requires that electronic and	http://www.section508.gov http://www.access- board.gov/sec508/summary.htm http://www.access- board.gov/sec508/guide/1194.22.htm http://www.washington.edu/accessit/index.htm l http://www.wrightslaw.com/idea/index.htm http://www.w3.org/WAI/
	information technology that is developed, procured, maintained, or used by the federal government be accessible. Section 508 does not directly apply to private sector websites or to public websites which are not U.S. federal agency websites.	
	The U.S. Department of Justice Office of Civil Rights is charged with enforcing Section 508. When complaints arise, members of the public, students, and employees with disabilities may: 1. File an administrative complaint with agencies they believe to be in violation of Section 508; 2. They may file a private lawsuit in federal district court; or 3. They can file a formal complaint through the US Department of Justice Office of Civil Rights.	
	The Attorney General is required to evaluate how well the government is conforming to Section 508. They are also required to provide updated reports to the President and Congress on both the accessibility of federal electronic and information technology to people with disabilities and the resolution of Section 508 complaints filed against federal agencies.	
	Although the ADA does not deal directly with the accessibility of the Internet, two major sections in the ADA may apply to Web accessibility. These are:	http://webaim.org/articles/laws/usa/rehab See:
	 Title II, which states that communications with persons with disabilities must be "as effective as communications with others" [28 C.F.R. ss 35.160 (a)] and 	http://www.section508.gov/index.cfm?fuseAction=Laws2_OtherRelevant
	Title III, which deals with public accommodation of people with disabilities.	
	Despite numerous cases and hearings over the past 10-15 years regarding the applicability of the ADA to the Internet, it is still difficult to know how to interpret and apply the contradicting rulings thus we do not have a definite answer on the question of how the ADA applies. It is clear that inaccessible Web sites have been the target of lawsuits in recent years,	
	Section 504 of the Rehabilitation Act requires that postsecondary institutions in the United States not discriminate against students with disabilities. Also, some US states have decreed that their state will adhere to the Section 508 guidelines, which could impact state colleges and universities.	
	Public schools are required to make educational content accessible to all students. As more and more content is delivered online, this increases the requirements for accessible web content under IDEA legislation.	
	In addition, there are other US laws which impact web accessibility indirectly.	

Annex 2 - Scope of public sector obligations

	Scope of public sector obligations
АТ	The E-Government Law applies to: a) federal, state and regional authorities; b) deliverer ("Zusteller"); c) federal public administration. The Disability Discrimination Act applies for bodies of federal public administration, including the self-administration structures that those supervise and including the activities that they perform as holders of private rights.
	It also applies for legal relations (Rechtsverhältnisse) that include the provision of goods and services available to the general public, as long as they are in the responsibility of the federal government. This is specified in a paragraph in the Federal Disability Discrimination Act [http://www.bizeps.or.at/gleichstellung/rechte/bgstg.php].
DE	Flemish governmental websites (linked to www.vlaanderen.be), also sites funded or part-funded by the Flemish government. [http://www.bestuurszaken.be/toegankelijke-websites-0]
BE	There are voluntary actions addressing websites of the Wallonie-Brussels Federation [http://www.infrastructures.cfwb.be/index.php?id=agi_accessibilite]
BG	All administrative services websites and all executive levels of governmental organizations including central government, local government and municipalities.
CY	-
67	Public authorities/public administration. It generally applies for all Public administration information systems. What is and what is not Public administration information system is described in detail at http://www.isvs.cz/co-je-isvs/
CZ	Some information systems are excluded from these obligations, e.g. intelligence agency, national security agency or police, ministry of internal affairs, ministry of defence, penitentiary service – but only while performing special or secret tasks.
DE	BITV imposes a direct legal obligation on all bodies of the federal administration and beyond this on all bodies of the regional administration which implement federal law. The latter applies for instance to social security legislation which is enacted at the federal government level and must be operationally implemented by the regional governments. Thus the direct legal obligation imposed by BITV generally applies to web sites hosted by government bodies such as ministries and related government agencies such as the national labour office.
	However, bodies of the regional administration which do not implement federal law in one way or another, e.g. the regional ministries of education and related bodies such as public universities, are not covered by the federal equality law and the related requirements catalogue stipulated through BITV. (Note: Cultural, educational and media policy/regulation is the sole duty of the regional parliaments according to federal structure of the German constitutional system). They are addressed by regional equality laws and related accessibility obligations, which may however vary from region to region when it comes to detailed requirements imposed.
	Also, services of public interest that are delivered by commercial enterprises, e.g. postal services, are not concerned by a direct obligation under federal law.
	§ 11 BBG explicitly defines the types of policy organisations/bodies whose web sites fall under the ambit of the law, namely bodies of the federal administration and bodies of the regional administration as far as these implement federal law. Beyond federal ministries and related agencies, this definition includes all legal entities operating under public law and carrying out a public duty under supervision of the federal state, which includes for instance statutory health insurances. These may or may not utilise sate funds.
DK	The whole public sector is to follow the guidelines. [http://www.digst.dk/Arkitektur-og-standarder/Standardisering/AAbne-standarder-vejledning/De-syv-saet-af-obligatoriske-aabne-standarder]
EL	All organisations that are considered as public organisations (i.e. all organisations that receive state funding including municipalities and prefectures). This is mentioned explicitly by Ministerial Decree YA Π . Φ .40.4/1/989 on 10 th April 2012, article 2.
ES	The legislation specifies: - Public administration (includes all levels of public organisations, local, regional and national government, tax authorities, provincial authorities, social security, etc., and all organisations that depend on local, regional and national authorities, this includes public enterprises such as RENFE)

	Scope of public sector obligations
	 Banks Insurance companies Public and private transport companies Travel agencies, Electricity and gas providers. Public refers to all public administration bodies and services at a national level and all websites financed totally or partially by public resources. Public administration is government (national, regional, provincial, local) and all entities and public companies that depend directly on each of these levels and entities that are owned (fully) or partially by these levels.
EE	Public Information Act concerns all holders of public information, including state and local government agencies and legal persons in public law. In addition, it also sees as holders of public information: § 5. (1) 3) "legal persons in private law and natural persons under the conditions provided for in subsection (2) of this section. (2) The obligations of holders of information extend to legal persons in private law and natural persons if the persons perform public duties pursuant to law, administrative legislation or contracts, including the provision of educational, health care, social or other public services, — with regard to information concerning the performance of their duties. (3) 1) undertakings which have a dominant position in the market or special or exclusive rights or which are natural monopolies — with regard to information concerning the conditions and prices of the supply of goods and services and changes thereto; 2) sole proprietors, non-profit associations, foundations and companies — with regard to information concerning the use of funds allocated from the state or a local government budget for the performance of public duties or as support." [http://www.legaltext.ee/et/andmebaas/tekst.asp?loc=text&dok=X40095K5&keel=en&pg=1&ptyyp=RT&tyyp=X&query=Avaliku+teabe+seadus] The Framework of Interoperability of the State Information System also includes the entire Estonian public sector. Everyone's Rights in e-State The e-State Charter applies to all administrative agencies, that is state institutions, local governments and legal entities in public law.
FI	JHS recommendations cover both state and municipal administration All governmental organizations including central government, local government and municipalities and public services
FR	The law states that it applies to any online public service provided either by the State, territorial collectivities, public organisations.
HU	The scope seems to cover the public sector in general
IE	The Act and Code address all public sector bodies - i.e. all bodies in receipt of public funding. The public bodies defined in section 2 of the Act are interpreted in the Code of Practice to cover: a Department of State; the Office of the President; the Office of the Attorney General; the Office of the Comptroller and Auditor General; the Office of the Houses of the Oireachtas; a local authority; the Health Service Executive; a person, body or organisation (other than the Defence Forces) established by or under any enactment (other than the Companies Acts 1963 to 2003) - this would include, for example, the Broadcasting Commission of Ireland established under the Radio and Television Act 1988; the Central Statistics Office, established under the Statistics Act 1993; the National Disability Authority established under the National Disability Authority Act 1999; the Courts Service established under the Courts Act 1998; and the Legal Aid Board established under the Civil Legal Aid Act 1995, OR under the Companies Acts 1963 to 2003, in pursuance of powers conferred by or under another enactment, and financed wholly or partly, whether directly or indirectly, by means of moneys provided, or loans made or guaranteed, by a Minister of the Government or shares held by or on behalf of a Minister of the Government. This would include for example, Dublin Bus, Bus Éireann and larnród Éireann.

	Scope of public sector obligations
ΙΤ	All public bodies and agencies, both national and local. The law also applies to private subjects, if they are concessionaries of public information or services, and to public transport and telecommunication companies. Includes, inter alia, all State government, schools of all levels and educational institutions, local government departments, provinces, municipalities, mountain communities, and their consortiums and associations, universities, chambers of commerce, all non-economic public bodies national, regional and local administrations, companies and organizations of the National Health Service and the Agency for Collective Bargaining for Public administrations (ARAN). Also, to economic public agencies, to private firms which are licensees of public services, to regional municipal companies, to public assistance and rehabilitation agencies, to transport and telecommunication companies in which the State has a prevalent shareholding and to ICT services contractors. Article 3 of Law 04/2004 lists the addressees of the legislation. More recently, the Decree no. 179 of 18/10/2012 (converted into Law 221 of 17/12/2012) extended the Stanca Law to all subjects who receive government grants or subsidies for the provision of information services via the internet.
LT	All public sector organisations - includes all state and municipality institutions and offices; also organisations that are controlled by governmental organisations. The legislation which describes the obligations applies to all governmental organisations (state and municipality), therefore it is clear that the websites of such organisations must be made accessible for all people. [http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=415705] All public administration entities in Luxembourg in so far as they deliver concrete services to citizens and/or businesses of an administrative nature or are financed at least with over 50% by public funds.
LO	The above cited documents refer to "administration public" as a concept, from which it is inferred that all public administrations are affected by deliberations of the decisions taken by the CTIE and the IT strategic plan. Ministries, institutions and enterprises under subordination of ministries, municipalities, institutions and enterprises under subordination of municipalities, enterprises established by State, higher education
LV	institutions, institutions established by high schools, free port administrations, National Radio and TV Board, Central Election Commission, State Human Rights Bureau, Bank of Latvia, State president, Parliament (Saeima), Cabinet of Ministers, State Control as well as institutions established by State president and parliament. The websites of such organisations must be made accessible for all people.
MT	The government's web accessibility requirements define that public service websites and other websites registered under the .gov.mt domain have to follow accessibility requirements. In Malta, websites that have a .gov.mt domain are almost exclusively related to public organisations within central government. Governments' web accessibility requirements only specify that besides "Authorities, Corporations, Agencies and Commercial Public Sector entities", also entities such as Foundations and Local Councils are included under this definition. It is important to note however that some entities or agencies are also registered under the .org.mt domain such as www.mca.org.mt and www.mepa.org.mt. In addition, all new public sector websites as defined in the Vocabulary GMICT X 0004 - this definition includes "Authorities, Corporations, Agencies and commercial Public Sector entities in which the Government has a majority shareholding and/or that are not listed on the stock exchange. Entities also comprise Foundations and Local Councils." However, in practice only public sector websites registered under the .gov.mt domain and commercial public sector websites that offer basic services (e.g. transport / utilities) currently apply web accessibility obligations.
NL	The Ministerial Decree and hence the National Web Quality Guidelines (Webrichtlijnen) apply to governmental sites of municipalities, provinces, ministries, water management boards and government agencies (such as e.g. Tax and Customs, Vehicle Register, Social Security, etc.).
NO	Public (and private sector) that have the public as a target group [stated in § 9 of the legislation]. The proposed legislation is supposed to apply to public sector on all organizational levels and all fields. However, there is a clause on sectors covered by other legislation, thereby taken out of this anti- discrimination act, and currently the accessibility legislation seems to not be applicable to neither educational nor constructional sectors. The challenge is that the legislation for these sectors include no or limited amount of accessibility obligations.

	Scope of public sector obligations
PL	1) state administration bodies, bodies of state control and law enforcement, courts of law, prosecution organisational units, and local governments and their bodies, 2) budgetary entities and local government entities of budgetary establishments, 3) earmarked funds, 4) independent public health care establishments and companies carrying out medical activities under the provisions of regulations concerning medical activities, 5) the Social Insurance Institution (Zakład Ubezpieczeń Społecznych), the Agricultural Social Insurance Fund (Kasy Rolniczego Ubezpieczenia Społecznego), 6) the National Health Fund (Narodowy Fundusz Zdrowia) The Act of 17 February 2005 on the computerisation of the operations of the entities performing public tasks specifies that its provisions apply to entities which perform public tasks (art. 2) and further lists those entities by name. This Act also specifies the exceptions thereto, such as: state-owned companies, trading companies, special services, the Chancellery of the Sejm, the Chancellery of the Senate, the Chancellery of the Polish President, and the Polish National Bank, as well as ICT systems used for scientific and educational purposes. Additionally, the stipulation of compliance with the minimum requirements for ICT systems includes "any entity that is entrusted with or commissioned with the execution of a public task, if the execution of the said
	task entails the obligation to communicate information to or from entities that are not bodies of state administration"
РТ	The target websites are set in the article 2 of law no 36/2011 of June 21st, that states the scope of application: a) sovereign bodies; b) Services of central public administration, including public institutions and services of the State; c) Services of regional public administration (they are mention Açores e Madeira regions); d) State business sector (100% or any kind of participation).
RO	-
SE	National authorities under the government. It is specified that "the public sector" (det allmänna) is to be accessible on its external websites.
SI	All public sector organisations
SK	All public sector organizations – in more detail: government, other national level public bodies, municipalities (cities, villages and self-governing regions), companies established by government, companies and chambers delegated to provide public services.
	Most public organisations in England, Scotland and Wales (subject to a few exceptions such as the Security Service, the Secret Intelligence Service and Government Communications Headquarters).
UK	The Equality Act 2010 Schedule 19 (consolidated) contains list of public bodies to which the duty applies including, central government departments, local authorities, the Armed forces and the key health, education, policing and transport bodies.
	[http://www.homeoffice.gov.uk/publications/equalities/equality-act-publications/Schedule-19]
AU	All federal government websites that are covered by the Financial Management and Accountability Act 1997. Conformance is required on all government websites owned and/or operated by government under any domain. This includes external (public-facing or private) and internal (closed community) sites (i.e. conformance is required for all internet, intranet and extranet sites).
	Under the Commonwealth Authorities and Companies Act 1997, agencies under that Act are encouraged to follow the Web Accessibility National Transition Strategy (NTS).
	For details of each Australian state's and territory's access policies, see: http://www.mediaaccess.org.au/research-policy/australian-governments-access-policies
CA	All federal government departments and most federal government agencies. [It is stated that "This standard applies to departments listed in Schedules I, I.1 and II of the Financial Administration Act, unless excluded by specific acts, regulations or Orders in Council."]

Scope of public sector obligations

US

Electronic and information technology that is developed, procured, maintained, or used by the federal government must be accessible. All federal and state government web sites must be accessible. Two sections within the Rehabilitation Act, as amended, have impact on accessible web design. These are Sections 504 and 508. Section 504 indicates that programs receiving federal funds may not discriminate against those with disabilities based on their disability status. All government agencies, federally-funded projects, K-12 schools, postsecondary entities (state colleges, universities, and vocational training schools) fall into this category. Section 508 bars the Federal government from procuring electronic and information technology (E&IT) goods and services that are not fully accessible to those with disabilities, this includes web design.

Annex 3 - Timeframes for web accessibility

	Timeframes for web accessibility
AT	All existing official websites had to be brought in conformity with accessibility standards by 1.1.2008. Newly made official websites before 1.1.2008 didn't have to meet the Accessibility standards immediately, they only had to achieve this by 1.1.2008. There is no newer timeframe.
BE	No clear timeframes established. Only public websites of the Flemish government are to be made accessible right from the start
BG	No timeframes appear to be set.
CY	
CZ	No specific timeframes set. Public web sites (those falling within the law 365/2000 Sb.) are supposed to have accessibility achieved by the time the force of law begins to be valid.
	For public websites covered by the legal obligation in the BGG, web accessibility was to be implemented according to a staged approach ranging from 2002 up to 2005.
DE	Any existing web site falling under the ambit of the law (BGG) and which was particularly directed towards people with disabilities had to comply by 31st Dec 2003 at the latest. All other existing web sites had to comply by 31st December 2005. Any web site to be newly established from 2002 onwards had to comply immediately.
DK	No specific timeframes have been set but the accessibility obligations in principle apply immediately for new websites from 2008 and onwards, not existing ones that were developed before 2008. By "new development" the intention is also to include also rather small changes to design or technique, so in general all developments after 2008 have to be accessible. But if no functions or graphics have changed in the last five years, the regulations on accessibility would not be relevant (in practice, almost none of the sites are that old).
EL	According to Ministerial Decree YA Π . Φ .40.4/1/989 on 10th April 2012, article 11, all public websites that are developed after the date 10th April 2012 should respect the WCAG 2.0 (newly websites). In case of existing websites of public organisations, they have to comply with WCAG 2.0 within 3 years from that date by providing a binding work plan.
ES	For all relevant websites, the deadline was December 2008 The new websites have to be aligned with the legislative obligations. But it is important to highlight that after the 1st deadline by the end of 2008, a second one was fixed for the end of 2012 with the open exception of websites "where the accessibility was difficult to implement". It is not clear what has to be done in these cases but after the deadline, all new websites or existing ones that will be either started or re designed, will have to accomplish the legislative requirements
EE	Currently, no new deadlines have been set. The previous deadline by when public sector websites had to be brought into compliance with the WAI quality criteria was 2010, fixed in the soon to be expired Estonian Information Society Strategy 2013. The Digital Agenda for Europe has set the target that public sector websites need to be fully accessible by 2015 and this is also the timeframe followed in Estonia. In terms of website lifecycle, no timeframes have been fixed, although the implicit assumption is that newly made websites have to meet the WCAG guidelines, whereas reorganizing the existing websites may turn out to be unreasonably expensive. No cases are known when a website would have been ordered to meet the WCAG standards specifically. On the other hand, the requirement is kept in mind when, for one reason or another, a new website is being created.
FI	There is no timeframe set and no distinction between old and new websites.
FR	Two years timeframe starting May 2009 for Central government and public bodies it administrates; three years timeframe starting May 2009 for regional governments, municipalities, departments and public bodies they administrate.
	No distinction is made between existing and newly made websites in this context.
ни	There appears not to have been any specific timeframe set under the earlier legislation. More recently, it seems that the Government Decree 1056/2012 on the Action Plan for 2012-2013 of the Implementation of the New National Disability Program says that the e-accessibility of public web pages has to be achieved and the deadline is 30 September 2013.
IE	No timeframe (although the Disability Act did have a date when it came into effect -1 st Jan 2006).
	There is no phased approach taken (Drafters of the legislation would not have had any appreciation of these

	Timeframes for web accessibility
	matters.)
IT	No timeframe. Relevant websites are required to be accessible immediately on the implementation of the law. All websites are covered, both existing and newly made.
LT	There is no timeframe imposed for public websites' accessibility. The law (Government Resolution) states that all websites of state and local government institutions must comply with the requirements, described by the law. However no timeframe as well as no sanctions for noncompliance are indicated. In reality, governmental organisations implement these requirements when they are re-designing their websites. Since 2009 (amendment of the law) The Information Society Development Committee under the Ministry of Transport and Communications carries out a function of supervision of the implementation of the requirements for state and local government websites. This means, the Committee carries out annual analysis (and provides reports, which are public) on the condition of state and local government institutions' websites and makes suggestions for their improvement.
LU	No specific timelines were reported. In theory, all relevant public websites could in principle be expected to be made accessible immediately.
LV	No specific timeframes appear to be set.
МТ	No specific timeframes but in principle this seems to mean that by law websites falling under the accessibility standard(s) should be made accessible immediately. However, there is no active follow-up to check/monitor compliance. Web accessibility requirements apply to all sites (new and existing). Existing public websites and websites created under the gov.mt domain prior to June 2011 shall abide by the Website Standard (CIMU S 0051) Version 3.1, dated 15 April 2005.
NL	In the 2006 Decree Webrichtlijnen v1: all governmental websites comply with WCAG 1, priority 1 by end 2010. This objective was not achieved by 2010. New objective: all gov. websites WCAG 1.0 priority 1 by end of 2012 and all gov websites at least WCAG 1.0 priority 1+2, or WCAG2, prio A and AA by 2015. Obligation covers both existing and new government sites
NO	The anti discrimination law says that new public web sites (the main solution) are to be accessible by July 1, 2011, but only 12 months after the government has made the specifications on how to meet the regulation (the specifications are not yet ready). For existing public web sites, the deadline is January 1, 2021. This seems to mean that all new websites must be accessible from when the law specifications have been public for 1 year.
PL	Both newly made and already existing websites must achieve compliance with the requirements by 31 May 2015, whereas additionally: "§ 23. ICT systems of entities performing public tasks, operating on the date of entry into force of the Regulation on the basis of hitherto existing legislation, should be adapted to the requirements referred to in Chapter IV of the Regulation no later than on the date of their first major upgrading following the entry into force of the Regulation." This timeframe was specified by the Regulation of the Council of Ministers of 12 April 2012 on the National Interoperability Framework, the minimum requirements for public registers, the exchange of information in electronic form, and the minimum requirements for ICT systems: "§ 22. ICT systems of entities performing public tasks, operating on the date of entry into force of the Regulation, should be adapted to the requirements referred to in § 19 [concerning accessibility] no later than within 3 years from the date of entry into force of this Regulation". The date of entry into force of the Regulation is 31 May 2012, which means that the three-year deadline expires on 31 May 2015 .
PT	According to Resolution of the Council of Ministers Nº 155/2007, websites of public administration should ensure the level "A" of accessibility (then WCAG1.0) and W3C and the ones that allow the performance of transactions should be level "AA": December 2007 (for all websites that do not integrate services with transactions); February 2008 (for all websites that integrate services with transactions). These obligations applied to all websites created after the date of entry into force of this resolution (27 th September 2007). Websites that existed before 2007 were also covered by accessibility obligations, see for instance the Resolution Nº 97/99.http://www.acessibilidade.gov.pt/acesso/res9799_en.htm. More recently, "National Regulation of Digital Interoperability" (RCM n.o 91/2012 of November 8th) requires: -Internet sites that deliver only information (definition of RCM 155/2007) must to comply (is mandatory) with WCAG 2.0 level 'A' since 8 February 2013 (90 days after the publication of RCM n.o 91/2012); it is

	Timeframes for web accessibility
	recommended to achieve 'AA' or 'AAA' (does not mention a date to achieve this goal);
	- internet sites that deliver online services (definition of RCM 155/2007) must to comply (is mandatory) with WCAG 2.0 level 'AA' since 8 February 2013 (90 days after the publication of RCM no 91/2012); it is recommended to achieve 'AAA' (does not mention a date to achieve this goal).
RO	-
SE	No specific timeframes are set in the guidelines, but the Ordinance in principle expects accessibility immediately. No distinction between existing and new sites.
SI	According to Action Plan for Disabled Persons 2007-2013, provision 3.9 states that information and other services of the government on the World Wide Web should be equally accessible to all citizens. The Plan will be fully implemented until year 2013, but most of the objectives under this goal have already been achieved. No distinctions between existing and newly made sites.
	All relevant websites are expected to be accessible immediately, according to new extended obligations in
SK	Legislation Act Nr. 570/2009 are effective from 15th July 2010. Intermediate period is no longer valid as it was in past.
	All websites are covered - no distinction between new and existing.
UK	FOR PUBLIC WEBSITES The Equality Act 2010 ('The 2010 Act') is an overarching piece of legislation that aimed to harmonise a raft of previous existing anti discrimination and equality laws. These included any existing obligations under the Disability Discrimination Act 1995 (and subsequent amendments) for accessibility of public sector websites, applicable to existing public sector websites at the time the 2010 Act came into force on 1st October 2010. At that time, there were pre-existing deadlines already in force for compliance with a minimum standard of accessibility of government websites under guidelines issued by the UK Central Office of Information ('COI') (TG102 - last updated in October 2009). Although the COI closed in March 2012, these guidelines do not appear to have been replaced:
	 All new websites must conform to the COI guidelines from the point of publication to a minimum standard of accessibility for all public sector websites of Level Double-A of the W3C WCAG. Websites owned by central government departments must be Double-A conformant by December 2009, including websites due to converge on Directgov or BusinessLink, unless convergence is scheduled before October 2009. Websites owned by central government executive agencies and non-departmental public bodies must conform by March 2011. (coi.gov.uk/documents/guidance/delivering-inclusive-websites.pdf)
	In addition, there are specific dates in the 2010 Act for public bodies to comply with the public equality provisions under Section 149 which could be relevant to the provision of services via web sites in the public sector: April 2011 for compliance with a general duty to ensure equal opportunities in the provision of public services and September 2011 for compliance with a Specific Duty to publish information demonstrating their compliance with the Equality Duty and to set themselves 'specific measurable equality objectives'
	(http://www.equalityhumanrights.com/legal-and-policy/equality-act/equality-act-timeline/) FOR PRIVATE WEBSITES
	At the time the Equality Act 2010 came into force, there were also existing obligations under the DDA 1995 (and subsequent amendments) for accessibility of most private websites (e.g. inter alia, those providing a service to the public or intranets provided for employment).
	Part 3 of the Equality Act 2010 relating to accessible services came into force on the 1 October 2010, but there are no specific time frames under the Act for websites of this type to be made accessible, although it could be interpreted as allowing time for organisations to make "adjustments" to accommodate accessibility, as the Act provides for courts to take into account the cost of adjustments and an owner's finances.
	For public sites:
	Level A by December 2012 for all federal, state and territory web sites
AU	Level AA by December 2014 for all federal government web sites.
AU	For states and territories, most have adopted 2014 for complying with Level AA while some will take somewhat longer.

Timeframes for web accessibility

WCAG 2.0 to at least Single A level by December 2012.

Websites and web content created before July 2010 that will be archived or decommissioned before December 2012 are not required to meet WCAG 2.0.

Similarly, any web content created before July 2010 that is no longer current, but that is still important and/or popular and not yet appropriate for archival, should remain WCAG 1.0 conformant. Where this type of content is not WCAG 1.0 conformant, agencies should upgrade to WCAG 2.0 (as WCAG 1.0 is technically superseded).

For other sites, no required time frames although they are liable to complaint for inaccessibility under the Disability Discrimination Act. 2013 has been advised by Human Rights Commission in its World Wide Web Access: Disability Discrimination Act Advisory Notes Version 4.0.

Section 4.2 of the Advisory Notes state:

Existing non-government websites or web resources that undergo substantial change in the period July 2010 – December 2013 should comply with WCAG 2.0 to a minimum level of AA conformance;

All existing non-government websites and web content should comply with WCAG 2.0 to a minimum level of AA conformance by December 31 2013.

For relevant sites, the phasing is as follows:

"Phase I (August 1, 2011 - February 29, 2012)

- All Web site home pages and pages referenced from Web site home pages.
- Significant number of Web pages that provide the most important information and services for individuals and businesses including rights and benefits.
- Significant number of Web pages that are the most frequently used.
- All new Web pages published post October 1, 2011 must immediately conform

CA

Phase II (March 1, 2012 - July 31, 2012)

- Additional Web pages that provide the most important information and services for individuals and businesses including rights and benefits.
- Additional Web pages that are the most frequently used.

Phase III (August 1, 2012 - July 31, 2013)

- Remaining Web pages. "

The distinctions are made based on pages rather than on sites. These categories apply to all websites, equally. A new website would presumably involve only new web pages, even if they were copied from an existing website.

US

On May 10, 2000, the Chief Information Officers of all agencies were instructed to issue a memorandum for the Chief Information Officers of all federal agencies to establish an Electronic Information Technology (EIT) Accessibility Coordinator and Team to ensure successful implementation of Section 508 within their agencies.

As mentioned earlier, public web site accessibility is still being challenged but, the ANPRM indicates what a likely compliance schedule for any ADA web accessibility regulations would look like. Should DOJ follow the schedule currently under consideration, websites created or substantially revamped starting six months from the effective date of the final rules would have to comply with them. Likewise, new pages added to a site starting six months from the date the regulations take effect would have to comply "with the maximum extent feasible." For existing websites, entities covered by Titles II and III (in the case of higher education, public institutions, and private institutions to the extent they fall under the "places of public accommodation" definitions) would have two years from the regulations' effective date to bring their sites into compliance. For private (commercial) websites, DOJ has not posted any proposed regulations setting web accessibility

standards under the ADA, and it has yet to provide an "official timeline" for when it might do so. Also, the extent to which private institutions might have to comply under Title III regulations is unclear. However, DOJ has clearly indicated its intent to establish web accessibility standards, and to make them as broadly applicable as possible.

Annex 4 - Obligations in relation to accessibility of (outsourced/privatized) 'Basic services' websites

	Obligations in relation to accessibility of (outsourced/privatized) 'Basic services' websites
AT	The Disability Discrimination Act seems to cover basic services within its scope.
BE	Seem not to be covered, as such.
BG	The obligations concerning accessibility of administrative services websites automatically applies to any private (commercial) website that provides administrative services if such are outsourced (privatized) from the state.
CY	-
CZ	There are no particular obligations for basic services providers in Czech Republic. These are advised to follow particular standards and rules, but as in case of Private web sites, it is neither obligatory nor punishable by law. In general it depends on whether a particular provider of basic service is a commercial provider or public authority. If a provider is public authority, it has to follow Public administration information systems law (2000, amendments of 2008 and 2012) and Accessibility public notice (2008). If a provider is commercial provider, there are no obligations by law.
	Basic services are covered by the common legal obligation according to BGG only to the extent that they are provided by bodies of the federal administration and subordinate agencies.
DE	BGG defines the entities on which an obligation is imposed in terms of their legal status rather than the type of services they tend to provide. The applied definition includes all legal entities operating under public law and carrying out a public duty under supervision of the federal state. Beyond immediate government bodies such as federal ministries, these include so called self-governed bodies as they have for example to be established in the framework of statutory social insurance schemes, e.g. statutory health insurers (as opposed to private health insurers) or medical associations. These may or may not utilise state funds. This approach follows the principle of combining governmental framework legislation and social self-government, under which the State sets a legal framework within which social insurance is managed by governing and controlling bodies elected by the insured and the employers.
DK	Most basic services are covered by current web accessibility obligations since most of the services are public. The web obligations do not seem to apply in cases where the basic (public) services are outsourced / privatized, although it is reported that in practice the transportation systems and the like voluntarily try to comply in order not to get too many complaints.
EE	There are no measures explicitly requiring the websites of "basic services" providers to be made accessible. These websites are covered with the same obligations as public websites and as providers of public services. There are no general obligations but when such a website has been created to fulfil public tasks this must be clearly stipulated in the legal act or the statutes of an institution or its subsidiary. The obligations imposed on public sector institutions (i.e. holders of public information) by the Public Information Act (RT I, 22.03.2011, 10) also apply to, § 5 (2) "legal persons in private law and natural persons if the persons perform public duties pursuant to law, administrative legislation or contracts, including the provision of educational, health care, social or other public services, – with regard to information concerning
	the performance of their duties." (3) 1) "undertakings which have a dominant position in the market or special or exclusive rights or which are natural monopolies – with regard to information concerning the conditions and prices of the supply of goods and services and changes thereto"
EL	The basic services are not covered by the current web accessibility obligations unless they are considered as public organisations and they fit under the Ministerial Decree YAΠ.Φ.40.4/1/989 on 10th April 2012, article 2. There are no provisions also on web accessibility obligations in cases where any basic (public) services are outsourced / privatized.
	Spanish legislation covers all governmental levels (at national, regional and local level) and also the Law 56/2007, extended the obligation of web accessibility to enterprises offering services of public interest (public or private ones), according to the following: large Spanish companies with over 100 employees or a turnover above a certain level, if operating in key economic sectors.
ES	The following are specifically covered: • Banks,
	Insurance companies,
	Public and private transport companies,

	Travel agencies,
	Electricity and gas providers.
FI	No specific reference to 'basic services', but all public web sites are covered by JHS 129 Recommendation. JHS recommendations concerns only public organisations. If service is privatized it depends on if the public organisation which is in charge demands accessibility.
FR	None specifically addressing basic services, as such, although it seems that the web accessibility obligations would apply in cases where the basic (public) services are outsourced / privatized.
HU	There seems to be no specific reference to 'basic services'.
IE	All publicly funded services are covered by the legislation; services of general interest are therefore covered if they receive public funding. Private commercially funded basic services are not covered. The public bodies defined in section 2 of the Act are interpreted in the Code of Practice to cover: a person, body or organisation (other than the Defence Forces) established by or under any enactment (other than the Companies Acts 1963 to 2003) - this would include, for example, the Broadcasting Commission of Ireland established under the Radio and Television Act 1988; the Central Statistics Office, established under the Statistics Act 1993; the National Disability Authority established under the National Disability Authority Act 1999; the Courts Service established under the Courts Act 1998; and the Legal Aid Board established under the Civil Legal Aid Act 1995, OR under the Companies Acts 1963 to 2003, in pursuance of powers conferred by or under another enactment, and financed wholly or partly, whether directly or indirectly, by means of moneys provided, or loans made or guaranteed, by a Minister of the Government or shares held by or on behalf of a Minister of the Government. This would include for example, Dublin Bus, Bus Éireann and larnród Éireann.
IT	Law 04/2004 specifies that private firms involved are those licensees of public services: from regional municipal companies, to public assistance and rehabilitation agencies, to transport and telecommunication companies, in which the State has a prevalent shareholding and to ICT services contractors. Recently the definition of public services has changed to underline the social purpose of these activities in conformity with the European directives. "Local public services are those that are concerned with the production of goods and activities 'designed to achieve social purposes and to promote economic development and civic communities' local (Decree 138/2011)"
LT	If organisations that provide 'basic services' are controlled (ownership) by the state or municipality institutions, they must have websites which have a version for disabled people. If the organisation that provides 'basic services' is not controlled by the government, these obligations do not apply to it.
LU	There seems to be no specific reference to 'basic services' at present, although a government initiative under preparation to impose such standards also on commercial websites would also presumably apply for basic services. Where public services are outsourced, the web accessibility obligations would apply; where they are privatized, they would only apply where financed over 50% by the government.
LV	No obligations for basic services websites.
MT	There are currently no references in the relevant legislation that particularly refer to basic services. Those that are offered through public websites are covered by the accessibility obligations. Public sector websites as per Government's vocabulary definition includes Authorities, Corporations, Agencies and commercial Public Sector entities in which the Government has a majority shareholding and/or that are not listed on the stock exchange. It also includes Foundations and Local Councils. In cases were a public service is outsources/privatised, the accessibility requirements would be part of the tendering procedure (e.g. public transport). But the legislation does not make specific reference to this issue.
NL	No obligations for basic services websites, unless they are falling directly under governmental/ministerial authority. In some cases (like public transport) accessibility requirements are included in tender or procurement procedures for travelling information systems.
NO	Yes, since the law covers both public and private sector, and also non-profit organizations.
PL	Some "basic services" are covered by current web accessibility obligations; those are mainly services associated with health care and education, but it depends on the legal form of the provider of such services.

The Act of 17 February 2005 on the computerisation of the operations of the entities performing public tasks obligates the following organisations to provide web site accessibility:

- 1) state administration bodies, bodies of state control and law enforcement, courts of law, prosecution organisational units, and local governments and their bodies, but also:
- 2) budgetary entities (such as statistical offices, public prosecutors, courts and tribunals, detention centres and prisons, military units, police units, the State Fire Service, schools, dormitories and common rooms, road maintenance units, water management authorities, social welfare homes) and local government budgetary establishments providing local communities with services concerning: management of housing and commercial premises; roads, streets, bridges, squares and traffic organisation; waterworks and water supply, sewerage, waste water treatment and disposal, maintaining cleanliness and order, maintenance of sanitary facilities, landfills and municipal waste disposal facilities; provision of electricity, heat and gas, local public transport, markets and market halls; municipal green areas and woodlots; physical education and sports, including maintenance of recreational areas and sports facilities; maintenance of different species of exotic and domestic animals, including in particular the continued breeding of animals in danger of extinction, in order to protect them outside the place of their natural occurrence; cemeteries (Art. 14 of the Public Finance Act of 27 August 2009),
- 3) earmarked funds, (such as the State Fund for Rehabilitation of Disabled Persons Państwowy Fundusz Rehabilitacji Osób Niepełnosprawnych),
- 4) independent public health care establishments and companies carrying out medical activities under the provisions of regulations concerning medical activities,
- 5) the Social Insurance Institution, the Agricultural Social Insurance Fund,
- 6) the National Health Fund.

However, the obligations imposed by the Act do not apply to, for instance, state-owned companies and trading companies, which are providers of the majority of the "basic services" (such as those concerning: energy, telecommunication, transport, radio and television, postal services etc.)

As mentioned here above, the Act of 17 February 2005 on the computerisation of the operations of the entities performing public tasks expressly lists those institutions and legal forms of organisations that are obligated to comply with the Act's stipulations. (Art. 2) However, it must be noted that it is not the type of service provided that determines whether an organisation is required to fulfil the obligation to provide web site accessibility. For example, a school may be run in the form of a budgetary entity, but it may also be a private school; the same applies for example to sports facilities etc.

The legislation in force in relation to basic services only specifies which are the basic services, not giving any indications on the accessibility requirements to citizens with special needs

The basic services are: Water supply service; Electricity supply service; Gas supply service; Phone service; Service delivery of natural gas and liquefied petroleum gas flowing; Electronic communication services; Postal services; Collecting and treating waste water services and Management services for municipal solid waste. The state business sector (100% or any kind of participation) is covered within the accessibility obligations. There is no policy currently in practice directly oriented to private or commercial websites. However private firms are encouraged to make their products and services accessible online.

- RO
 - Where basic services in Sweden are outsourced to companies (public or private), these are not covered by the web accessibility obligations. It is not at all specified whether the accessibility obligations apply to publicly owned companies but, in reality, it is interpreted as such.
 - There is no specific reference to basic services websites accessibility.
 - The Act on the Equalization of Opportunities for Disabled Persons (from 2010) draws attention on access to information, communication and other services and emergency assistance, but the measures in regard to accessibility of websites are only indirect.

Most of the 'basic services' provided are provided by companies, where state (or municipality) owns at least 51% of shares. These companies are therefore obliged to be in line with the web accessibility obligations of the legislation. If the state (or municipality) owns less than 51%, no legislations/measures impose obligations on 'basic services' providers' websites.

These institutions and organizations are explicitly mentioned in Legislation Act Nr. 570/2009 which revises Legislation Act Nr. 275/2006 about Information Systems of Public Administration, where it is stated that it is

150

РΤ

SE

SI

SK

obliged to be in line with standards for 'legal entities, which are established or founded by relevant obliged entities' (including state, municipalities, etc.). All the basic services will be covered by the general obligations imposed on service providers in accordance with the general provisions of Part 3 of the Equality Act 2010. In addition, most further education and higher education providers are public authorities and therefore subject to the public sector equality duty under \$149 of the Equality Act 2010 not to discriminate against students with disabilities. Most service providers are obliged to provide web accessible services (whether basic or not) and would therefore be subject to the Equality Act 2010 Statutory Code of Practice (Services, public functions and associations) to provide accessible web services (11.3 - 11.8). In educational contexts, there are implied obligations to provide accessible web services in Part 6 (1) (Schools) and 6 (2) (Further and higher education) of the Equality Act 2010 which make it unlawful for education UK providers to discriminate against pupils / students with disabilities in the provision of education. The Act also includes (non mandatory) positive action provisions that allow action to be taken by education establishments to address disadvantages faced by particular groups of pupils. Guidance on the Act for educators suggests that such action could 'include targeted provision, resources or putting in place additional or bespoke provision to benefit a particular disadvantaged pupil group.' http://www.equalityhumanrights.com/advice-andguidance/new-equality-act-guidance/equality-act-guidance-downloads/ (accessed 02/09/2012) Schools and further education providers also have obligations under the Equality Act 2010 as employers, and bodies which carry out public functions and service providers and in that capacity would be subject to the general provisions of Part 3 of the Equality Act 2010 ('the Act') relating to the service providers as detailed in 1.1.1 above. It is an inferred obligation under the Disability Discrimination Act other than if the services are under a public/private partnership. They are then covered by the mandatory provisions of the Web Accessibility National Transition Strategy. ΑU World Wide Web Access: Disability Discrimination Act Advisory Notes Version 4.0 http://www.humanrights.gov.au/disability_rights/standards/www_3/www_3.html These Advisory Notes in Section 4.2 specify that non-government websites meet WCAG 2.0 to Level AA by December 2013. This is policy not legislation. At federal level, there are no obligations specifically directed towards basic services, as such, unless they fall within the scope of the obligations on public agencies. The Canadian regulations only apply to websites that are provided by (or on behalf of) the federal government. There are no regulations that apply to any organizations or agencies that are not part of the federal government. Thus there are no obligations on providers of "basic services" except if those "basic services" are provided directly by the federal government, in which case there is no distinction between those and other federal government web sites. CA Separate regulations can and do exist within some provinces, e.g. Accessibility for Ontarians with Disabilities Act, 2005. For example, Ontario has a law in place making it necessary for businesses to be accessible to everyone and other provinces are considering doing the same thing. This would cover accessibility of websites for basic services provided by private (commercial) entities. Within the Canadian model, regulating most "basic services" (other than telecommunications and telephony, which are covered in another section of this survey) is a provincial level responsibility, not a federal one. While there are provincial accessibility regulations (such as the one mentioned above) that cover all services / businesses, there seem not to be any provincial regulations that apply only to "basic services". All publicly funded services are covered; other services are covered if they receive public funding. Private commercially funded basic services are currently not covered. Electronic and information technology that is developed, procured, maintained, or used by the federal government must be accessible. States which receive AT funding (all 50 states) must provide accessible web sites under the requirements of US the Assistive Technology Act of 1998, thus state level services must also be accessible. The DOJ is considering further revisions to the ADA Title II and Title III regulations and has been gathering public feedback. One recommendation concerns the establishment of web accessibility standards for state and local government entities (Title II) and places of public accommodation, such as stores, hotels, and schools (Title III). This is not yet in effect.

Annex 5 - Obligations in relation to private (commercial) website accessibility

	Obligations in relation to private (commercial) website accessibility
AT	No direct obligations, but the Disability Discrimination Act covers nearly all commercial websites. Generally, since 2006, also non official websites must fulfil the requirements of the accessibility. Framework conditions of single cases are however evaluated individually; the decision whether a non-official site should be checked for conformity is handled on a case by case basis according to §6.
BE	No obligations, although a large number of organisations and companies has voluntarily chosen to make their websites accessible, mostly through adherence to the Anysurfer (= WCAG) guidelines. The focus on Flemish government website accessibility has motivated several other groups (schools, universities, local governments) to follow the example. For companies (especially banks) a rising concern for Corporate Social Responsibility might be influential too.
	No specific obligations for private (commercial) websites, per se.
BG	However, the obligations concerning accessibility of administrative services websites automatically applies to any private (commercial) website that provides administrative services if such are outsourced (privatized) from the state.
CY	-
CZ	None
DE	There is no direct legal obligation requiring commercial parties to ensure that their web sites are accessible to people with disabilities. However, Federal equality legislation (BGG) empowers accredited disability organisations to force commercial enterprises or their umbrella organisations into a structured negotiation process about making their products, service and/or venues accessibility to people with disabilities. The law enables enforcement of a bilateral and consensus based negotiation process which is ultimately directed towards contractually agreeing a so called "target agreement". It is entirely up to the negotiating parties to agree any specific accessibility requirements that are to be met, a schedule for implementing these and potentially any sanctions in the case a target agreement is not going to be implemented as contractually agreed. No sanctions are foreseen in cases where the negotiation process does finally not yield a target agreement. A disability organisation demanding negotiations for a target agreement must indicate this at a central
	register, thereby stating the parties involved in the negotiation process. Within four weeks following publication in the central register, other disability organisations have the right to join the negotiation process. As soon as joint negotiating committee has been established by the disability organisations involved the negotiation process has to be started following weeks. Successfully concluded 'target agreements' must be published in central register.
DK	None
EL	No specific obligations for private (commercial) websites, per se. [However, it is noted that, in principle, such would be covered if they have been developed by structural funds within the programming period 2007-2013 and in this respect Article 16 of the EC Regulation 1083/2006 is implied. This is not made explicit and, therefore, there are commercial websites that have been developed through structural funds but they are not accessible by people with disabilities]
ES	There are legislative obligations applying to some private commercial websites (Banks, Insurance companies, Public and private transport companies, Travel agencies, Electricity and gas providers). Spanish legislation covers all governmental levels (at national, regional and local level) and also the Law 56/2007, extended the obligation of web accessibility to enterprises offering services of public interest (public or private ones), according to the following: large Spanish companies with over 100 employees or a turnover above a certain level, if operating in key economic sectors.
EE	No specific obligations for private (commercial) websites, per se. The obligations foreseen by the Public Information Act on public sector institutions apply to private web site accessibility only if the latter provide public services and their sites are designated as a public task. Or as the Interoperability of the State Information Systems Framework of Websites puts it: "The obligation of an institution to create an official website comes from the provisions of PIA [Public Information Act]. The obligations of creating a site to fulfil public tasks must be clearly stipulated in the legal act or the statutes of an institution or its subsidiary."

	Obligations in relation to private (commercial) website accessibility
FI	None
FR	None
HU	None
IE	Not directly. An obligation could be inferred under the Equality Act but it seems not to be interpreted in this way; in fact it seems that web accessibility is not being considered at all in this context.
ΙΤ	No specific obligations for private (commercial) websites, per se. However, obligations also apply to private subjects, if they are concessionaries of public information or services, and to public transport and telecommunications companies: economic public agencies, private firms which are licensees of public services, regional municipal companies, public assistance and rehabilitation agencies, transport and telecommunication companies in which the State has a prevalent shareholding, ICT services contractors. [It is also noted that, in 2004, the Italian Banking Association (ABI) defined the guidelines for accessibility of home banking sites.)
L1	Not at the moment. However, a government initiative is under preparation to impose such standards also on
LU	commercial websites.
LV	No direct obligations.
МТ	No direct obligations in general. Only private websites that cover basic services are in practice required to be accessible, although the legislation does not particularly make reference to this. This includes cases such as the website of the private transport operator Arriva which took over the responsibility for the transport system from the Transport Ministry in 2011. This also includes the website by GO plc. (ex Maltacom) which is the national USO. However, it should be noted that also private websites can apply for an accessibility audit by FITA. Websites that are created according to 'FITA Web Accessibility Guidelines' and the 'FITA Web Accessibility Audit checklist' can then be included in the 'FITA ICT Accessibility Audit Register'.
NL	No direct obligations for web accessibility for private and/or commercial websites. However general anti- discrimination and equal treatment laws apply to all legal entities. There have been no court cases so far against private or commercial parties regarding discrimination through inaccessible websites.
NO	Yes, as covered in the anti discrimination law. The law is the same for public and private sector, also non-profit organizations. The law states that it covers public and private sector that have the public as a target group.
PL	None
PT	There are no obligations directly oriented to private or commercial websites. However, it is possible to consider that this is implicitly covered by some of the resolutions, mainly in terms of actions to encourage their attention to web accessibility. For example, Resolution of the Council 2003/C 39 aims at the promotion of specific measures to encourage private firms to make their products and services accessible online
RO	-
SE	None
SI	No direct obligations Although the Act on the Equalization of Opportunities for Disabled Persons (from 2010) draws attention on access to information, communication and other services and emergency assistance, the measures in regard to accessibility of websites are only indirect.
SK	None Private companies are not obliged, although many of them freely decided to follow e-accessibility recommendations to build good image.
UK	Under equality (anti-discrimination) legislation. The obligations to provide accessible websites in the private sector would be covered by the general provisions of Part 3 of the Equality Act 2010 ('the Act') relating to the service providers. Guidance from the EHRC on what would constitute a service provider contains a very wide range of private sector services

	Obligations in relation to private (commercial) website accessibility
	including financial services such as banks, providers of public utilities, (such as gas, electricity and water suppliers), retail services and telecommunications and broadcasting services
	The Equality Act 2010 http://www.legislation.gov.uk/ukpga/2010/15/contents
	EHRC list of examples of service providers:
	http://www.equalityhumanrights.com/advice-and-guidance/before-the-equality-act/guidance-for-service-providers-pre-october-2010/what-is-a-service-provider
	Under equality (anti-discrimination) legislation.
AU	The Disability Discrimination Act broadly covers web accessibility in terms of access to goods and services and the obligations under indirect discrimination.
	Advisory Notes about WCAG 2.0 from the Australian Human Rights Commission are intended to assist individuals and organisations involved in the ownership or development of web resources, by clarifying the requirements of the Disability Discrimination Act (DDA) in this area, and explaining how compliance with them can be best achieved. The Advisory Notes do not have direct legal force, nor do they substitute for the provisions of the DDA itself. However, the Commission and other anti-discrimination agencies can consider them in dealing with complaints lodged under the DDA.
	The SOCOG vs. Maguire case established a legal precedent in the Disability Discrimination Act that the Act applies to online service delivery
	None at federal level.
CA	Separate regulations can and do exist within some provinces, e.g. Accessibility for Ontarians with Disabilities Act, 2005. At the moment, only Ontario has a law in place making it necessary for businesses to be accessible to everyone. However, other provinces are considering doing the same thing. It may be only a matter of time before all of Canada has standards on accessibility for businesses.
	In July 2010, the Department of Justice posted revised regulations for ADA Titles II and III, reflecting the first major revision of accessibility standards under the ADA since the early '90's. The DOJ released four "Advance Notices of Proposed Rulemaking" (ANPRMs) to announce its consideration of possible further revisions to the ADA Title II and Title III regulations and began gathering public feedback and recommendations. One ANPRM concerns the establishment of web accessibility standards for state and local government entities (Title II) and places of public accommodation, such as stores, hotels, and schools (Title III). Two attorneys, Teresa Jakubowski of Barnes and Thornburg and Joshua Stein of Proskauer Rose, have addressed the case law on the applicability of ADA to web sites and the accessibility standards web sites should meet. They noted that it is still "unsettled," as whether web sites of private entities must meet ADA
US	Title III web accessibility requirements. They noted that the DOJ interprets the ADA as applying to the information, communication, and services delivered by public entities and private sector "places of public accommodation" via the Web, and thus that the department fully intends to establish web accessibility standards for them. The ANPRM on web accessibility and recent DOJ settlements with public and private entities indicate the DOJ
	will derive its regulatory standards for web accessibility from the Rehabilitation Act Section 508 technology accessibility standards
	The U.S. Access Board, the federal agency charged with setting accessibility standards under the Rehabilitation Act, ADA, and other relevant laws, is in the process of revising its Section 508 standards to better align them with the WCAG standards. The Access Board does not anticipate completing its "refresh" of Section 508 until 2013.

Annex 6 - Web accessibility standards/guidelines applied

	Web accessibility standards/guidelines applied	
АТ	In the E-Government Law official websites are obliged to respect WCAG level A, the fulfilment of other levels of WCAG - as far as possible - is intended. Federal Disability Discrimination Act (BBGStG) implies the fulfilment of WCAG level AA. Websites that are set up in Austria with help of public funding are covered by the BBGStG and should therefore as large be in conformity with WCAG 2.0 AA. Therefore, the level of accessibility required is WCAG A or AA, depending on the legislation	
BE	No official standards, but the Anysurfer label is the de facto one for Belgian websites. This is based mainly of WCAG level A although some criteria require level AA and AAA. WCAG2.0 is to be followed where appropriate (detailed in the Anysurfer checklist) (http://www.anysurfer.be/nl/in-de-praktijk/checklist)	
BG	Provision of administrative services online needs to fulfil WCAG 2.0 requirements. In the Ordinance for Electronic Administrative Services, Chapter III, Article 15a says that websites of the providers of public administrative services must meet the level of accessibility under the Class AA WCAG 2.0 (Web Content Accessibility Guidelines 2.0 of the World Wide Web Consortium). The website content should be presented in a standard format according to the requirements of WCAG 2.0; using formats that are not included in WCAG 2.0 (Flash, PDF, JavaScript, etc.) is allowed only in exceptional cases. In these cases, the content should be available in a standard format, as well.	
СУ	None. There is no national legislation or current policy on web accessibility standards. WCAG is informally used but not applied by any legislation.	
CZ	Czech Republic has its own set of web accessibility standards established in law 365/2000 Sb and further enforced by law 81/2006 Sb, last updated in public notice 64/2008 Sb. These standards were inspired by WCAG and nowadays there is no contradiction with WCAG standards. Czech standards had to be re-defined once in 2006 to suit WCAG standards properly. For those who are obliged by the law, the Czech standards of web accessibility have to be achieved. For other subjects it is only recommended (or it is recommended to reach at least AA level of WCAG by EU rules, these are subordinate to Czech rules)	
DE	A German own standard was adopted by federal ordinance (BITV) based on WCAG1.0, in terms of a listing of detailed requirements annexed to BITV. Following adoption of WCAG 2.0 the national standard was aligned respectively (BITV 2.0). The success criteria of WCAG 2.0 have been adopted for the purpose of BITV 2.0, with some deviations, e.g. concerning success criteria no. 3.1.5 and no. 2.4.8. Other than WCAG 2.0, BITV 2.0 specifies two priority levels. Priority level 1 includes requirements of WCAG's conformity levels A and AA, whereas Priority level 2 includes requirements of conformity level AAA. BITV 2.0 requires achievement of priority level 1 at minimum, whereby success criteria 2.4.8 is included in BITV's	
DK	priority level 1 although it is part of WCAG's conformity level AAA. The seven open standards that all public authorities have to follow include accessibility (WCAG 2.0 AA) since 2008. This is not a law but a mandatory rule for all public authorities to follow, based on a comply or explain approach.	
EL	According to Ministerial Decree YAΠ.Φ.40.4/1/989 on 10th April 2012, WCAG 2.0 compliance level AA should apply and it is recommended compliance level AAA.	
ES	The key legislative document is the Royal Decree 1494/2007, through which the "Regulations for basic terms and conditions of access for the disabled to technologies, goods and services related to the information society and social media" are approved. It refers to the existing UNE standard at that time UNE 139803:2004, that was inspired in WCAG 1.0, but the requirements were organised in a different way. Therefore, it was a national standard not equivalent to WCAG 1.0. A new updated national standard, UNE 139803:2012 "Web content accessibility requirements" was published in 2012 and based on WCAG 2.0. This new standard is mandatory as it has automatically replaced the previous standard of 2004. It replicates exactly the ISO standard identical to WCAG 2.0.	
EE	In addition to XHTLM standards, the WCAG 2.0 (level AA) (requirements for submitting information on a web page (text, pictures, forms, sound etc.)), and WAI-ARIA (requirements for web content and solutions, developed with the assistance of Ajax, DHTML and other technologies standard) have to be followed by public sector websites.	
FI	The Advisory Committee on Information Management in Public Administration, JUHTA, has been set up at the Ministry of Finance to promote cooperation in information management between the State and the municipalities. It draws up recommendations for the public administration (JHS recommendations). Recommendation JHS 129 promotes usability and accessibility, and recommends WCAG guidelines (currently	

	Web accessibility standards/guidelines applied		
	WGAG 1.0; now being updated to WCAG2.0). It requires WCAG A and some AA.		
FR	Référentiel Général d'Accessibilité pour les Administrations (RGAA), based on WCAG2.0. It requires WCAG 2.0 AA. RGAA is the official document published by administration (last version in 2009, no further update). It has the same structure as the WCAG2.0 (4 principles, 12 guidelines, success criteria, however success criteria are not exactly formulated like the approved French WCAG translation). RGAA also contains comments, explanations, examples, and 187 compliance tests to be performed to check the conformity. Compliance tests refer to the WCAG2.0 success criteria. RGAA also stipulates: "To meet the criteria required in the WCAG 2.0, a Web page must pass all tests that are labelled levels A and AA. It is also useful to check the deployment of AAA level tests, which have certain usefulness, although not essential for accessibility, without the success of these tests is a formal obligation." Additionally, public Web sites owners should publish a self declaration of conformity. But, only a minority have done it. Web sites have also possibilities to derogate from the accessibility requirements for parts of their sites (reasons invoked can be: volume of data to be treated and quantity of work necessary, obsolete contents, and sites hosting third party contents).		
The W3C Office of Hungarian Academy of Science has translated the WCAG Guidelines, and now is promoting its wide-ranging application. However the recommendations are not yet included official law) in Hungary. The overall modification of the law 1998/XXVI about the right of disabled people and the equal opposite is in progress in the recent months. The modification will include concretizations about e-accessibilithis needs the ISO 40500 to be applied in national standards, and law about the obligation of use to into force. This is also planned especially in the relation of governmental and local governmental hapages. The professional agreements are on course and it is expected that the Government will acceded			
IE	The former code of practice has since been deprecated or superseded. Presently, the official recommendation is to follow WCAG2.0 guidelines and targeting level AA compliance.		
The primary sources applied on the basis of the earlier legislation were the W3C's Web Access (especially the WCAG 1.0) and Section 508 of the U.S. Rehabilitation Act. Annexes A, B, C and I Decree July 8th, 2005, defined the guidelines on the technical requirements and the various le accessibility. [Annex "A" of the Ministerial decree contains 22 technical requirements regardin Compliance with these requirements guarantees an almost full WCAG-AA accessibility level; A contains methodologies and criteria for the subjective accessibility assessment of Internet tec applications; Annex "C" has a list of 7 requirements for the accessibility of Personal Computer Annex "D" is made up of 11 requirements for software accessibility]. The legislation has since been updated with Decree 179 of 18/10/2012 converted into Law 22 17/12/2012. Article 2.bis requires the Italian Digital Agency to define and update the technica according to the latest international standards of reference. Although WCAG 2.0 is not specific			
LT	mentioned, this is the reference. It is recommended in "Methodological Recommendations for the Creating and Testing of the Websites adapted for the Disabled" that websites should be designed according to the technical requirements that are found in Web Content Accessibility Guidelines (WCAG) 2.0) (level AA). It is a direct reference to the WCAG guidelines and there is no modification of these guidelines in the document itself. It is only stated that guidelines are grouped by four website accessibility principles: perceivable, operable, understandable, and robust (sections 3 and 4 in the document).		
LU	The Luxembourg RENOW quality standard is applied for public websites, and includes accessibility requirements. It adopts the WCAG 2.0 standards directly, and requires level AA.		
LV	Order how state institutions must present information into internet http://www.likumi.lv/doc.php?id=56301&from=off. In the policy documents (regulations) the accessibility requirements seem to be focused on issues like possibility to choose size of lettering and easy to read versions and there seem not to be explicit requirements to take WCAG2.0 standards into account.		
МТ	The latest GMICT Website Accessibility Standard issued by MITA on the 3rd June 2011 adopted version 2.0 of the Web Content Accessibility Guidelines (WCAG) as specified by the Web Accessibility Initiative (WAI) of the World Wide Web Consortium (W3C). All Level A guidelines and parts of the Level AA and AAA guidelines are mandatory and must be addressed on all new or updated Government websites. Existing public websites and websites created under the gov.mt domain prior to June 2011 shall abide by the Website Standard		

	Web accessibility standards/guidelines applied		
	(CIMU S 0051) Version 3.1, dated 15 April 2005.		
NL	The national Webrichtlijnen version 1 (2006) referred to WCAG 1.0 Priority 1 and 2 criteria, plus a number of additional guidelines for universal access. The updated version Webrichtlijnen version 2 (July 2011) consists of the full, unmodified WCAG 1 priority 1 and 2, or as an alternative the full unmodified WCAG 2.0, priority A and AA criteria, plus a number of additional guidelines for universal access. By end 2012: at least WCAG 1 Prio 1; By 2015 at least WCAG 1 prio 1+2, or WCAG 2 prio A + AA.		
NO The proposed legislation will include all criteria from WCAG 2.0 level AA, except for 1.2.4 Caption 1.2.5 Audio Description (Pre-recorded). The arguments are primarily of economic nature, as both captions and recording audio descriptions currently are rather expensive due to the manual laboration.			
PL	The official regulation on the National Interoperability Framework, the minimum requirements for public registers, the exchange of information in electronic form, and the minimum requirements for ICT systems obligates public institutions to comply with the standards of WCAG 2.0 AA (Art. 19)		
РТ	Portugal has not a national web accessibility standard, and the latest legislation/regulation cites WCAG 2.0 directly. Law 36/2011 of June 21st ("Sets the adoption of open standards in the computer systems of the State") complemented by the RCM no. 91/2012 of November 8th (National Regulation of Digital Interoperability): - Internet sites that deliver only information (definition of RCM 155/2007) must to comply (is mandatory) with WCAG 2.0 level 'A' since 8 February 2013; it Is recommended to achieve 'AA' or 'AAA'.		
	- internet sites that deliver online services (definition of RCM 155/2007) must to comply (is mandatory) with WCAG 2.0 level 'AA' since 8 February 2013; it is recommended to achieve 'AAA'.		
RO	There are no standards reported that relate to web accessibility.		
	The official recommendation is to follow WCAG 2.0 AA.		
SE	The e-Government Delegation has published recommendations for public sector websites regarding accessibility, usability, trust, efficiency, technical independence and maintenance over time. The first recommendation on accessibility is to "follow WCAG 2.0 level AA", but the recommendations also present more than 40 specific recommendations for accessibility, where some are WCAG 2.0 level AAA, some are not WCAG criteria but rather WCAG recommendations, some are recommendations on which of the WCAG techniques to use, and some have nothing to do with accessibility.		
	In the other parts of the recommendations, accessibility topics are also found.		
SI	W3C standards are only recommended in Slovenia and are not officially applied. However it is reported that all public web sites do follow W3C WCAG 2.0 (level A)		
SK	In the Ministry Regulation, the list of obliged rules is provided in Regulation's Annex. Although term "WCAG2.0" is not mentioned in this Regulation, the Equivalent Table which connects rules from the regulation to rules of WCAG2.0 was elaborated in Methodical instruction related to this Ministry regulation, where WCAG2.0 guidelines are explicitly mentioned. It includes all rules from level A and to some extent from levels AA and AAA.		
UK	For public sector websites there is guidance from the UK Cabinet office on the minimum standard of accessibility (this was previously the remit of the Central Office of Information (COI) which closed in March 2012). The UK Government Cabinet Office guidance on web standards requires the minimum standard of accessibility for all public sector websites as WCAG AA and compliance with the WCAG is acceptable at Level Double-A of version 1.0 or the equivalent level in version 2.0. The online CO guidelines on accessibility of public sector websites refer to the Publically Available Specification: PAS 78 (<i>The 2006 UK Guide to good practice in commissioning accessible web sites</i>) which has now been superseded by BS 8878:2010 <i>Web accessibility code of practice</i> , a British Standard launched in December 2010. This is not a mandatory standard and is not referenced in legislation. BS 8878 makes reference to WCAG 2.0 and updates the previous PAS 78 guidance for the process of commissioning, procuring and producing accessible websites to, inter alia, handle the emerging wider purposes for websites, for example, user-generated content such as blogs and social networking sites. BS 8878:2010 is in fact referenced in the e-accessibility Action Plan as the basis for updated advice on developing accessible online services. This Plan requires the UK Cabinet Office Digital Strategy Team to ensure that the new single government portal (GOV.UK) have accessibility built in from the outset and refers to work being done to ensure the building of the portal incorporates. Inclusive Design Principals and is built to WCAG 2.0 Standards.		

		Web accessibility standards/guidelines applied		
AU The		The Online and Communications Council (OCC) endorsed WCAG 2.0, requiring all Australian, state and territory government websites to conform to the guidelines to meet WCAG 2.0 Level A by December 2012. The Secretaries' ICT Governance Board (SIGB) extended the requirement for Australian Government (Financial Management and Accountability Act 1997) (FMA Act) agencies to conform to WCAG 2.0 Level AA standard by December 2014.		
	CA	WCAG 2.0: "Ensuring each Web page meets all five WCAG 2.0 conformance requirements: - Conformance requirement 1 (Conformance Level) defines the levels of conformance. It can only be met if the following are true: - Level AA conformance is met in full. - Common failures are avoided for all applicable success criteria. - Sufficient techniques are used to meet all applicable success criteria. - Sufficient techniques specific to each technology (that is relied upon) are used where applicable. - Conformance requirement 2 (Full pages) defines what needs to be assessed for a Web page. - Conformance requirement 3 (Complete processes) defines what needs to be assessed for a Web page that is part of a process. - Conformance requirement 4 (Only Accessibility-Supported Ways of Using Technologies) defines the ways of using technologies that can be relied upon to satisfy the success criteria. It can only be met by use of the following technologies: - XHTML 1.0 or later excluding deprecated elements and attributes, - HTML 4.01 excluding deprecated elements and attributes, - HTML5 or later excluding obsolete features, or - Technologies with sufficient techniques (specific to each technology) to meet all applicable success criteria. - Conformance requirement 5 (Non-Interference) defines requirements for ways of using technologies which are not relied upon to satisfy the success criteria." This is essentially WCAG 2.0 AA, with additions (outside the scope of WCAG) dealing with the processes undertaken in the development of the web pages.		
	US	All United States Federal Government Web sites must comply with the Section 508 Federal Accessibility Standards. Section 508 directed the Access Board (The Architectural, and Transportation Barriers Compliance Board) to create binding, enforceable standards that clearly outline and identify specifically what the federal government means by "accessible" electronic and information technology products. The Access Board enlisted the help of government, academic, industry, and disability advocacy groups to create the EITAAC, or Electronic and Information Technology Access Advisory Committee. With the help of this committee the Access Board was able to create the first set of accessibility standards for Federal E&IT and publish them December 21, 2000. Initially, guidelines did exist, but not in statutory language. Section 508 outlined binding, enforceable standards that must be adhered to in order for E&IT products to be accessible to persons with disabilities. A list of the Section 508 standards that apply to web accessibility is provided in the Section 508 of the Rehabilitation Act, §1194.22. The Section 508 Federal Accessibility		

158

Standards reference WCAG. They are currently under revisions with expected changes in 2013.

Annex 7 - Monitoring of web accessibility

	Monitoring approach	Sources
АТ	There is no monitoring of web accessibility. The only currently available means are arbitration procedures that can be initiated by the party concerned. If no agreement can be found, a law suit is possible. In 2007 a report on the state of the art of accessibility of official websites of the Federal Administration was published. The average degree to which WAI A criteria were fulfilled for all domains and in all points was with 94% very high. The accessibility evaluation for WCAG 2.0 has shown however that a high percentage of the evaluated Ministerial websites were not conforming to WCAG2.0 "Single A" in 2007. In the praxis the motto seems: where there is no claimant, there is no judge.	Report on accessibility of official websites: http://www.digitales.oesterreich.gv.at/ DocView.axd?CobId=24558
BE	There are no official exercises for monitoring web accessibility, but there are several private ones organised by Anysurfer and by students of the Thomas More University college	cf. Anysurfer website: www.anysurfer.be/en
BG	In The Ordinance for Electronic Administrative Services, it is also stated that the administrative services websites must fulfil certain design requirements related to the usage of people with disabilities and the progress of implementation of the required design applications is to be monitored by specific tests. Currently, the Communications Regulation Commission (CRC) does not perform any monitoring exercises on the implementation of the legal framework regarding web accessibility in Bulgaria. There have been external (private) assessments of the web accessibility and usability on main administrative and private websites with particular social significance. Pioneers in this direction have been the "Applied Research and Communications" Fund and the Lukrat.net company in Bulgaria. The most recent study administrated by the ARC Fund (see attached Annex document) shows that web pages of the state administration, as well as media and some banks do not cover 100% of the requirements of the W3C. There are not many mistakes but they could impede the navigation of the disadvantaged. The samples show only some of the most critical errors. In the pages included in this research most common mistake is the lack of ALT tag or ALT attribute. Another common problem is the link to download the Acrobat Reader in the presence of a PDF page. This leads to an inability to review important documents found on the page respectively. The problem probably comes from the fact that most computers are expected to have installed Acrobat Reader, but actually this is not always the case. A common problem is the lack of LANG attribute to identify the language of the page as well as PDF documents. Here are some of the advantages of its use: • It allows Braille translation software to substitute control codes for accented characters, and insert control codes necessary to prevent erroneous creation of Grade 2 Braille contractions.	The Ordinance for Electronic Administrative Services http://www.mtitc.government.bg/upload/docs/Naredb aElektronniAdmUslugipdf ARC Fund Bulgaria Website (e-government section): http://www.arcfund.net/arcartShow.php?id=7911 – e-Bulgaria reports (2002, 2004, 2005, 2006), incl. studies of web-accessibility and usability of central and local government web-sites (see reports' chapters on e-government) http://www.arcfund.net/arcartShow.php?id=6914 – e-Municipality report, 2005 assesses the development of the municipal web-sites, incl. web-accessibility issues http://www.arcfund.net/arcartShow.php?id=4571 – Benchmarking of e-Municipality Websites in Bulgaria, 2004 Lukrat.net: http://www.lucrat.net/eng/

	Monitoring approach	Sources
	 and syntax that are specific to the language of the page, speaking the text in the appropriate accent with proper pronunciation. Marking the language can benefit future developments in technology, for example users who are unable to translate between languages themselves will be able to use machines to translate unfamiliar languages. Marking the language can also assist user agents in providing definitions using a dictionary. 	
	In conclusion it can be said that all of the sites included in this research contain almost identical errors, which means that both the public administration and the private sector are not yet fully prepared to meet the needs of the disadvantaged.	
CY	None	-
CZ	There is no official authority monitoring of the web accessibility situation, not on a regular basis anyway. Ministry of interior responsible for web accessibility used external entities (web consultancy company, university faculty of informatics and public service company in the disability field) to check the web accessibility status once, in 2007. A final report on current situation in 2007 was prepared covering Public administration information systems, not all Czech webs in general. There are currently 3 entities with authorization from ministry of interior as attestation centres: RELSIE, Ltd. – Independent company offering services in the field of IT; Electro technical testing institute; Equica, Inc. – Consulting company offering services in the field of ICT (among other). These centres grant attestations only to Public administration information systems (only those are obliged to comply web accessibility standards). Upon request of website themselves these centres perform necessary steps and operations leading to further granting of attestation. Granted attestations are time-limited (5 years). Actual means of testing are unknown, as they are internal procedures of given entities.	Czech automated validators for WCAG: http://pristupnost.nawebu.cz/nastroje/ Handicapped people's organizations offering validation check: http://www.tereza.fjfi.cvut.cz/ http://kafira.cz/cms/ http://www.sons.cz/ Professional audit of Czech accessibility standards (paid service): http://www.dobryweb.cz/audit-pristupnosti
DE	No official monitoring scheme has been put in place in order to check compliance with the legal obligation imposed by BGG/BITV 2.0. As a supportive measure, the Ministry of Labour and Social Affairs has funded a project jointly conducted by web developer firms and disability organizations directed towards supporting web owners in complying with BITV. Amongst others, a voluntary compliance assessment scheme has been developed.	http://www.bitvtest.de/bitvtest/bitv_test_beauftragen/infos_preise.html#c391
DK	Digitaliseringsstyrelsen have the responsibility of e-accessibility and they measure, inform and raise awareness. The measurements have been made 2008, 2010, 2012: 206 websites are monitored: 98 local governments; 82 central governments; 26 portals (approximately e-services). A group of experts test 38 indicators according to the success criteria in WCAG 2.0 level AA. They use qualitative and quantitative tests and try with AT when necessary. They use a combination of automatic validation and manual testing. They have also made an interview with the web site owner, asking about if they use new technology etc.	http://www.digst.dk/Moedet-med- borgeren/Tilgaengelighed/Analyser-undersoegelser-og- kortlaegninger/Kortlaegning-af- tilgaengelighed/Rapporter

	Monitoring approach	Sources
	They use a score of 4 different levels (self made by the company doing the tests) of accessibility: 14 sites are good; 111 sites are ok; 71 are bad; 10 are very bad. The manual tests were made with the following tools: Web Accessibility Toolbar from Accessible Information Solutions (AIS), Colour Contrast Analyser, Web Developer and Accessibility Extensions to Mozilla Firefox, Colour Contrast Analyser from Snook, Colour Contrast Analyser from Jun etc They report to the public authority and you can see how each site scored, how it all develops from study to study (2008 > 2010 > 2012).	
EE	So far, the levels of web accessibility have been measured thrice. This has been done on behalf of the Estonian State Information System's Authority and the Ministry of Economic Affairs and Communications in the frameworks of the EU Structural Funds Programme "Raising Public Awareness about the Information Society". In 2010/2011, the most recent monitoring of the availability of public sector websites was conducted. The exercise included the websites of state institutions and of all local municipalities (sample size 293). The overall aim of the monitoring was to find out the extent to which the websites mentioned above were accessible to people with disabilities and what was the level of their technical solutions in more general terms (the websites' compliance with W3C standards WCAG 2.0 and HTML/XHTML) as of 2010. In each case, the first page, search, and contact information was assessed. Firstly a special database was created and websites saved by the use of GNU WGET software. In terms of accessibility, 4.1% of public sector websites met the WCAG 2.0 level A standard. In 2007, the accessibility of local municipalities was measured. Out of 252 websites, 4,37% (11) websites met the WCAG level A standard. The 1 st time public websites accessibility was measured was in 2006 when constitutional and government institutions (60 in total) formed the target group. As with the evaluation of 2007, the WCAG 1.0 evaluation methodology was used (http://www.w3.org/TR/WAI-WEBCONTENT/). According to the results, 6.67% of the websites met the WCAG 1.0 level A.	Avaliku sektori veebikäideldavuse uuring 2010. (2011) URL: http://www.riso.ee/et/files/veebideuuring_aruanne_fin al.pdf Avaliku sektori veebidest 4,1% vastavad ligipääsetavuse nõuetele WCAG 2.0 URL: http://www.riso.ee/et/koosvoime/internet/wcag- veebid-2011 Kohalike omavalitsuse veebidest vastab 4,37 % nõuetele URL: http://www.riso.ee/et/node/330 Eesti põhiseaduslike institutsioonide ja valitsusasutuste veebilehtede käideldavuse hindamine WCAG metoodikaga http://www.riso.ee/et/koosvoime/internet/Valitsuasutu ste_veebid_2006
EL	None	
ES	Although there are a legislative corpus and norms to follow, there is not any official monitoring body to follow up the state-of-the-art of any particular public website. On the other hand, third party and self declaration are allowed. INTECO officially is in charge of the monitoring of some webs of the public sector through its system called INTAV. http://www.inteco.es/viewProductsServices/servicios_profesionales/nuestros_servicios/catalogo/monitoriz acion_de_accesibilidad_web;jsessionid=E324B96C5235A408A2A4E0CCC91B93D9. Some tools have been approved and are available and also some certification processes have been adopted: - AENOR (Spanish association of certification) certifies the UNE139803/2012, the norm that is officially	AENOR ACCESIBILIDAD TIC: http://www.accesible.aenor.es/index.asp CWA 15554: ftp://ftp.cenorm.be/PUBLIC/CWAs/e- Europe/WAC/CWA15554-00-2006-Jun.pdf uwEM 1.0: http://www.wabcluster.org/uwem1/ Website Accessibility Evaluation Conformance

	Monitoring approach	Sources
	 accepted. EUROACERT is also considered a valid certification, while at the same time there is legislation providing processes on how to denounce breach on these certifications. Spanish legislation accepts National, European and some international certifications As for the affected websites, according to the legislation, the Administration bodies' websites and all others that are totally or partially financed by public resources are affected. There is a body, "Consejo Nacional de la discapacidad" (National Council of Disability) in charge of following up the development of the legislative aspects concerning the rights of the disabled people. But it is not a monitoring body of the accessibility for the websites, as such. Website at: http://www.msssi.gob.es/ssi/discapacidad/informacion/consejoNacionalDisc.htm 	Evaluation Method 1.0 (W3C): http://www.w3.org/TR/WCAG-EM/ Real Decreto 1276 /2011 adaptación normativa a la Convención Internacional sobre los derechos de las personas con discapacidad (Decree on the adaptation of the norm with respect to the international convention on the right of disabled persons): http://www.boe.es/diario_boe/txt.php?id=BOE-A-2011- 14812
FI	There is no systematic monitoring of web accessibility.	
FR	None	
HU	The planned modifications of law 1998/XXVI contains proposal of e-accessibility official monitoring mechanism.	
IE	There was a survey sent to each public sector body annually to find out what accessibility measures were undertaken including website accessibility. There were questions about whether the website has been audited and what level of accessibility is. This self-declaration approach however can lead to claims an order of magnitude higher than how actual performance conformed to technical standard.	http://www.nda.ie/website/nda/cntmgmtnew.nsf/D568 E86827A3A54A802573B6003D37EB/\$File/copmonrepor t2008.htm
IT	The Decree no. 179 of 18/10/2012 (converted into Law 221 of 17/12/2012) obliges public authorities to publish on their websites the annual goals of accessibility. It also assigns to the Italian Digital Agency the task of monitoring and intervention on providers of public services. The Italian Digital Agency with the note 61/2013 has defined in detail the obligations of Public Administrations, providing a questionnaire that the Public Administrations can use to perform a self-assessment on the state of adaptation of its web sites and web services to the legislation on accessibility. Under the Stanca legislation (Law 04/2004), the primary level of accessibility of web sites shall be certified subject to a positive result in the technical assessment, which verifies the conformity of the sites' pages with the technical requirements listed in Annex A of Ministerial Decree July 8th, 2005, by applying the methodology indicated therein. The secondary level of accessibility relates to the quality of information and services provided by the web site and breaks down into first, second and third-level quality. These levels of quality shall be certified by the subjective assessment, using the assessment criteria set out in Annex B of Ministerial Decree July 8th, 2005, by applying the methodology indicated therein. Law 04/2004 assigned the duty to monitor the enforcement of the Law to the Presidency of the Council of	http://www.digitpa.gov.it/ http://www.funzionepubblica.gov.it/link/digitalizzazion e-e-innovazione-tecnologica.aspx

Monitoring approach	Sources
Ministers (Department for Innovation and Technology now Digitization and technological innovation) and to CNIPA (now DigitPA - National Agency for the digitization of public administration). This applies especially to central public agencies. These two agencies must also trace the accessibility criteria for the development of IT systems in public administration, and introduce the issues relating to accessibility in public personnel training programs.	
On the other side, the Regions, the autonomous Provinces and Municipalities are responsible for the enforcement of the provisions of the law by local authorities. What is happening is that many Regions are now establishing their own competence centres in order to support the effectiveness of the Law on a local level through positive actions and training programmes under the coordination of CNIPA/ DigitPA.	
CNIPA/ DigitPA also plays an important part in monitoring the enforcement of accessibility policies in the processes of public ICT procurement. One of its institutional duties is in fact to give advice on any relevant public ICT project or contract signed by central agencies.	
A strong incentive has also come from the diffusion of the Italian web accessibility mark on public Web sites. Public Agencies that have positively gone through the technical accessibility test and want to bring out their commitment to the cause of e-inclusion, may report the result to CNIPA/ DigitPA and add the "accessibility logo" to their home pages.	
CNIPA/DigitPA sets up and runs a database containing all the information relative to the web sites which currently display the logo.	
The monitoring activity includes internet browsing of large numbers of websites and also in response to a complaint by a citizen. Through the site Accessibile.gov.it, any citizen can report problems of access to the sites and services provided by the PA, as well as send complaints or suggestions and then check the status of implementation of each report made.	
The list of official evaluators is at: http://www.digitpa.gov.it/sites/default/files/allegati_tec/Elenco%20valutatori%20accessibilit%C3%A0%2020 13_0.pdf	
The result of this evaluation process is the reporting of any accessibility problems and indications for changes.	
Once a year the Information Society Development Committee under the Ministry of Transport and	Valstybės institucijų interneto svetainių tyrimo

	Monitoring approach	Sources
	Communications organises the analysis of state and municipality institutions' websites. During the last analysis it was identified that out of 912 websites to which the accessibility obligations apply 58,6 % meet the requirements of website accessibility. During the previous analysis there were 51.9 % of public websites that met the requirements. It was concluded that during the last year the public websites were significantly improved to meet the requirements of website accessibility (although it seems that still only a small minority passed the actual formal test)	ataskaita. 2012 (Eng. The Report of the Analysis of the State Institutions' Websites. 2012) http://www.ivpk.lt/uploads/Bendrieji%20reikalavimai/2 012%20Bendruju_reikalavimu_tyrimo_ataskaita.pdf Valstybės institucijų interneto svetainių tyrimo ataskaita. 2011 (Eng. The Report of the Analysis of the State Institutions' Websites. 2011) http://www.ivpk.lt/uploads/Bendrieji%20reikalavimai/A taskaita_bendr-reik_2011_v3.pdf Valstybės institucijų interneto svetainių tyrimo ataskaita. 2009 (Eng. The Report of the Analysis of the State Institutions' Websites. 2009) www.ivpk.lt/uploads/Bendrieji%20reikalavimai/Ataskait a_20090904_final.doc
LU	Luxembourg deploys a quality insurance approach including UX, accessibility, information architecture, development criteria for all public website projects, with several quality checks all along the website design process. The relevant authorities also provide a tool to carry out online quality evaluation. The aim is to provide Luxemburgish Public Quality Barometer. Monitoring of accessibility is carried out by CTIE in conjunction with the client organisations. This covers websites under www.etat.ie. There is an ongoing accessibility audit all along the design process. The tool for monitoring quality includes an accessibility report.	
LV	There are no official exercises for monitoring web accessibility. Only associations of disabled persons SUSTENTO and APEIRONS regularly carry out this monitoring.	
МТ	There is no regular official monitoring/verification framework enforced by MITA that ensures that content passes the minimum accessibility requirements and/or guarantees that accessibility is in place. The Foundation for Information Technology Accessibility (FITA) is the principal advocate and coordinator for ICT accessibility in Malta. FITA advises and acts on behalf of the Kummissjoni Nazzjonali Persuni b'Diżabilita' (KNPD) on matters of ICT accessibility and regularly monitors website accessibility. Although no detailed evaluation reports measuring actual levels of web accessibility are available online, KNPD has published the 'FITA ICT Accessibility Audit Register' which lists Maltese website that have been built according to the 'FITA Web Accessibility Guidelines' and the 'FITA Web Accessibility Audit checklist.'	FITA ICT Accessibility Audit Register http://www.knpdarchives.org/fita/dokumenti/1007_fita _audits_register.pdf FITA Web Accessibility Guidelines http://www.knpdarchives.org/fita/dokumenti/webpage s.doc FITA Web Accessibility Audit checklist http://www.knpdarchives.org/fita/dokumenti/web_che cklist.doc

	Monitoring approach	Sources
NL	Governmental website accessibility is monitored; accessibility is assessed both with an automated check and with a 'manual' test. A new monitor/test instrument is under development (trials in September 2012).	www.webrichtlijnen.nl/monitor
NO	All public websites are checked automatically and lightly, more as an overview (more like cluster sampling) with 11 criteria/checkpoints chosen from WCAG.	http://kvalitet.difi.no/resultat/
PL	The Ministry of Administration and Digitisation, and previously the Ministry of the Interior and Administration, have commissioned studies in this field, such as the "Study of the effect of computerisation on the operation of public administration offices in Poland in 2011" which investigated by means of a questionnaire-based survey all offices of public and government administration, also with respect to the compliance of their web sites with the W3C standards (WCAG 1.0 and WCAG 2.0). This formed the basis to determine whether an office conformed with those requirements or not. An important piece of information turned out to be, for instance, how many respondents were not able to answer the question concerning accessibility, even though competent persons had been selected for the survey. In 2012 the Information Society Department of the Ministry of Administration and Digitisation published the report on "Information Society in figures 2012" which cites the data from that survey. A similar publication was also issued in previous years.	A study of the effect of computerisation on the operation of public administration offices in Poland in 2011 http://msw.gov.pl/portal/pl/256/9425/Raport_z_Badani a_wplywu_informatyzacji_na_dzialania_administracji_p ublicznej_w_P.html (access: 30.07.2012) Information Society in figures 2012 http://mac.gov.pl/dzialania/jest-nowy-raport-spoleczenstwo-informacyjne-w-liczbach/ (access: 30.07.2012)
PT	The assessment is made on request to the responsible organisation. These are the validation tools: TAW (Test Accessibilidad Web): http://www.tawdis.net/ Hera (Revendo a Acessibilidade com Estilo): http://www.sidar.org/hera Examinator (Relatório de Acessibilidade Web Simplificado): http://www.acesso.umic.pt CynthiaSays.: http://www.cynthiasays.com Opera: http://www.opera.com In 2010 75% homepages ensure the level "A". Not all sites have been tested. Of the 28 sites (Central Government) evaluated by TAW 75% complied with WCAG 1.0, more precisely 64% in accordance with the level "A" and 11% in accordance with the level 'AA'.	http://www.acessibilidade.gov.pt/e_u/index.htm
RO	-	-
SE	Earlier, the governmental body of Verva made automatic tests on web accessibility on governmental public sector websites four times a year. Verva was closed down in 2008. No official measurement has been made around WCAG since then. However, the public body Handisam and the public body of local government bodies SKL does make studies of their own every second year. These studies are not checking WCAG accessibility but rather asking the public sector to self-declare (Handisam) or letting students search the web	http://handisam.se/Uppfoljning-och- statistik/Uppfoljning-i-statenOppna- jamforelser/Handisams-myndighetsenkat/Enkat-till- myndigheter-2013/ http://www.eutveckling.se/sidor/matningar/

	Monitoring approach	Sources
	sites and report what they find (SKL). There are also 2 commercial ICT-companies that measure accessibility automatically in more or less the same way Verva did, Meridium (the service is called Validerat) and Netrelations (the service is called Inspector). They do it free of charge and open, as a service to their customers.	http://www.handisam.se/Uppfoljning-och-statistik/Uppfoljning-i-statenOppna-jamforelser/Oppna-jamforelser-Ny/Oppna-jamforelser-2012/ http://brs.skl.se/brsbibl/kata_documents/doc39598_1.pdf http://www.validerat.se/sv/se-resultaten/ http://inspector.netrelations.se/
S	Ministry of Public Administration in 2008 fully incorporated state E-government portal following W3C WCAG 2.0 EU guidelines. Now all public administration web sites follow corporate identity, so no monitoring is not felt necessary. There are no official exercises to monitor other (private) web sites.	Report on the implementation of Action Plan for Disabled Persons 2007-2013 – Final report (2011) (http://www.google.si/url?sa=t&rct=j&q=&esrc=s&sour ce=web&cd=6&ved=0CD4QFjAF&url=http%3A%2F%2Fw ww.irssv.si%2Findex.php%3Foption%3Dcom_docman% 26task%3Ddoc_download%26gid%3D219%26Itemid%3 D&ei=j1JTUJmOHqOm4gTm2YHwCQ&usg=AFQjCNHxOt MghgljRx_Fq08wPqmll18a3g&cad=rja)
S	The e-accessibility monitoring is done in irregular waves. Till now, 9 waves of monitoring were conducted (2005, 2007, two in 2008, three in 2009, 2010 and two in 2011). These monitoring focuses on both public administration and private companies' websites.	Description, methodology, results and reports of e-accessibility Monitoring: http://informatizacia.sk/monitorovanie-pristupnosti-webovych-stranok/2824s#pristupnost_2011_I
U	Following a UK National Audit Office report, the UK Public Accounts Committee (PAC) published a 'critical' review of progress for improvement of the UK Government's internet practices in its 16th report of 2007/08. In response, annual monitoring of a number central government websites has taken place since 2009 to, inter alia, assess accessibility, applying the standards set out in the guidelines TG102 issued by the (now defunct) UK Central Office of Information and subsequent reports on progress published. The latest report 'REPORTING ON PROGRESS: Central government websites 2011/12' confirmed that of the government sites that responded (182), 64% were WCAG single-A compliant and 61% were WCAG double-A compliant. In addition to monitoring exercises, it would appear that the overall approach in the UK to achieving compliance with legislation on web accessibility has involved a combination of accessibility initiatives including reviews, evaluation and development of guidelines. For example, the (now defunct) UK Disability Rights Commission's 2004 Formal investigation into the accessibility of web sites and the development of a Publically available specification PAS 78 and more recently the British Standard BS8878. In addition, activities	Reports on progress: Central government websites 2009/10 2010/11 and 2011/12: https://update.cabinetoffice.gov.uk/resource-library/websitemetrics2010-11 (accessed 28/07/2012)

	Monitoring approach	Sources
	such as the beta testing by Government Digital Service of the single government portal (GOV.UK) http://digital.cabinetoffice.gov.uk/2011/09/05/accessibility-and-the-single-government-domain/	
AU	Federal agencies will be required to report at regular intervals to the Australian Government Information Office (AGIMO) that is part of the Department of Finance. AGIMO reports to the Secretaries' ICT Governance Board. For state and territory agencies, reporting will be coordinated by jurisdictional representative agencies, or via existing reporting mechanisms. Jurisdictions will provide consolidated reporting from their state to AGIMO to enable national progress to be monitored. A reference group has been established to monitor progress and provide relevant input from an industry and societal perspective. Members include the Australian Human Rights Commission; the Attorney-General's Department; the Department of Families, Housing, Community Services and Indigenous Affairs; the Department of Broadband, Communications and the Digital Economy; and representatives from state and territory jurisdictions.	Web Accessibility National Transition Strategy http://www.finance.gov.au/publications/wcag-2- implementation/introduction.html#mandate
CA	"Deputy heads are responsible for monitoring adherence to this standard within their departments, consistent with the provisions of the Treasury Board's Policy on Evaluation, and Policy on Internal Audit, and for ensuring that appropriate remedial action is taken to address any deficiencies within their departments." "The Treasury Board of Canada Secretariat will monitor compliance with this standard in a variety of ways, including but not limited to, the following: - assessments under the Management Accountability Framework; - examinations of Treasury Board submissions, departmental performance reports, results of audits, evaluations and studies; and - work performed in collaboration with departments." Since this is just a new standard, monitoring results are not yet available. At this point monitoring has been left to voluntary compliance without formal monitoring being put in place. Previously, there was a	Standard on Web Accessibility http://www.tbs-sct.gc.ca/pol/doc- eng.aspx?section=text&id=23601
US	monitoring section within the Treasury Board, but this unit has been let go and not replaced. The U.S. Department of Justice Office of Civil Rights is charged with enforcing Section 508. When complaints arise, members of the public, students, and employees with disabilities may: 1. File an administrative complaint with agencies they believe to be in violation of Section 508. 2. They may file a private lawsuit in federal district court, or 3. They can file a formal complaint through the US Department of Justice Office of Civil Rights. The Attorney General is required to evaluate how well the government is conforming to Section 508. They are also required to provide updated reports to the President and Congress on both the accessibility of	http://www.justice.gov/ http://www.justice.gov/opa/pr/2012/September/12- crt-1103.html

Monitoring approach	Sources
federal electronic and information technology to people with disabilities and the resolution of Section 508 complaints filed against federal agencies. In September, 2012, the DOJ released a report on accessibility of federal government electronic and information technology. The report was authorized under Section 508 of the Rehabilitation Act of 1973, as amended (Section 508) to provide findings based on a survey of federal agencies on the accessibility of their electronic and information technology (EIT) and the procedures used to implement the requirements of	
Section 508. EIT includes website accessibility among other things. The survey results indicated that a good deal of the EIT used by federal agencies is accessible. The report finds that most agency components have general Section 508 policies (over 50 percent), as well as Section 508 Coordinators (nearly 70 percent). Most components (over 90 percent) incorporate Section 508 requirements into their procurements for EIT in some way. Few agencies have received Section 508	
complaints. Most components (70 percent) have accessibility policies in place for websites and a majority (nearly 58 percent) perform some type of evaluation and remediation on their websites.	

Annex 8 - Evolution of web accessibility policy in recent years

	Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
AT	There were no changes since 2008, because national regulation acts in accordance with international standards. If the standards in W3C change, they then apply automatically for Austria (international standard equals national standard).	There are no official plans of changes from the political side. Nevertheless, it is reported that the parties concerned wish for more opportunities of mutual agreement and for the opportunity of a class action.
BE	None reported	None reported
BG	Changes in existing legislature concerning web accessibility last made in 2009.	Common Strategy for Electronic Governance in the Republic of Bulgaria (2011-2015)
CY	None reported	None reported
CZ	Last change implemented in the case of web accessibility in Czech Republic was Public notice 64/2008 Sb. in 2008. It defines changes in Czech accessibility standards to comply the WCAG 2.0 better (not fully however).	In 2007 Czech Republic committed to reach WCAG 2.0 standards in future. There is no exact date of achieving these standards and its form is yet to be discussed.
DE	The main legislative change implemented since 2007/2008 concerns the revision of the federal ordinance substantiating the obligation towards web accessibility imposed by the general equality law enacted in 2002. Here, the 61 success criteria set out in WCAG 20 have been largely adopted, with few exemptions. Also an additional requirement to provide basic information by means of German sign language and easy language has been adopted.	None reported
DK	There has been some re-organisation in public Denmark and the public body that made the measurements does no longer exist. But regarding the guidelines and standards on accessibility, no changes have been made.	None reported
EE	In comparison with 2007/2008, there has not been completely new legislation concerning the e-accessibility of websites in particular. Rather, the existing policy measures have been continued/ extended. The work on the implementation of the Information Society Strategy 2013 continues. The Interoperability of the State Information System Framework has been updated annually. In 2008, Everyone's Rights in e-State The e-State Charter by the National Audit Office of Estonia was compiled. All of these documents make reference to the need to make (public) websites accessible to people with special needs. When in 2006 and 2007, the accessibility of public sector websites in terms of WCAG 1.0	According to the Action Plan 2012-2013 of the EU Structural Funds Programme "Raising Public Awareness about the Information Society" (launched in 2007) one of its goals is to raise awareness to improve access to public e-services and make the services more user-friendly. The target group includes state agencies and local municipalities, developers of e-services and websites, the Internet community (including people with special needs). Within the period of February 2012-January 2013, the following tasks are foreseen: 1) translation

Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
standard was measured, in 2010/ 2011, the same exercise assessed how many of the public sector websites met the officially applied WCAG 2.0 standard. In March 2012, Estonian Parliament, the Riigikogu, ratified the UN Convention on the Rights of Persons with Disabilities which also makes reference to the need to guarantee disabled persons access to various services, including information and communication technology.	and adaptation of the WCAG 2.0; 2) creating implementation guidelines for the implementation of WCAG 2.0 guidelines, 3) creatin an electronic technical aid for measuring the user-friendliness of websites. Basically, the technical aid should be a website where it would be possible to assess a website's user-friendliness. The requirements of user-centred websites are largely based on the document "Kasutajakeskse veebi disain, (The Design of User-centred Web) http://www.riso.ee/et/files/Kasutajakeskse_veebi_lehekylgede_disai.pdf, which includes Estonian specific as well as generally accepted website requirements.
	Preparations for the new Information Society Strategy 2020 (2014-2020) have begun.
	Another strategic document, the Green Book on Public Sector Administration is currently also being worked on in cooperation with various ministries and should be available before the end of 2012. The aim of the Book is to establish a central approach about how public services should be provided. The Information Systems Development Division of the Ministry Economic Affairs and Communications holds the stance that access to a public service has to be granted through the most convenient channel (electronic environments, office, telephone service, (mobile)-service, smart-service, etc.) depending of the target group and the nature of a particular service. In case a person with special needs has to/can use a particular service, the provider of public service must organize his/her access to the service. The technology used has to meet the established requirements. Most important is the availability/accessibility of the service, the means or channel of providing the service is of secondary importance. By 2014, the so-called single Government Portal should be created
	which should bring the current websites of the Government of the Republic, the State Chancellery, and the 11 ministries under single platform. This should help to overcome several currently existing
	technical problems, including accessibility for disabled persons (by 2014, all the websites of ministries should comply with WCAG

	Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
		requirements).
EL	The main legislative change was the Ministerial Decree YAΠ.Φ.40.4/1/989 issued on 10th April 2012, obliging public website accessibility.	There are no plans for any changes on the main legislative initiatives since Ministerial Decree YA Π . Φ .40.4/1/989 was issued very recently (on 10th April 2012)
ES	Many regulations adapting the 2007 legislation have been published. Recently, in July 2012 the official certification norm UNE139803/2004 has been derogated by UNE139804/2012 to introduce as mandatory the WCAG 2.0 The acceptance of Spanish certifications together with the European and some international ones and the regulations that include social networks in the obligation of being accessible, is another aspect of the constant evolution of the Spanish legislation on this matter. http://www.boe.es/diario_boe/txt.php?id=BOE-A-2011-14812	No specific plans are foreseen at this moment, as the legislation is already adapted to the European requirements although experts and certification and standardisation bodies continue working on accessibility issues.
FI	WCAG 2.0 has officially been translated into Finnish.	Recommendation JHS 129 is currently being updated.
FR	February 2009: Publication by administration of the Référentiel Général d'Accessibilité pour les Administrations (RGAA), technical document Web defining accessibility http://references.modernisation.gouv.fr/rgaa-accessibilite/ 16 May 2009: decree JORF n°0113 du 16 mai 2009 page 8245 texte n° 32): http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020616980 29 octobre 2009: arrété JORF n° 0251 du 29 octobre 2009 page 18329 texte n° 31). http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000021208630 http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000021208630	None
ни	The 2009. LX. law about electronic public-utility service specifies that in the case of those services where the nature of matter allows it, the accessibility of disabled people have to be assured. The 225/2009. (X. 14.) governmental regulations prescribe the general rules of electronic public-utility service, accentuating that it has to be assured the accessibility of electronic public-utility service. Parallel with these the accessibility tenders in Hungary have the condition the accessibility of web pages, too. 1056/2012 governmental decree says that it have to establish the e-accessibility of public web pages. The deadline is 30 September 2013.	The National Development Ministry is now working on the basic principles of web accessibility.

	Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
IE	There have been no legislative changes on web accessibility implemented since 2007/2008. There was a review of the Disability Act in 2010, but no update of the Act or its provisions of relevance for web accessibility. It has been suggested that achievements in web accessibility that were made during the 2006/7/8 period (when there was funding under the disability strategy) may not always be being sustained.	None reported
IT	Ministerial Decree of 30 April 2008 - Technical rules governing access to educational tools and training for disabled pupils.	None reported
	New recommendations on website accessibility were passed on 2011/12/27. The earlier version of these recommendations was issued on 2004/03/31. New recommendations are based on the new technical requirements described in WCAG 2.0 and were updated from the previous version of WCAG 1.0.	No information about the discussion or planning of any web accessibility legislative policies was gathered.
LT	Autorių teisių ir gretutinių teisių įstatymas (Eng. Law of Copyright and Related Rights) [link2] was changed on 2011/12/21 to state that disabled people have a right to free e-access to the works of art in audio and Braille formats (section 25).	
	[link1] Neįgaliesiems pritaikytų internet tinklapių kūrimo ir testavimo metodinės rekomendacijos (Eng. Methodological Recommendations for the Creating and Testing of the Websites adapted for the Disabled) http://www.ivpk.lt/uploads/wcag/isakymas.pdf	
	[link2] Autorių teisių ir gretutinių teisių įstatymas (Eng. Law of Copyright and Related Rights) http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=417078&p_query=&p_tr2=2	
LU	The Luxemburgish Gov council officially adopted Renow in 2007.	There are plans to extend the web accessibility obligations to commercial websites as well.
LV	None reported	None reported
МТ	The Equal Opportunities (Persons with Disability) Act of 2000 (Chapter 413, Article 13) stipulates that no person with a disability shall be denied access to the services of any local or other public authority. The Foundation for Information Technology Accessibility (FITA) is the principal advocate and coordinator for ICT accessibility in Malta. FITA advises and acts on behalf of the Kummissjoni Nazzjonali Persuni b'Diżabilita' (KNPD) on matters of ICT accessibility.	According to the sources available, apart from the changes implemented in the course of 2011, there are currently no further policy changes planned.
	The latest GMICT Website Accessibility Standard issued by MITA on the 3rd June 2011, adopted version 2.0 of the Web Content Accessibility Guidelines (WCAG) as specified by the Web Accessibility Initiative (WAI) of the World Wide Web Consortium (W3C). Now, all Level A guidelines and parts of the Level AA and AAA guidelines are mandatory and must be addressed	

	Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
	on all new or updated Government websites. Prior to adopting WCAG 2.0, all public websites were required to adhere to WCAG version 1.3 which was implemented through Governments' Website Standard (CIMU S 0051) Version 3.1, dated 15 April 2005.	
NL	The Webrichtlijnen, including the accessibility standards have become a national standard in 2006, and are applied since then in (e.g.) procurement procedures. Accessibility has become a standard topic addressed in e-gov policies. The national standard for web accessibility is one of the essential building blocks of the National ICT implementation plan (2009 and onwards). In response to questions in Parliament, the Minister of Internal Affairs (BZK) has agreed that measures will be taken if the objective (all gov sites accessible at WCAG 1, prio1 level) is not achieved by end of 2012. In implementation and support projects, the focus on the guidelines is supplemented with attention for organizational implementation conditions, such as anchoring accessibility in quality policies, securing management commitment, etc. The issue of achieving a certain standard has been extended towards assuring that the standards can be maintained over time and that accessibility is a common part of organizational policies.	Being discussed: should compliance with the mandatory standard be enforced, and if so, what kind of sanctions would work? Expectation: the launch of the European Accessibility Act (announced for late 2012) might change the Dutch policies concerning private/commercial websites and basic services websites accessibility.
NO	The new law on antidiscrimination was approved in 2010.	Since the government is still discussing the regulation's specifications, one could say that elaboration of the details of the law enforcement is still taking place.
PL	As compared with the year 2008, Polish legislation has undergone some significant changes as regards web site accessibility. The hitherto non-binding guidelines and studies were replaced as of 15 February 2010 with new provisions of the Act of 17 February 2005 on the computerisation of the operations of the entities performing public tasks, as amended. However, it was not until 2 years later that specific regulations were introduced by the Regulation of the Council of Ministers of 12 April 2012 on the National Interoperability Framework, the minimum requirements for public registers, the exchange of information in electronic form, and the minimum requirements for ICT systems; those specific regulations obligate public institutions to apply WCAG 2.0 at level AA in their web sites. As regards other government documents, the problems of e-services accessibility and the government's standpoint concerning this issue are addressed in a general manner in the publication issued by the Ministry of the Interior and Administration, "Digital Agenda for Europe in the works and plans of Polish government institutions". Basically, in terms of web	The "Long-Term National Development Strategy Poland 2030" brings hope that such plans are going to emerge in the not too distant future, however it is not discussed yet. PL: http://mac.gov.pl/strategie/ EN: http://bip.msw.gov.pl/download.php?s=4&id=6188

	Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
	site accessibility to people with disabilities, it only mentions those changes in the legislation that had been implemented till that time.	
	On 5 April 2011 the Ministry of the Interior and Administration presented a draft of the strategy for "Efficient State 2011-2020". It mentions, among other things, the need to provide access to e-government services to people with disabilities. The document states that those persons must not be excluded from being a part of the information society, whose "one of the important priorities is to make use of the possibilities provided by digital technologies for the purpose of activation and social integration of socially excluded groups." (page 50).	
	"The Strategy for the Development of the Information Society in Poland until 2013" from the year 2008 actually does not directly address the issue of web site accessibility to people with disabilities. However, the "Long-Term National Development Strategy Poland 2030" does, even if in a general manner, remark repeatedly on the problem of digital exclusion of the disabled (as well as the elderly, the less educated, etc.), for example by referring to the Digital Agenda for Europe and the need to work on e-inclusion, to provide access to public information, to supply and promote accessibility standards not only by public institutions.	
	There are no changes to report.	There are legislative/or policy changes under discussion aiming at increasing the target group (including relevant private/commercial websites). The new legal dispositions currently under discussion will focus on:
n=		– Direct and Indirect public State Administration bodies
PT		– Education institutions
		- Online banking
		- Utilities (such as: EDP, Telecoms)
		– Media (TV, radio, newspapers)– e-Commerce
RO		- e-commerce
KU	No absence There are just different places. The formation of the state with with the state of th	Opening discussion on including help of according to the
SE	No changes. There are just different players. The former national authority Verva which produced guidelines for web development was closed down in 2008. The e-Government Delegation has taken over the responsibility. A new digital agenda for Sweden is applicable since 2010. http://www.government.se/sb/d/2025/a/181914 initiatives on web accessibility in page 21.	Ongoing discussion on including lack of accessibility as a form of discrimination under the legislation. This discussion is not new but has been further accentuated during 2012.

	Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
SI	Action Plan for Disabled Persons 2007-2013 started its implementation in 2007. The Plan will be fully implemented until year 2013, but most of the objectives under the goal 3 (ensuring disabled people access to the built environment, transportation, information and communications) that are referring on web accessibility have already been achieved. Under that goal, provision 3.9 states that information and other services of the government on the World Wide Web should be equally accessible to all citizens. Provision 3.11 promotes the usage of ICT for better integration and communication of disabled and functionally impaired people in the field of e-accessibility, including the use of the internet, hardware and software. As a result of these provisions, adaptation of the e-government portal on W3C WAI level A has been made. Another new feature carried under Action Plan is the inclusion of service "Govorec" (in English "Speaker") on the web portal of e-Government for listening to certain published content. Beside this, the web portal of e-Government allows viewing of video content by the visually impaired.	None reported
SK	 The main changes: the list of obliged entities (organizations) was expanded, more WCAG2.0 rules were added as obligatory rules. 	It is planned to expand the list of obliged entities to include universities and health care services providers. No changes regarding the expansion of obligatory WCAG2.0 rules are planned.
UK	The existing provisions of the DDA 1995 (as amended) for website owners to make their site accessible to disabled users and to make reasonable adjustments to do so were merged into the Equalities Act 2010 and appear to have been strengthened by new provisions for reasonable adjustments which have been expanded and appear more onerous than under the DDA 1995. The Equality Act 2010 appears to lower the threshold for the requirement to make reasonable adjustments and now provides that a person with disabilities must not be put at a 'substantial disadvantage', compared to a non-disabled user, whereas under the DDA 1995 (as amended) the requirement for reasonable adjustments arose where it was 'impossible or unreasonably difficult' for a disabled user to use a service. Furthermore, the EHRC's Code of Practice on the application of the 2010 Act advises that the duty to make reasonable adjustments is a 'continuing' duty that should be continually reviewed, not simply considered once (7.27). Additionally, the Equalities Act 2010 places more onerous generic duties on Public authorities to 'eliminate discrimination', 'advance equality of opportunity' and 'foster good relations between those protected by the Act and others', which could have implications in the provision of website services.	Legislation The Equality Act 2010 is relatively new legislation comprising overarching provisions for web accessibility and no planned changes (or changes currently under discussion) thereto are currently known. Any foreseeable changes may possibly be in response to future EU directives on web accessibility. Policy 1. Cabinet office guidelines state that future policy and timetables for implementation 'will align with European Commission recommendations on the adoption of WCAG 2.0 and planned future updates to the guidance will include details of the specific conformance requirements for version 2.0' http://digitalstandards.cabinetoffice.gov.uk/delivering-inclusive-websites/minimum-standard-of-accessibility/
AU	In December 2009, the Online and Communications Council of the Council of Australian	

	Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
	Governments (COAG) adopted WCAG 2.0 replacing the previous WCAG 1.0 requirement. Web Accessibility National Transition Strategy commenced in 2010	
	"The new Standard on Web Accessibility and new Standard on Web Usability are now in effect. The new Standards replace Parts 1, 2 and 3 of the Common Look and Feel for the Internet 2.0 Standards.	None reported. The new Standard on Web Accessibility took effect on August 1, 2011. It is now in its implementation phases.
CA	"The new Standards are accompanied by guidance documents (Guidance on Implementing the Standard on Web Accessibility, Guidance on Implementing the Standard on Web Usability) to facilitate implementation which provides useful direction to senior departmental officials, who are responsible for supporting deputy heads in adhering to the requirements of these new Standards."	However, the federal government is moving to a single IT organization "Shared Services Canada". This organization will have the potential for improving accessibility compliance.
	http://www.tbs-sct.gc.ca/clf2-nsi2/index-eng.asp Canada was one of the first countries to embrace WCAG 2.0, even before it was officially published in its final form. In 2007/2008 the "Common Look and Feel" contained provisions beyond WCAG 1.0 that are now incorporated in WCAG 2.0. Thus there is no need for a separate "Common Look and Feel" standard. Instead, Canada now focuses on providing additional guidance on how to implement WCAG 2.0.	
US	In July 2010, DOJ posted revised regulations for ADA Titles II and III, reflecting the first major revision of accessibility standards under the ADA since the early '90's. At the same time, DOJ released four "Advance Notices of Proposed Rulemaking" (ANPRMs) to announce its consideration of possible further revisions to the ADA Title II and Title III regulations and begin gathering public feedback and recommendations. One ANPRM concerns the possible establishment of web accessibility standards for state and local government entities (Title II) and places of public accommodation, such as stores, hotels, and schools (Title III). Source: http://www.educause.edu/blogs/jcummings/ada-web-accessibility-regs-likely-just-matter-time	It is not clear when DOJ will move from this exploratory stage to posting proposed regulations for public comment via a Notice of Proposed Rulemaking (NPRM). However, the ANPRM on web accessibility and DOJ settlements with public and private entities in recent years indicate that DOJ is likely to derive its regulatory standards for web accessibility, whenever they are published, from the Rehabilitation Act Section 508 technology accessibility standards federal agencies and contractors must meet and the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG).
		The U.S. Access Board, the federal agency charged with setting accessibility standards under the Rehabilitation Act, ADA, and other relevant laws, is in the process of revising its Section 508 standards to better align them with the WCAG standards. This should simplify DOJ's standards selection process as well as provide institutions trying to anticipate those standards with some sense of direction. While the Access Board does not anticipate completing its "refresh" of Section 508 until 2013

Main legislative and/or policy changes on web accessibility implemented since 2007/2008	Main legislative and/or policy changes on web accessibility planned or currently under discussion
	DOJ has not posted any proposed regulations setting web accessibility
	standards under the ADA, and it has yet to provide a timeline for
	when it might do so.

Annex 9 - Policy situation in relation to choice for telecoms users with disabilities

	Policy situation in relation to choice for telecoms users with disabilities
	The Communication Law is applicable to public communication services and in principle it applies for all public communication providers.
	However, there are no binding obligations on the Telecoms sector in this area, although the legislation does make reference to choice in a general manner:
АТ	§ 1 Abs. 2 (2): "Ensure equal opportunities and operative competition in the provision of communications networks and communications services by ensuring that all users derive maximum benefit in terms of choice, price and quality, whereas interests of disabled users, elderly users, and users with special social needs have to be a particular focus."
	With the amendment of the telecommunication act (TKG) the guidelines of the EU TK regulatory framework were implemented. The general objectives of the law already imply that the interests of users with special needs have to be taken in special consideration.
	Due to the combination of legal provisions, which determine on the one hand publication obligations for providers with regard to measures that need to be taken for the needs of disabled users, and that on the other hand put statutory ordinances in the position of regulating by law even more targeted measures in this areas, the basis was set to create demand-oriented and appropriate regulations.
	Issue of equivalence of choice seems not to be specifically addressed.
ВЕ	The accessibility obligations (in relation to social/special tariffs) were initially designated to the USO operator, i.e. Belgacom, only. By now they are extended to ALL operators. The Belgian Telecoms regulator BIPT/IBPT is now studying how these operators can be refunded for the extra costs these social tariffs impose on them.
	(http://www.bipt.be/GetDocument.aspx?forObjectID=3603⟨=nl)
	The issue of choice seems not to be very directly addressed.
BG	In Section 2 of the Telecommunications Act, it is stated that the regulator ought to monitor the progress of service providers in terms of the mentioned above accessibility measures and mandate service providers to publish results (Article 235a). The regulator must define the standards for accessibility measures and define benchmarking standards take punitive action including cancelling service permission certification (Article 236) in order to provide extensive, transparent and easily understandable information in order to achieve equivalence in choice of all end-customers, including people with disabilities.
	The current accessibility obligations appear to apply only to the Universal Service Provider.
	The issue of choice seems not so far to have been specifically addressed.
CY	The current accessibility obligations appear to apply only to one designated (universal Service) operator (CYTA/ATHK) for Cyprus.
	It is explicitly given in the Electronic communications law to treat disabled users equally to the others in terms of access to service, emergency, directories, info &help and option to choose a provider.
CZ	Czech telecommunication office chose a designated universal service operator – Telefonica O2 that is obliged to follow all the rules and provide special services for disabled people. However all operators are obliged to offer special tariffs to disabled people. T-mobile is the only one participating on service with hearing disability.
	The issue of choice seems not so far to have been specifically addressed.
DE	§45 , section 1 to 3, of the German Telecommunications Act of 22nd June 2004 ("Telekommunikationsgesetz") as amended in 2009 and 2012 regulates in what way the interest of end users with disabilities have to be considered by all providers of publicly available telecommunications services. Provision of relays services to people with disabilities have been subcontracted to a single provider according §45 (3), whereby service provision is financed by end users through services fees and a contribution by each telecommunications providers active on the German market.
DK	The issue of choice seems not so far to have been specifically addressed, as such. Nevertheless, the accessibility obligations do appear to apply to all operators

	Policy situation in relation to choice for telecoms users with disabilities
	The issue of choice seems not so far to have been specifically addressed.
EL	The current accessibility obligations apply only to one designated (universal Service) operator and that is OTE for Greece
ES	The regulations clearly state that the operators/entities have to offer equivalent services and choices to the people with disabilities
	Accessibility requirements appear to apply to all operators
	Electronic Communication Act brings out the objectives of state organisation of the electronic communications sector and some of the goals concern the issue of choice as well:
	§ 134 (1) 1) "Protecting subscribers, including people with special needs and the elderly, in particular regarding the range of services, quality and price."
	§ 134 (3) 7)"to protect the rights of users of communications services, among other things, by ensuring the ability of end-users to access information of their choice, to its distribution as well as to the use of applications and services."
EE	Also §87 (3) says "A communications undertaking must make information on the quality of the communications services provided to end-users and measures taken to ensure equivalence in access for end-users with special needs publicly available on its website or in the absence thereof, in any other reasonable manner." [entry into force 25.05.2011].
	Electronic Communications Act (RT I, 29.12.2011, 214)
	The existing general accessibility obligations in principle appear to apply to all operators on the telecoms sector.
FI	The revised Communications Market Act appears to have relevance for choice, although seems not to specifically mention this.
rı	Accessibility obligations apply for all operators who have been chosen as universal service providers - TeliaSonera Finland Oy, Mariehamns Telefon Ab, Ålands Mobiltelefon Ab, Ålands Telefonandelslag
	The issue of choice seems not so far to have been specifically addressed, as such.
FR	However, the Code des postes et des communications électroniques stipulates "Access for disabled endusers of electronic communications services at affordable rates and emergency services, equivalent to that enjoyed by the majority of end users." and this applies in principle to all operators under the control of a governmental authority 'Autorité de régulation des communications électroniques et des postes.
HU	The 2003/C law about electronic information (2003. évi C. törvény az elektonikus hírközlésről) §2, §5, §10 makes direct reference to the equivalence in choice for disabled end users.
	The current accessibility obligation refers to all operators. In Hungary there are 2.
IE	The issue of choice has been addressed and is ongoing through a consultation process with all providers. For example, more than 10 operators (fixed and mobile) provide, on a voluntary basis, a free directory enquiry service for their customers with disabilities, who have registered for the service. This initiative was agreed and implemented through ComReg"s forum on electronic services for people with disabilities http://www.erg.eu.int/doc/berec/bor_10_47Rev1.pdf
	http://www.comreg.ie/consumer_initiatives/disabilities_forum.592.570.html So far, the formal obligations apply to just one universal service provider.
IT	The issue of 'equivalence in choice for disabled end-users' has not been explicitly addressed. Major specific obligations are issued by The Italian Communication Regulatory Authority. Other facilities are issued by fiscal laws.
	The current accessibility obligations (mainly in relation to tariffs?) apply to all telecom operators.
LT	The legislation states that large operators with significant communications network must ensure the right for subscribers to access any public telephone service provider and telephone services that a certain provider provides. (section 33.1) It is also stated that people with disabilities must have a possibility to use

Policy situation in relation to choice for telecoms users with disabilities

any service provider which a majority of end users are using.

Elektroninių ryšių įstatymas (Eng. The Law of Electronic Communications)

http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc I?p id=415040

It can be concluded that choice of operators for disabled users is addressed in this Law. The main idea is that people with disabilities must have the same options as other users.

Accessibility obligations apply not to one specific operator, but to every operator. The law states that access to universal services for disabled people must be ensured by the telecom operators (section 34.15). The Communications Regulatory Authority can issue specific requirements for the providers of electronic communication services to ensure provision for the people with disabilities. Currently the Communications Regulatory Authority stated that Teo LT, AB is a large operator with significant communications network and must ensure provision universal services including the possibility for the people with disabilities to use telecommunication services.

Elektroninių ryšių įstatymas (Eng. The Law of Electronic Communications) http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=415040

No information reported in relation to the issue of choice.

The issue of choice seems so far not to have been explicitly addressed.

According to decision of Public Utilities Commission No 427 from 07.12.2009 "On obligations of universal service" responsible telecom operator about provision of universal service is fixed network operator "Lattelecom", and accessibility obligations only to them. In decision of Public Utilities Commission No 427 from 07.12.2009 "On obligations of universal service" directly is set the necessary discounts for disabled, for example, 75% discount for subscription of telephone line Disabled can choose an arbitrary operator but discount will be provided only by Lattelecom.

In Malta, the issue of equivalence in choice for disabled end-users has been included as Regulation 41 (1) of the amended Electronic Communications (Regulation) Act of 2011 which stipulates that "An undertaking providing publicly available electronic communications services shall take all necessary measures to ensure that disabled end-users have access to electronic communications services equivalent to that enjoyed by the majority of end-users."

http://justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=22374&l=1

The Malta Communications Authority (MCA) also recently published its Annual Plan 2012. This Annual Plan states that "The new EU regulatory framework, transposed into national legislation in 2011, places additional emphasis on the need for consumers with disabilities to be able to access or choose from the range of electronic communication services available to all consumers. The MCA will conduct a high-level analysis of the costs and benefits associated with the different accessibility services and produce a report to facilitate consideration of the issues at national level."

http://www.mca.org.mt/sites/default/files/articles/MCA%20Annual%20Plan%202012.pdf

The current accessibility obligations (stemming from legislation) apply, with a few exceptions regarding mobile telephony, mostly to the designated (universal service) operator which is GO plc. (formerly Maltacom). The essential elements of the universal service to be provided by designated operators are outlined in the Electronic Communications (Regulation) Act, Cap.399 and the Electronic Communications Networks and Services (General) Regulations, LN412 of 2004 (updated in 2011). These include inter alia the provision of connection to the public telephone network at a fixed location, access to publicly available telephone services, directory information services, public pay telephones and facilities for disabled users and those with special social needs.

In Part IV of the Electronic Communications Networks and Services (General) Regulations entitled "Universal service and users" rights", Regulation 30 (3) provides that the Malta Communications Authority (MCA) may designate one or more undertakings to comply with the obligations to provide specific measures for disabled users. It also provides that the MCA may designate different undertakings or sets of undertakings to provide different elements of universal service and/or to cover different parts of the national territory. In designating an undertaking, the MCA is required to adopt an "efficient, objective, transparent and non-discriminatory designation mechanism whereby no undertaking is a priori excluded

МТ

LV

	Policy situation in relation to choice for telecoms users with disabilities	
	from being designated." Regulation 31 (2) also states that the MCA may also, in the light of national conditions, specify requirements to be complied with by a designated undertaking for the purpose of ensuring that such undertaking provides tariff options or packages to consumers, in particular to ensure that those on low incomes or on special needs may access and use the publicly available telephone service.	
	However, even if not covered by the universal service obligation also other operators increasingly provide accessibility services to their clients such as Melita which besides GO plc. also provides ADSL broadband at a reduced price to customers registered with FITA.	
	The issue of choice seems not so far to have been specifically addressed.	
NL	Currently, specific text telephone arrangements are offered by KPN (formerly state-owned), the USO. Mobile telecom providers like T-Mobile and Vodafone have a special plan for people with hearing impairments, a data-only plan. For the text relay service, the choice of provider is not limited by regulations, but in practice there is only one provider in the Netherlands, the Swedish provider nWise.	
NO	The issue of choice seems not so far to have been specifically addressed.	
NO	Current accessibility obligations seem to apply only to the universal service provider, Telenor.	
	The issue of choice seems not so far to have been specifically addressed.	
PL	The obligations concerning service provided to people with disabilities, which are imposed on by the Act of 16 July 2004 on Telecommunications Law, including related Regulations, are applicable to the designated (universal service) operator; in the whole country that designated operator is Telekomunikacja Polska.	
	The legislation on this topic is quite vague. However it is possible to identify some references about 'equivalence in choice for disabled end-users'.	
	Law nº 51/2011 - Law electronic communications	
	(this one updates and complements Law n.º 5/2004)	
	Law nº 5/2004 - Law electronic communications	
	http://dre.pt/pdf1sdip/2011/09/17600/0438304461.pdf	
	5 th Art. Regulation objectives	
PT	The legal disposition states that end-users, including users with special needs, should have free choice in what concerns price and quality of telecommunications services. 29 th Art. Normalisation	
	The National Regulatory Authority must encourage the use of non-mandatory technical standards and specifications, based on a list issued by European Commission, in order to ensure interoperability and improve choice capacity by end-users.	
	91 th Art. Specific measures for disabled users	
	The National Regulatory Authority can take specific measures to ensure that end-users with disabilities can also benefit from the choice of service providers available to the majority of end-users.	
	The current accessibility obligations are applied only to the Universal service provider.	
RO	No information reported in relation to the issue of choice.	
	The issue of choice seems not so far to have been specifically addressed, as such.	
SE	Such accessibility egulations as exist apply to all operators. More generally, lot of the accessibility provisions are addressed through public measures rather than obligations on the telccoms sector as such.	
SI	The Post and Electronic Communications Agency of the Republic of Slovenia ensures (according to 120 th Article of The Electronic Communications Act) that users, including disabled users, derive maximum benefit in terms of choice, price and quality of electronic communication networks, electronic communication services and associated facilities and services. Although the issue of choice is mentioned, it does not so far seem to have been actively addressed, as such	
	Current legislation applies only to one universal service provider. Universal service provider is according to 11 th Article of The Electronic Communications Act obligated to ensure disabled end users non-discriminatory use and access to publicly available telephone services, including access to emergency	

Policy situation in relation to choice for telecoms users with disabilities

services, directories and directory enquiry services as enjoyed by other end users. All those obligated measures are set by the government in coordination with Ministry of Labour, Family and Social Affairs.

Besides addressing those policies in The Electronic Communications Act, also Universal service provider Telekom Slovenije refers to those measures in their General conditions for end users.

Act on the Equalization of Opportunities for Disabled Persons (from 2010) draws attention on access to information, communication and other services and emergency assistance. So beside the fact that Universal service provider has to derive maximum benefit in terms of choice, price and quality, also this recommendation in followed in general by the Act on the Equalization of Opportunities for Disabled Persons

The issue "equivalence in choice for disabled end-users" is explicitly mentioned in following way:

The objective of the Universal Service is to, besides others, to provide equivalent access to public telephony services including the equivalence in choice of providers for disabled end-users.

Most of the obligations apply to universal service provider – obligations connected to provision of equipment, free access to information service about telephone numbers for users with sight impairment and human operator service.

Two obligations are imposed on the whole telecommunication sector (providers of public services):

- providers are obliged to provide information for disabled users about products and services which are targeted for them in understandable and accessible way,
- providers are obliged to provide cost control information about provided public service to disabled user for free in the form of SMS and text message, or in the form of electronic mail regarding internet connection service.

According to Telecommunication Office's General Authorisation No. 1/2011 for provision of electronic communication networks or electronic communication services.

The issue of equivalence of choice seems to have been addressed to a certain degree, in that accessibility obligations may apply for all operators:

- 1. Condition 15 of the General Conditions of Entitlement (Special measures for disabled end users) applies to all providers of Publically Available Telephone Services, including BT the designated universal service operator. Condition 15 requirements include the provision of:
 - accessible telephone directories
 - bills and contracts in accessible formats
 - subscribers nomination of a third party to handle their billing issues
 - priority fault repair service (mobile PATS providers excepted)
 - access to relay services
 - reduced tariffs in respect of calls made via relay services
 - access to emergency services using short code numbers
 - access to emergency organisations via Mobile SMS Access on emergency call numbers "112" and "999" at no charge.
 - Publicise the special measure obligations to (and make them available in suitable format for)
 disabled end users

Universal Service Condition 4 (which required BT as Universal Service Operator to provide a relay service) has recently been revoked and Condition 15 of the General Conditions of Entitlement has been amended to include a new condition 15.5, which includes obligations on providers of Publically Available Telephone Services to provide (in addition to giving access to) a relay service. As a result, the obligation to provide relay services has widened to other providers of Publically Available Telephone Services.

2. The Universal Service Obligation to provide accessibility and functionality of the public payphone boxes for end users with disabilities and the provision of text phone facilities has been articulated in General Condition 6 of the General Conditions of Entitlement, which requires at least 75% of Public Call Boxes to be

SK

UK

ſ	
	Policy situation in relation to choice for telecoms users with disabilities
	accessible to disabled end users through the use of reasonable means and that at least 70% Public Call Boxes incorporate amplification. OFCOM guidance on General Condition 6 states that it applies 'providers of Public Telephone Boxes' (and is therefore not only applicable to BT as the Universal Service operator).
	Also of interest is the regulator's 'mystery shopping' to find out whether operators mention their accessibility services to consumers.
	http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/services-for-disabled-users/
	Users of the National Relay Service have choice in terms of carrier they use to access the NRS.
AU	Sections 6, 9 and 9E of <i>Telecommunications (Consumer Protection and Service Standards) Act 1999</i> states that carriers that offer a Standard Telephone Service must offer equipment for people who cannot access the standard telephone service.
AU	Providers determine how they meet these obligations. Telstra is the Universal Service Provider and provides equipment as does Optus to some of its customers. Some but not all other carriers have a wholesale arrangement with Telstra to supply equipment for people with disability. This usually relates to fixed phone equipment only.
	The issue of 'equivalence in choice for disabled end-users' has not been explicitly addressed so far in the telecoms regulation / policies in Canada, although in practice the accessibility regulations and obligations are placed on all telecoms operators. Anything beyond meeting these basic regulations is up to the telecoms operators themselves.
CA	There is no one designated universal service operator in Canada.
	The basic obligations of CRTC's Broadcasting and Telecom Regulatory Policy CRTC 2009-430 http://www.crtc.gc.ca/eng/archive/2009/2009-430.htm apply to all operators. Additional obligations may be incurred by an individual operator's licence / renewal application.
	The FCC rules, Acts, laws and policies apply to all operators equally and to both products and services.
	Section 255 of the Telecommunications Act of 1996 requires phone manufacturers and telecommunications service providers to make their products and services accessible to all individuals with disabilities when readily achievable to do so. This ruling applies to all manufacturers and service providers, thereby ensuring choice among customers. Specifically, Section 255 and the Code of Federal Regulations requires:
	Service Providers
	Under 47 CFR 6.5, service providers are required to ensure that their service is accessible to and usable by individuals with disabilities, if readily achievable.
	Under 47 CFR 6.7 service providers are required to evaluate the accessibility of their equipment in the early stages of development. These obligations should include acquiring and offering accessible telephones for sale.
US	Under 47 CFR 6.11, service providers must ensure access to information and documentation that it provides to its consumers.
	Manufacturers
	Under 36 CFR 1193.31, telecommunications equipment shall be accessible to and usable by individuals with disabilities.
	36 CFR 1193.41 requires that input, control, and mechanical functions shall be locatable, identifiable, and operable by at least one mode that does not require user vision.
	36 CFR 1193.43 requires that all information necessary to operate and use the product, including text, static or dynamic images, icons, labels, sounds, or incidental operating cues, shall be available through at least one mode in auditory form and to provide visual information through at least one mode to users with low vision without relying on audio.
	Under 36 CFR 1193.23, manufacturers must evaluate the accessibility, usability, and compatibility of telecommunications equipment and customer premises equipment and shall incorporate such evaluation

Policy situation in relation to choice for telecoms users with disabilities

throughout product design, development, and fabrication, as early and consistently as possible.

36 CFR 1193.33 requires manufacturers to ensure access to the information and documentation it provides to its customers, including user guides.

http://www.epa.gov/inter508/standards/index.htm

Annex 10 - Evolution of telecoms accessibility policy

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
AT	The 2009 amendment to the Telecommunication Law states the following: 1. § 1 Abs. 2 (2): "Ensure equal opportunities and operative competition in the provision of communications networks and communications services by ensuring that all users derive maximum benefit in terms of choice, price and quality, whereas interests of disabled users, elderly users, and users with special social needs have to be a particular focus." ("whereas interests of disabled users have to be a particular focus" was introduced in 2009; "elderly users, and users with special social needs" was introduced in 2011) 1. § 1 Abs. 2 (3): "to promote the interests of the citizens, in which the interests of disabled users, elderly users, and users with special social needs have to be a particular focus through a) ensuring that all citizens have access to universal service; b) ensuring protection for consumers, in particular by simple and inexpensive dispute resolution procedures as well as a high level of protection of personal data and privacy; c) providing information, in particular in the form of transparent tariffs and general terms. Information obligations in the Telecommunication Law include since 2010 management approved plans for the extension of barrier-free access for hearing and visually impaired persons (61. In § 21 Abs. 1, 6c)	The preparatory work for a Regulation according to § 17 (2) TKG has already been initiated. § 17 (2) empowers the Minister for Transport, Innovation and Technology to issue an ordinance, which may prescribe measures to enable users with disabilities to use telecommunications services to the same extent as users without disabilities. More generally, if there are any changes in EU laws and regulations, Austria follows according to its possibilities.	All aspects of Austrian Telecom regulations are highly driven by EU standards. The implementation of the revised EU telecoms Package appears to be strengthening the approach to accessibility.
BE	Since 2005, Belgium has a law on Electronic Communication (WEC). Since then several modifications and additions have been voted. On July 8, 2011 a proposal for an addendum to the WEC-law about the reachability of emergency services was introduced in the Belgian parliament. (http://www.fevlado.be/themas/afstandstolken/publicatieOnderzoekAfstandstolken.pdf, p. 23) It was voted and published in the Official Staatsblad/ Moniteur of Dec 2, 2011 (http://www.bipt.be/GetDocument.aspx?forObjectID=3644⟨=nl) However no implementation details have been published yet but the tests of alternative access methods (SMS) for the 112 number are on-going. (www.hannah2.be/infovisie/iv/MEAC2012/112.pdf)	-	This is very likely, but no reference is made in the text of the law.
BG	Almost the entire legislation on disabled–users dates from 29/12/2011 in line with 2009 EU	Almost entire legislation on	Entirely driven by the EU's

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
	Regulatory Framework- EU's revised Telecoms package In Chapter 2 of the Telecommunications Act (from 22.05.2007), it is stated that a necessary condition for granting the right for provision of telecommunications (universal service) on the territory of the Republic of Bulgaria is for the provider of the services to serve a sufficient number of people including people with special needs - people with disabilities, elderly people and people under social security system (changes made most recently -29.12.2011). The legislature concerning the provision of accessibility for people with disabilities telecommunications services was adopted at the end of 2011 in efforts for legal synchronization with 2009 EU Regulatory Framework.	disabled–users emanates from 29/12/2011 in line with 2009 EU Regulatory Framework- EU's revised Telecoms package, so no further changes intended at this point.	revised Telecoms Package
	In Section 2, Article 187 of the Telecommunications Act it is stated that operators of universal telecommunications services must apply special accessibility measures, including (also present in The Ordinance N 6 from 13.03.2008 for Requirements and Parameters for the Quality of the Universal Service and Special Measures for People with Disabilities and Selection of Operators Providing the Universal Service):		
	- General customer services (e.g. information, billing, etc.)		
	- Accessible directory services.		
	 Payphones accessibility, including 'PIP' sign on button 5 orienting people with disabilities and also a sign indicating the direction of placing the phone card in the telephone 		
	- Access to emergency number 112		
	- Provision of terminal equipment that meets the needs of disabled users		
CY	Law 112(I)/2004 (Harmonisation of Directive 2002/22/EC)article 113) as well as the modifying law 51(I)/2012 (Harmonisation of Directive 2009/140/EC) imposed a requirement of any disadvantaged user to be able to have access to telecommunication services	Any changes will be driven by the EU's revised Telecoms Package	Recent changes fully driven the EU's revised Telecoms Package
C Z	A main legislative change was the amendatory act to law 127/2005 Sb. (The electronic communications law). This amendatory act allows disabled people access to public telecom service, emergency service, information service, directory service, while this access should be equal to other end users. According to this document, the disabled users should be able to use electronic communication services to the same extent as the others, although by different (technological) means. It also regulates providing of the special prices for people with specific social needs.	Another amendatory act to Order in Council 109/2008 Sb. is now in legislative process. It defines documents by which a disabled user proves his claim to the	The amendatory act was driven by European parliament directive 2002/22/ES from 7.3.2002 regarding universal service

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
		special prices. No other particular changes are planned right now.	and rights of disabled people using electronic communications (universal service directive).
DE	§45 (1) of the German Telecommunications Act of 22nd June 2004 ("Telekommunikationsgesetz") as amended in 2009 and 2012 stipulates that providers of publicly available telecommunications services must consider the interests of end users with disabilities when planning and delivering their services. Access to services by end users with disabilities is to be enabled in a manner that can be considered equal to the access provided to the majority of end users. This applies also in relation to the choice of services and providers. §45 (2) further stipulates that the national regulator can determine common demand according to section (1), after relevant umbrella organisations and service providers have been heard. To ensure provision of relevant services and service features, the national regulator can impose an obligation on service providers. The regulator can desist from imposing an obligation on service providers if a hearing of the parties concerns reveals that such service features or comparative services are widely available. Up to now, only obligations in relation to text relay service seem to have been implemented.	No planned changes have been reported	Germany has not transposed the revised EU telecom framework within the deadline set by the EU Legislator (25 May 2011) mostly due to discussions on issues like broadband universal service and specific consumer protection measures. The law was adopted in February 2012 and entered into force in May 2012.
DK	There is now more support for both text relay and sign language interpretation through different techniques (web based, live interpretation, text- to-sign languages and so on).	The rules are considered sufficient	The existing rules are based on the Telecoms Package
EL	2006 -Directive 2002/22/ integrated at the Greek national legislative system by the Law 3431/2006 2008 Measures for people with disabilities in the context of Universal Services (ΦEK 1667/B/18-08-2008)_	Any changes will be driven by the EU's revised Telecoms Package	Fully driven by the EU's revised Telecoms Package
ES	The "Real Decreto 1494/2007: http://boe.es/buscar/doc.php?id=BOE-A-2007-19968"were crucial to regulate the wide range of services and rights related to people with disabilities in the telecommunication sector. Although no other legislation has been published since then, the deadlines for some of the questions stated have been reached, in some cases they finalise end of 2012. The evolution on the quality of services is good according to the observatories and polls published. The LAW 7/2010 has updated many aspects on telecommunications. Also there are some AENOR	Although the legislation is almost completed, there are progressive mandates to be approached in a time schedule and a deadline in the case of the telecommunications sector stated for December 2013	Spanish legislation has been adapting to the EU norms and rules, although it not always clear the extent to which these have been guided by the Telecoms package, EU legislation and internal policy

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
	norms (quoted in their respective sections) that update aspects such as the new WCAG 2.0 for the websites		developments within the territory.
EE	During the past years, the Electronic Communications Act has been amended several times. In terms of telecoms accessibility, the Electronic Communications Act new requirements and obligations on telecoms companies have been set. Majority of the amendments of this kind have been made in 2011 and entered into force 2011 / early 2012. These include new requirements and obligations in terms of providing free access to the national emergency services as well as the single European emergency call number 112 but also for example an obligation according to which "A communications undertaking must make information on the quality of the communications services provided to endusers and measures taken to ensure equivalence in access for end-users with special needs publicly available on its website or in the absence thereof, in any other reasonable manner."	Currently no new legislative or policy changes are planned.	With the amendments made to the Electronic Communications Act (RT I, 23.03.2011, 11; came into force 25.05.2011) Directives 2009/140/EC and 2009/136/EC of the European Parliament and of the Council of 25 November 2009 were transposed into Estonian legislation.
	Communications Market Act Section 60 c (363/2011) on universal service obligation takes into account the needs of the disabled. The subscriber connection that is offered must be such that all users, including disabled end-users, can use the emergency services, make and receive domestic and international telephone calls, and use other normal telephone services. The connection must also enable all users to have appropriate internet access, taking into account the connection speed in use among the majority of users, technical feasibility and costs	Towards a barrier-free information society Action Program is being implemented and discussed. Information society indicators are being developed.	The amendment of Communications Market Act is based on EU's Telecoms Package.
FI	A Governmental decree (1/2012) to safeguard basic communications services for disabled users specifies new obligations.		
	A videoconference with a minimum 512 Mbps symmetrical data speed should be available for hearing-impaired users and users having speech problems. Furthermore, hearing-impaired users and users having speech problem are also entitled to a connection that enables them to send and receive text messages in order to contact emergency services.		
	The decree also safeguards the interests of visually impaired people by securing their right to a clear and easy access to customer service of a universal service connection. An invoice and a detailed specification of the invoice concerning the universal service connection must be submitted to visually		

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
	impaired people in a clear and readable form.		
	Several decrees, decisions concerning equal access have been incorporated into the national Code des postes et des communications électroniques which appear in the current Consolidated Version of 6 August 2012 Emergency services shall be accessible (article L32- 12°)	Some measures are still at an experimentation stage (for instance Emergency services for the deaf)	Decree n° 2012-436 du 30 March 2012 modifies the Code des postes et des communications
FR	Needs of people with disabilities shall be considered equally (L32-1 7°)		électroniques according to
	NB: Code des postes et des communications électroniques is regularly updated (last version 12 September 2012)		the new European regulations on electronic communications of directives 2009/136/CE et 2009/140/CE
HU	The 2003/C law about electronic information (2003. évi C. törvény az elektonikus hírközlésről) have been modified 27 times since 2007. However, these modifications are not explicitly addressed accessibility for people with disabilities.	-	-
	There have been no legislative changes since 2007/2008. However, the regulator has been conducting a consultation process with operators	The consultation process with telecoms operators will be issuing its proposals in September 2012.	The changes are totally driven by the EU's revised Telecoms package.
IE		http://www.comreg.ie/consumer _initiatives/disabilities_forum.59 2.570.html	
IT	In these years the most important change is the resolution 514/CONS (2007) of the Italian Communication Regulatory Authority, introducing, for example, free SMS offer for people with hearing impairments; Internet access for visually impaired people.	No policy changes appear to be currently planned on telecoms accessibility. The discussion of major telecom players is more concentrated on the privacy and on telecom tariffs than on telecom accessibility.	No changes in terms of telecoms accessibility.
LT	"Autorių teisių ir gretutinių teisių įstatymas" (Eng. The Law of Copyright and Related Rights) states that there is exemption for disabled people – a return of money spent on mobile phones, computers,	No information about any planned policy changes or	The changes were made to completely adapt the

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
	multifunctional equipment etc. (sections 20.7.2 and 20 ¹ .7.2). The regulation of public electronic communications service providers and end-user's rights and obligations was improved to ensure that more attention is given to the end-user's rights, which also include the rights of disabled end-users. "Elektroninių ryšių įstatymas" (Eng. The Law of Electronic Communications) was supplemented with a provision that all end-users, including disabled people, must have an ability to access the emergency services. To ensure this an obligation for the service providers was introduced. It was also stated that disabled users must have access to all services that are available for the majority of end-users, also that they could experience the benefits of those services. All of the EU Regulatory Framework for Electronic Communications Networks and Services (the 'Telecoms Package') was adapted and implemented to the legal system of Lithuania. Autorių teisių ir gretutinių teisių įstatymas (Eng. The Law of Copyright and Related Rights) http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_!?p_id=417078&p_query=&p_tr2=2 Elektroninių ryšių įstatymas (Eng. The Law of Electronic Communications) http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_!?p_id=415040	discussions was found.	'Telecoms Package' and now Lithuania's legislative system fully corresponds to the requirements of 'Telecoms Package'
LU	While no Universal Service provider has been designated, the incumbent provides Universal Service on a voluntary basis. No new legislative/policy developments have been reported in relation to telecoms accessibility in particular.	No information about any planned policy changes or discussions was found	-
LV	After 2007 the following resolutions have been adopted: the decision of Public Utilities Commission No 285 from 10.09.2008 "On obligations of universal service" and No 427 from 07.12.2009 "On obligations of universal service". These addressed accessibility for disabled people.	It is planned to establish in 2013 the Fund of Universal Service or another model of financing and compensation of Universal Service. This will address issues of accessibility for disabled people.	It is planned to take into account the statements contained in EU's revised Telecoms Package.
МТ	Main legislative changes relate to an amendment of the Malta Communications Authority Act, Cap. 418 of 2000, as amended by Acts VII of 2004 and XIII of 2005; Legal Notice 426 of 2007; Acts XXX of 2007, XII of 2010 and IX of 2011; and Legal Notice 180 of 2012. The following amendments to regulations in the Act were made:	There currently appear to be no further policy changes on telecoms accessibility planned	These changes have been clearly driven by external pressure from EU level. The Malta Communications

The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans beer driven by the EU's revised Telecoms Package?
Pursuant to the amendments made to Article 8 of the Universal Service Directive, the Malta Communications Authority is being empowered to, assess the extent and form of the specific measures required to ensure equivalence in disabled end-users' access and the affordability of services provided by designated undertakings. In addition, in line with greater harmonisation in the revised EU framework, the Malta Communications Authority is required to promote compliance with any standards and/or specifications that the European Commission may from time to time recommend. Regulation 39: Quality of service This regulation has been amended to reflect Article 22 of the revised Universal Service Directive, so that the Malta Communications Authority may require undertakings (mainly the USO) to publish information on any measures taken to ensure equivalence in access to disabled end-users. Regulation 41: Ensuring equivalence in access and choice for disabled end-users The revised framework ensures that all providers of publicly available electronic communications services and not only undertakings designated as providers of universal services provide disabled end-users' with equivalent access to, and use of services, as for the majority of end-users. To this end, the Malta Communications Authority may, where appropriate, lay down requirements to ensure that disabled end-users benefit from competition and the choice of undertakings enjoyed by the majority of end users. The Malta Communications Authority is also required to encourage the provision and affordability of any specific terminal equipment offering the requisite services and functions for disabled end-users.		Authority in its Annual Plan 2012 states that 'The new E regulatory framework, transposed into national legislation in 2011, places additional emphasis on the need for consumers with disabilities to be able to access or choose from the range of electronic communication services available to all consumers'
Regulation 43: Emergency services and the single European emergency call number Amendments to this regulation are intended to ensure that disabled end-users are able to access emergency services, and that specific measures targeting these end-users whilst travelling in Malta are based to the greatest extent possible on standards and, or specifications that the European Commission may from time to time recommend; provided that this shall not impede the Malta Communications Authority from adopting additional requirements in this regard. Regulation 85: Interoperability of digital interactive television service		

The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans beer driven by the EU's revised Telecoms Package?
disabled end-users in line with Article 18 of the EU's Framework Directive.		
http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8884&l=1		
In addition to the above, changes were made to the current universal service regime and implemented in the Malta Communications Authority Decision on Universal Service Obligations on Electronic Communication Services of 2011.		
According to this decision which followed the outcome of a consultation process, the main scope was to re-establish the individual universal service obligations and their respective designations including measures for disabled users. The MCA in this document decided to waive a number of services falling within the scope of specific measures for disabled users due to proportionality reasons, and because some of the specialised equipment required is widely available in the local market. Furthermore, in default of the provision of expressions of interest, GO plc. has been designated to provide the universal service with respect to directory enquiry services for visually impaired users, and a		
"Telecare" type of service.		
The main changes to the previous regime are:		
1. The MCA decided to waive the obligation to provide itemised billing in electronic format compatible with speech narration software		
2. The MCA decided to waive the obligation on the designated undertaking to provide specialised handsets as provided in the Universal Service Directive as most of these devices are considered to be widely available on the market.		
3. The universal service shall include the provision of one call free of charge per week to a directory enquiry service number of the designated provider's choice to eligible visually impaired persons which are included in a list specifically provided by the responsible Ministry or Government Department.		
4. The Telecare Service needs to be upheld but certain fees and deposits on equipment can be charged. The universal service shall now include the provision of a 'Telecare' type of service allowing easy access to emergency services. The designated undertaking may collect a nominal deposit for all new 'Telecare' subscribers who are not benefiting from the reduced tariff scheme.		
http://www.mca.org.mt/sites/default/files/articles/2011_03_ECS_USO_Decsion.pdf		

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
NL	Changes are occurring at the moment of this study (Q3-Q4 2012). The Ministry of Economic Affairs (ELI) is preparing a tender for text and video relay services. The new regulations will specify what services are to be offered, technology protocols, availability (text-speech 24/7, video less hours). The selected vendor for the service must cover the accessibility of landline mobile and internet telephony and devices. First steps in the tender procedure are expected for Fall 2012, the launch of the new service is expected for summer 2013.	(See previous column)	The tender (and its preparation process) is a direct consequence of the EU Telecoms Package implementation and the Universal Services Directive.
NO	None. Diskriminerings- og TIlgængelighetsloven 2008-06-20 nr 42 covers ICT as a whole but not telecoms in a specific way.	The law above was supposed to be enforced from 1 July 2010 but still there are juridical issues to solve.	Not that we have been able to confirm
	Since 2007/2008 there have been no legislative changes on accessibility of telecommunication services. Such changes are being planned for in the near future. Already in 2006 some recommendations were included in the UKE analysis: "Implementation of the 112 emergency number in Poland, including in particular access for statutorily established public emergency services to the information on the location of persons calling the 112 emergency number and other emergency numbers."; (http://www.bip.uke.gov.pl/_gAllery/28/74/2874.pdf) among other stipulations, the following was recommended to be included in the Telecommunications Law:	(See previous column)	As stated by the Chancellery of the Prime Minister, the planned amendment to the Telecommunications Law is to implement, among other things, the revised provisions of the package of directives: Directive 2009/140/EC,
PL	"- including a provision concerning the obligation on the operators and the public emergency services to provide accessibility for people with disabilities to those services via the 112 emergency number by means of text messaging. The implementation of such regulation into the EU legislation is presently being consulted by the EC as a part of the regulatory framework review." A provision to this effect and other provisions regarding accessibility of telecommunications services will probably be included in the next amendment, as the Chancellery of the Prime Minister has published the		Directive 2009/136/EC and other Directives, so these changes are being introduced in the spirit adopted by the EU's Telecoms Package of 2009.
	proposed changes to the Telecommunications Law, mentioning also that: "All providers of telephone services available to the public will be required to provide facilities for people with disabilities. The purpose is to, wherever technically possible, ensure that those people are provided with access to telephone services equal to that of most end users, including but not limited to access to emergency services and to services of the numbering range beginning with '116'. Furthermore, to provide disabled users with a better access to emergency numbers, we introduce the possibility to contact		http://www.premier.gov.pl/rz ad/projekty_ustaw/projekty_ nowelizacji_ustaw/projekt_us tawy_o_zmianie_ustaw,1066 6/,

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
	the emergency services by means of free-of-charge text messages (SMS)." On 10 July 2012 the Council of Ministers adopted the draft amendment to the Telecommunications Law, which had been proceeded on for many months. http://orka.sejm.gov.pl/Druki7ka.nsf/0/6766667061929B14C1257A470043B113/%24File/627-ustawa.docx		
PT	The changes are included in Law Nº 51/2011. The main changes are related to the i) strengthening of consumer rights, namely in what concerns special needs persons; ii) improving the competition between operators by increasing the choices for consumers; iii) promotion of investment in new communication infrastructures, in particular regarding broadband services; iv) increasing of the security and integrity of networks.	There are appear to be no additional policy plans or currently under discussion As the current legislative framework was recently altered (leading to law Nº 51/2011), the need for change has not been felt so far.	Recent changes in national legislation were driven by the new European legislation.
RO	The telecoms regulator (ANCOM) has adopted new bylaws on the Implementation of Universal Service in the Field of Electronic Communications to reflect the new approach. The ANCOM Decision was adopted and published on 17th of January 2011. The NRA's President's Decision no. 7/2011 on Implementation of Universal Service in the Field of Electronic Communications repealing the former Decision no. 1074/2004 sets out the scope of the universal service obligations in Romania. Amongst others it has been stipulated that ANCOM may impose to USPs measures taken in favour of disabled users.	With regard to the new USO regulation market research was planned in 2012 in order to assess the needs of disabled users and based on its findings ANCOM may impose obligations on all undertakings	Recent regulative developments seem to be driven by the new European legislation
SE	No recent changes are reported	No plans in this area were identified.	Any changes and plans are correlated to EU regulation regularly.
SI	Policies now refer to Law on Electronic Communications from year 2011. There were no big changes made since the previous law (2004) in the field of accessibility, except non-discriminatory use and access to publicly available telephone services, including access to emergency services, directories and directory enquiry services was emphasized. Besides that, in the 72 th Article of The Electronic Communications Act the obligation was added, that telephone operators must enable the disabled	Currently, there are appearing not to be any planned policy changes on telecoms accessibility under discussion.	-The new Law on Electronic Communications from year 2011 adopted the recommendations of EU Regulatory Framework for

The main legislative and/or policy changes on telecoms acces	sibility implemented since 2007/2008	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
clients to make emergency calls using voice or sign language ar languages.	d other forms of non-spoken		Electronic Communications Networks and Services (the 'Telecoms Package')
Newly emerged obligations - obligations for all providers provider to ensure equal accessibility to emergency service ("112" and and to ensure access to services provided within phone number extent for disabled people (Act No. 351/2011 on Electronic Cortoprovide information for disabled users about products and in understandable and accessible way (Telecommunication Off for provision of electronic communication networks or electronic to provide cost control information about provided public serform of SMS and text message, or in the form of electronic mair (Telecommunication Office's General Permission No. 1/2011 for communication networks or electronic communication services - to provide information for end users about their services' quae equivalent access to services for disabled users. Provider is obligations for provider of universal service: - upon request of people with hearing and speech impairment to communication device according to the disability of the use telecommunication device according to the disability of the use telecommunication device (Telecommunication Office's Decision - the provider of universal service is obliged to provide access the users with hearing or speech impairment to access the public to Office Decision No. 3125/OTR/2012). Cancelled obligations - according to Telecommunication Office's Decision No. 3125/OTR/2012).	other national emergency numbers) r prefix "116" in maximal possible numications). services which are targeted for them ice's General Authorisation No. 1/2011 nic communication services). vice to disabled user for free in the I regarding internet connection service or provision of electronic is). lity and about actions ensuring the ged to provide this information to (Telecommunication Office's General ation networks or electronic to provide equipment enabling them hire or sell one specially equipped or for the price of basic on No. 3125/OTR/2012). to human operator service enabling the elephony service (Telecommunication	The Slovak Republic recently implemented all directives of the revised Telecoms Package (2009) and issued new Act No. 351/2011 on Electronic Communications. Following this issuance, Telecommunication Office of the Slovak Republic issued all measures supplementing this Act. On July 2012 also issued decision on provision of universal service laying down obligations for designated undertaking. No further legislative of policy changes are planned in close future.	The changes in legislation, where former Act No. 610/2003 on Electronic Communications was replaced by new Act No. 351/2011 on Electronic Communications, were driven by the need of transposition or European Union regulatory framework on electronic communication. The eaccessibility legislative changes were driven mainly by two directives: - DIRECTIVE 2002/21/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) - and DIRECTIVE 2002/22/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 March 2002 on universal service and users' rights relating to electronic

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
	universal service is no longer obliged to fully access the directory in electronic or printed (or both) format and update it at least annually, as directory services are provided on commercial basis.		communications networks and services (Universal Service Directive).
UK	1. Changes to the General Conditions of Entitlement and Universal Service Conditions (Implementing the revised EU Framework), Statement and Notification, 25 May 2011, inserting new General Condition 15.7 and consequential definitions of 'Mobile SMS Access', 'Short Message' and 'SMS'. 2. Changes to the General Conditions of Entitlement and Universal Service Conditions (Implementing the revised EU Framework), Statement and Notification, 25 May 2011; inserting new General Condition 4.2 and 4.3; inserting new definition of 'Cell Identification', 'Mobile Network' and 'Zone Code'; and changing definition of 'Communications Provider'. 3. Recent revocation of Universal Service Condition 4 which required BT as Universal Service Operator to provide a relay service. (as referenced in Annex 8 (Notification of proposed revocation of Universal Service Condition 4) of the OFCOM review of Relay Services dated 28 th July 2011) and to avoid the duplication of this obligation which is now covered by Condition 15.5 of General Conditions of Entitlement (see 4 below). 4. Changes to Condition 15 of the General Conditions of Entitlement to include new Condition 15.5 provisions to expand the obligations for the provision of relay services to include other providers of Publically Available Telephone Services (as referenced in Annex 7 (Notification of proposed revocation of Universal Service Condition 4) of the OFCOM review of Relay Services dated 28 th July 2011)	1. The regulator, OFCOM is reviewing the provision of Video relay services in the UK The provision of a universal VRS has been the subject of a recent further consultation process by OFCOM (see below) which contains (A 5.6) responses on VRS to a consultation process started in July 2011 about the introduction of improvements to the current text relay service. The need for VRS provision in the UK was identified, but OFCOM considered that requirement to provide an unrestricted VR service inappropriate 'at this time'. There were concerns over the costs of running a full time service and that current limitations on the availability of BSL interpreters could make it impractical to require Communications Providers to provide an unrestricted service. However the majority of disability stakeholders and relay providers	It is difficult to measure precisely the impact of the EU revised Telecoms package (as there was already a lot of attention to accessibility of telecoms), but broadly speaking it could be said to have influenced the following: The review of provision of relay services (including modification of General Condition 15 of the General Conditions of Entitlement to expand the provision in respect of providing relay services); modification of General Conditions of the General Conditions of the Entitlement to give to emergency services via SMS and revocation of the Universal Service Condition 4 relating to the Universal service which obligation has expanded to other PATS providers under modified

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
		responses supported the 'implementation of a VR service but on an unrestricted basis'. (A5.13). OFCOM plans a consultation on later on this year	General Condition 15 General Conditions of Entitlement.
		2. OFCOM's proposals to upgrade the Text relay services to include new proposed services via the Internet through PC, laptop, tablet computer equipment and smart phones to provide a more fluid text service. OFCOM Review of Relay Services http://stakeholders.ofcom.org.uk /binaries/consultations/relayservices-review-12/summary/text_relays.pdf	
AU	The establishment of the Telecommunications Universal Service Management Agency from 1 July 2012 under the <i>Telecommunications Universal Service Management Agency Act 2012</i> and associated changes to the universal services regulatory environment through amendments to the <i>Telecommunications Act 1997</i> and the <i>Telecommunications (Consumer Protection and Service Standards) Act 1999.</i>	The Telecommunications Universal Service Management Agency publicly released a Request for Tender for the National Relay Service on 15 August 2012 as the current contracts for the NRS expire on 30 June 2013.	n/a
CA	CRTC's Broadcasting and Telecom Regulatory Policy CRTC 2009-430 http://www.crtc.gc.ca/eng/archive/2009/2009-430.htm	There are no accessibility related initiatives currently under discussion (http://www.crtc.gc.ca/eng/dno.	n/a

	The main legislative and/or policy changes on telecoms accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's revised Telecoms Package?
		htm) The main emphasis on accessibility within the CRTC has been focused in the television domain rather than in the telecommunications domain	
	There have been many changes to policy and legislation in the US since 2008. Most notably, the 21st Century Communications and Video Accessibility Act of 2010 (CVAA) which provides access to advanced technologies for people with disabilities.	Currently, there are no specific policy changes on telecoms accessibility under discussion.	n/a
	In addition, much work has been done regarding broadband access through the Universal Service for Americans Act. In July, 2010 the Accessibility and Innovation Initiative, as recommended in the FCC's National Broadband Plan was established. This initiative promotes collaborative problem solving and uses the tools of public and private sector innovation to address accessibility barriers.		
JS	Since December 31, 2008, persons with hearing and speech disabilities using Video Relay Service (VRS) or Internet Protocol Relay (IP Relay) – two forms of Internet-based Telecommunications Relay Service (TRS) – have been able to obtain ten-digit telephone numbers. The Federal Communications Commission (FCC) has adopted new rules that require VRS and IP Relay users to obtain a "real" tendigit telephone number to place and receive calls using VRS and IP Relay. Two key benefits of this process is that it will make it easier for hearing persons to call VRS or IP Relay users by dialling just the relay user's ten-digit telephone number. Callers do not need to know the user's IP address or "proxy" number to call. Second, these rules allow a VRS or IP Relay provider to automatically deliver the relay user's location information to the appropriate 911 call centre when the user makes an emergency 911 call.		
	In addition, on July 22, 2010, the Universal Service Reform Act of 2010 was introduced by Representatives Boucher (D-Va) and Terry (R-NE). The measure is intended to improve and modernize the USF by reining in the size of the fund and promoting broadband deployment		
	Source: http://en.wikipedia.org/wiki/Universal_Service_Fund		

Annex 11 - Evolution of television accessibility policy

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
АТ	Television accessibility regulations were strengthened and integrated by the new legislation 50/2010 into the ORF Act (ORF-G) and into AMD-G in accordance with the AVMD Directive.	-	All regulations mentioned were integrated by the new legislation 50/2010 into the ORF Act (ORF-G) and into AMD-G in accordance with the AVMD Directive.
BE	In relation to television accessibility, recent developments were: a) Some ministerial declarations (Mr. Lieten, July 31, 2012) on increasing the percentages of subtitled programmes for both public and commercial broadcasters. (http://m.deredactie.be/cm/vrtnieuws.mobile/mcultuuren media/mmedia/1.1385720) and b) An agreement with broadcaster EEN on the provision of signing		Apparently this directive gets very little follow up in Belgium
BG	None	-	-
СУ	Law 118(I)/2010 article 29 modifying law 7(I)/1998 - broadcasters under the Cypriot territory (public or private) should foresee so that their services should be gradually made accessible to people with sight or hearing loss; each TV station has the obligation to transmit between 18:00 – 22:00 a special News Programme understandable by people with hearing loss of at least 5 minutes duration; broadcasters should submit a time plan within one year after the publication of the above law (118(I)/2010 article 29) that would specify specific ways that gradually will result to the increase of the percentage of their programmes accessible to people with sight or hearing loss by 5% According to Law/ Presidential Decree (ΚΔΠ) 117/2009		Cyprus with the Law 118(I) 2010 amended its Law on Radio and Television Stations (L. 7(I)/1998) and the Cyprus Broadcasting Corporation Law (Ch. 300A) and harmonised the Republic's legislation with the European Directive 2010/13/EU on Audiovisual Media Services - codified version. For example, the requirement to gradually provide access to audiovisual media services for people with hearing or visual loss emerges directly from the EU Audio /Visual directive.

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
	published by 13.3.2009, it is required in Annex II, (Article 7) that the EPG providers should comply with the relevant guidelines that the Commissioner specifies in regards to additional characteristics and information for people with hearing or sight loss.		
CZ	In 05/2008 the Statutory rule 161/2008 Sb. was released. It describes and imposes digital switchover in Czech Republic. In the context of the digital switchover a specific support programme for people with disabilities was implemented.		Developments are generally aligned with the EU Directive (although it seems that the main provisions in relation to accessibility were already in place)
DE	In Germany, the broadcasting sector is regulated at the regional governance level (Länder) according to Art. 70 (1) of the Constitutional Act (GG). The regional governments have concluded an Interstate Broadcasting Treaty which represents a regulative framework for the broadcasting sector. The treaty has been amended several times and up to now, it does not impose any obligations in relation to users with disabilities. In each region, a competent state media authority oversees the compliance with the Interstate Broadcasting Treaty. A joint conference of the 10 interstate media authorities provides a coordination mechanism at the federal level. Here, some state media authorities have urged both public and private broadcasters to provide larger volumes of programmes with access services. However, there is no mechanism to enforce provision of access services.	Some state media authorities have urged both public and private broadcasters to provide larger volumes of programmes with access services.	-
DK	Digitalisation took place in 2009	-	To a high extent
EL	Presidential Decree 109/2010 (ΦΕΚ 109 – A 5-11-2010) harmonises the EC directive 13/2010 (EC L95 15/4/2010) with the Greek legislative system. In more detail, according to Article 7 (Article ^ of the EC directive), broadcasting TV stations have to make transitionally their services accessible to people with hearing or visual impairments. More	-	They have been driven by the EU's Audiovisual Media Services and more specifically Presidential Decree 109/2010 (ΦΕΚ 109 – A 5-11-2010) harmonises the EC directive 13/2010 (EC L95 15/4/2010)

The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
specifically:		
TV stations that are considered as informational media should broadcast at least 4 hours a week from their broadcasting programmes (e.g. specially informational programmes, light entertainment ones, TV series, programmes for kids documentaries, Sports programmes, etc. with Greek subtitles. News Programmes are not considered for the amount of 4 hours/week in Greek subtitles.		
TV stations that are considered as non informational ones, they should broadcast at least 3% of their weekly programme in a way that ensures the access by people with disabilities (not mentioning explicitly which disabilities)		
Non linear TV stations according to article 8 should ensure gradually that their services will become accessible by people with hearing or visual disability		
 Non linear TV media should broadcast content with Greek subtitles at least of 20% of their catalogue list. In case their catalogue list includes News Programmes, then a News programme should be broadcasted also in sign language with at least 7 minutes duration and all the main news of the day should be broadcasted in sign language and have a duration of minimum 2 minutes. Also according to law 3592/2007 published on 19/7/2007 		
and more specifically within article 6, paragraph 13, the TV stations should broadcast part of their News Programme for at least 7 minutes in Greek subtitles and also in Greek Sign Language between the view time 17:00-23:00		
LAW 7/2010 has changed substantially the accessibility obligations in accordance to the new digital TV. The focus is	No new plans, as such, although the LAW 7/2010 states a deadline by December 31 st	In line with the Directive although not directly driven by this

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
	now on digital television accessibility	2013	
EE	On 16.01.2011 Media Services Act (RT I, 06.01.2011, 1), which among other things sets requirements for providers of audiovisual media services in terms of accessibility, entered into force. The Act replaced the Broadcasting Act of 1994. The Act had two basic purposes: to bring the Estonian regulation concerning audiovisual media services into conformity with the Audiovisual Media Services Directive of the European Parliament and of the Council and also to update the national regulation concerning audiovisual media and radio broadcasting which was primarily necessitated by the development of technologies and transition to digital television in terrestrial transmission.	A draft of the Act to Amend the Media Services Act is currently under preparation. The amendments mainly concern administrative arrangement. According to the draft, Estonian Technical Surveillance Authority will become the executor of the state surveillance (current executer is the Estonian Ministry of Culture). The draft also intends to shorten the time period when audiovisual media service providers need to submit the information concerning making their services accessible to people with a visual or hearing disability to the executor of the state surveillance. Under the current legislation, the information shall be submitted by 15 November of every second year for two previous years, according to the draft, the information should be provided annually.	It may be said that the adoption of the Media Service Act was directly linked to the need to bring the regulations of Estonian audiovisual media services into conformity with the revised version (2010) of the EU Audiovisual Media Services Directive. With Media Service Act, which is largely based on the EU AVMSD, Estonia shall adopt and implement all the requirements of the EU AVMSD. For example, the requirement to gradually provide access to audiovisual media services for people with hearing or visual disabilities drives directly from the EU directive.
FI	Act on Television and Radio Operations (744/1998), new Section 19 a (712/2011) states that programmes shall be made accessible to people that are visually or hearing impaired. This means that subtitling must be added to Finnish or Swedish programmes and subtitles to speech synthesis to those (foreign) programmes which are already subtitled.	Information Society indicators, monitoring the quality and the increase of subtitling Increase plain language and sign language in TV-programs.	The Directive has been mentioned in the Government's proposal for the amendment of Act on Television and Radio Operations.
FR	Law 2009-258 of 5 March 2009 updated and extended the accessibility obligations	National Council for Audiovisual Media (Conseil National de l'Audiovisuel, CSA) ordered a study by Mediatvcom (private company) which was published in May 2012. Following this study, which CSA will provide	French government considers that laws n° 2005- 102 of 11 February 2005 and n° 2009-258 of 5 March 2009 are a sufficient framework See: http://www.dgmic.culture.gouv.fr/IMG/pdf/Repon

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
		to the Government and Parliament, the Council suggests that changes in the legislative framework should be introduced in France so that manufacturers and distributors must offer in their range of receptors, at least a product that embeds accessible functions.	se_au_livre_vert_audiovisuel_janvier_2012version _PDF.pdf
ни	Before the new Media Law (2010/ CLXXXV law) the 1996 I. law was in force. 2010/ CLXXXV law, 39§ specifies that service providers have to provide step by step the access of subtitling and signing.	-	The 2010/CLXXXV law was introduced on behalf of EU's Audiovisual Media Services Directive, taking into consideration entirely the EU's Directive.
ΙΕ	The old BCI developed Access Rules which have been in place since March 2005. The Broadcasting Act 2009 set out a number of provisions in respect of rules to be made by the new BAI to promote accessibility services. The relevant provisions are Sections 43-1c, -2, -3 and -6. The BAI commenced the process of reviewing the Access Rules in 2011 using research already commissioned by the old BCI with different stakeholder groups. http://www.oireachtas.ie/documents/bills28/acts/2009/a1 809.pdf In the revised Access Rules issued in 2012, the timeframe for achievement of targets reduced from ten to five years. To meet past slippage, targets were re-set in line with 2010 achievements. The target each year for subtitling changed from a fixed target to a target range. A target range would allow for a trade-off of higher quality/reliability against quantity or higher quota. There was an increase in the target for audio-description from 1% to 2% over 5 years for the PSB; audio-description measures are over 18-hour day rather than 24-hour day due to digital switchover.	See the updated and changed timeframes (as outlined in previous column)	Developments were not driven by AVMSD, as such; all measures were already under consideration.
IT	No specific changes in this field. Decree 15 march 2010, n. 44 (that transposes the European	-	-

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
	Directive 2007/65/CE) doesn't provide for specific changes on television accessibility. It reasserts the contents of the Gasparri Law (112/2004) for the good reception of television programs for citizens with sensory disabilities. They only suggest to TV broadcasters the adoption of appropriate measures for this purpose. Probably these laws wait for other authorities, like AGCOM - The Communication Regulatory Authority - or Communications Ministry, to define specific obligations for public and private operators. In reality, apart from the national service contract that obliges the public broadcaster, no other obligations are in force. The national service contract is renewed every 3 years. The last contract covers years 2010-2012.		
LT	The only recent change seems to be the provision that people with low income and people that live alone have a right to receive a compensation for the purchase of digital TV equipment. If a disabled person meets these requirements then it is possible to receive compensation. Otherwise, there are no specific obligations for compensation or other actions specifically aimed at disabled people.	-	The EU's Audiovisual Media Services Directive had a significant impact on television regulatory flexibility, the liberalization of advertisement regulation on television and audiovisual services, but no information was gathered that it had significant impact on the television accessibility
LU	No regulative changes have been reported	On 15 October 2012, Luxembourg's Minister for Communication and Media announced a reform of the Luxembourgish media law and the creation of the independent regulation authority ALIA (Autorité luxembourgeoise indépendante de l'audiovisuel). One of the missions of the ALIA will be to encourage operators of audiovisual services that broadcast under a Luxembourgish license to	The EU's Audiovisual Media Services Directive seems to have an impact on recent reform plans

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
		progressively make their services available for people with visual or auditory deficiency.	
LV	"Electronic Mass Media Law" (http://www.neplpadome.lv/en/home/electronic-mass-media-law.html) It envisages broadcasts for minority groups and individuals with special needs and a possibility to envisage access to certain broadcasts for people with impaired vision and hearing. "National concept of electronic mass media development 2009-2011"	-	" Electronic Mass Media Law" is designed according to the EU's Audiovisual Media Services Directive. Latvian legislation has implemented the article on accessibility for disabled people.
MT	One measure specifically addressing accessibility of Television has been included as part of the amendment process of the Malta Communications Authority Act. Subsidiary Legislation (399.28) of 2011 entitled 'Electronic communications networks and services (general) regulations' specifies in regulation 85 (1c) that "The Authority shall, having regard to its objectives under article 4 of the Act and its functions under these regulations, encourage () providers of digital television services and equipment to cooperate in the provision of interoperable TV services for disabled end-users." http://www.justiceservices.gov.mt/DownloadDocument.as px?app=lom&itemid=10563&l=1 In addition to that, according to regulation 3, sub-regulation 5 of the General Interest Objectives (Television Services) (Selection Criteria) Regulations, 2011 which sets out 'Mandatory criteria for generalist general interest objective television services', television service shall broadcast at least 30 minutes of weekly programming accessible to people with hearing disability. http://www.ba-malta.org/file.aspx?f=1174		Article 7 of the AVMS Directive stipulates 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". This article has been implemented in the Maltese Broadcasting Act, Cap. 350 in Chapter 16J., Article 3 through Act IV

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
NL	The Media Act and the Media Decree have been adapted in 2008 to the technical developments and terminology of new media developments and (interactive, non-linear) services. No changes in terms of accessibility. On a voluntary basis, the national public broadcaster has adopted text-to-speech (spoken) subtitling, especially relevant for people with visual impairments. Early 2012 a new system (Optical Character Recognition) has been implemented in order to improve the quantity and the quality of the text-to-speech subtitling.	-	The Ministry has sent out a letter to all broadcasters under Dutch jurisdiction encouraging them to provide accessible programs, in line with the EU Audio-visual Directive.
NO	None reported	-	Not as far as can be detected
PL	Basically, all relevant provisions concerning television accessibility were drawn up after 2008. First there was a revision of the Broadcasting Act – due to the entry into force of the Act of 25 March 2011 on amendments to the Broadcasting Act. At that time, some sections were added, for example: definition of audio description (Article 4), the entire Article 18a on introduction of appropriate aids for visually impaired persons and hearing impaired persons, which are to be provided during at least 10% of the quarterly transmission time of the programme service, with the exception of advertising and teleshopping. Further, a provision was added to Article 21 on the public television's mission, to ensure "accessibility of programme services or parts thereof as well as of other services to visually impaired persons and hearing impaired persons". The Act of 30 June 2011 on the launch of terrestrial digital television effected an amendment to the Act of 16 July 2004 on Telecommunications Law, and subsequently on 18 December 2009 the Minister of Infrastructure issued the Regulation which defined the technical and operational requirements for equipment used to receive digital	The regulator, KRRiT works on the regulation to define a (lower) share of programmes with reception aids for visually impaired persons and hearing impaired persons in the television programme service than the share set forth in paragraph 1 (of Broadcasting Act), with due regard for the diverse programming offer at different air times, technical capabilities, needs of the recipients, manner of transmission and main theme of the programme service (e.g. music TV emitting only video clips). Moreover KRRiT initiated public discussion to receive opinions from broadcasters and customers concerning plans to increase the percent of the quarterly transmission time (to 50%) and/or to vary the percent according to the distribution platform (terrestrial, cable, and digital) or according to the broadcaster type (public, commercial, social). However KRRiT does not have the right of	The legislation refers to the EU's AVMSD as well as the relevant Directives in the EU's Telecoms Package etc.

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
	transmissions, having regard to ensuring interoperability of digital transmissions services received by that equipment and facilitation of access for persons with disabilities.	legislative initiative.	
РТ	The biggest changes were introduced by Law on Televisão (8/2011) and by the Deliberation on the definition of a set of obligations that allow TV access by people with special needs (5/OUT-TV/2009). The first defined the right of equal access to persons with special needs, although it does not specify any quantitative targets or how to accomplish such ambitious goals. The Deliberation was a breakthrough, since it defines quantitative objectives for access services and deadlines for TV operators (public and commercial), but due to an action for judicial review by several private operators, it has not been completely applied.	The deliberation 5/OUT-TV/2009 is under review/discussion, but there is no timeframe established.	The information collected did not allow for a conclusion on this question.
RO	No changes have been reported	-	-
SE	A new TV law was implemented 2010-06-17 (2011:1558). Chapter 12 states that television broadcasters are to design the service in such a way as to be accessible to persons with disabilities through subtitling, interpreting, spoken text or similar technology. It should be made to the extent decided by the government, on the activities funded radio and TV fee under the Act (1989:41) on the financing of radio and television public service, and the authority for radio and television in the other cases. Such decision shall be valid for a period of time. In determining how and to what extent the service to be made available for persons with disabilities supplier's financial conditions and the technical development of accessibility services considered.	-	The law in 2010 was driven by the EU directive.
SI	The accessibilities policies refer to Mass Media Act from year 2006, but there were no changes since regarding television accessibility. The Radio and Television Corporation of Slovenia Act also stayed the same.	A new Mass Media Act is currently under discussion, but there are no policy changes on television accessibility included or under discussion.	The EU Audiovisual Media Services Directive (AVMSD) was a base for a Law on Audiovisual Media Services that was adopted in October 2011 and that regulates only the audiovisual media

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
			services. However, the accessibility obligations in Slovenia were already in place under the old Mass Media Act.
SK	The last legislative changes were implemented through the Act No. 220/2007 Code, effective since 31.5.2007. Regarding public broadcasters broadcasting digitally: 1. The broadcaster is obliged to provide multimodal access to the programme service, so that at least 50% of all digitally broadcasted programmes on each TV channel will be provided with hidden or open captions. 2. The broadcaster is obliged to provide multimodal access to the programme service, so that at least 3% of all digitally broadcasted programmes on one TV channel will be translated to sign language or will be broadcasted in sign language. 3. At least 20% of the digitally broadcasted programmes on one TV channel and in its each programme service will be provided with the audio description of programmes. Regarding commercial broadcasters broadcasting digitally: 1. The broadcaster is obliged to provide multimodal access to the programme service, so that at least 10% of all digitally broadcasted programmes on each TV channel will be provided with hidden/open captions or will be translated to sign language or will be broadcasted in sign language. 2. The broadcaster is obliged to provide multimodal access to the programme service, so that at least 10% of all digitally broadcasted programmes on each TV channel will be provided with hidden/open captions or will be translated to sign language or will be broadcasted in sign language. 3. The broadcaster is obliged to provide multimodal access to the programme service, so that at least 10% of all digitally broadcasted programmes on each TV channel will be provided with hidden/open captions or will be translated to sign language or will be broadcasted in sign language. 3. The broadcaster is obliged to provide multimodal access		EU's Audiovisual Media Services Directive was implemented in Slovak law through the amendment to the Act No. 308/2000 Code, on broadcasting and retransmission in its valid version, §18. This amendment only added to the existing Act obligation for the "on request" Audiovisual Media Services (non-linear services) to mark programmes with the multimodal access (only if such programmes are provided, however, there is no obligation to provide such programmes at all).

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
	to the programme service, so that at least 3% of all digitally broadcasted programmes on one TV channel and in its each programme service		
UK	1. The Audiovisual Media Services (AVMS) Regulations 2009 www.opsi.gov.uk/si/si2009/uksi_20092979_en_1 amending the Communications Act 2003 and empowering OFCOM to regulate VOD services and to delegate this to another body (www.ofcom.org.uk/tv/ifi/vod/designation180310.pdf www.ofcom.org.uk/consult/condocs/vod/statement/). 2. The Audiovisual Media Services Regulations 2010 www.opsi.gov.uk/si/si2010/uksi_20100419_en_1 which set out enforcement measures regarding AVMS Regs 2009. 3. Amendment in accordance with Ofcom's statement Signing on television: new arrangements for low audience channels, Ofcom, 4 December 2007. (http://www.ofcom.org.uk/consult/condocs/signing/statement). 4. Revisions to Ofcom's Code on Television Access Services to include non domestic channels licensed by OFCOM ('Channels licensed by Ofcom that are made available in Member States of the European Union other than the United Kingdom will be required to start providing access services with effect from 1 January 2014 if they meet the requisite audience share thresholds and affordability tests') Ofcom Statement: Access services on non-domestic channels dated 1/10/2012.	A new UK Communications Bill is planned: http://www.culture.gov.uk/what_we_do/tele communications_and_online/9158.aspx and the preparations include a review of the Communications Act by the Department of Culture, Media and Sport which has hosted a series of seminars in 2012 to inform a Communications White Paper where accessibility issues have been discussed. http://dcmscommsreview.readandcomment. com/	For some time prior to the EU's Audiovisual Media Services Directive, there have been extensive provisions in place in the UK for television access services, driven by UK domestic policy. Under the Broadcasting Act 1996, public service television channels were required to provide accessible television services. These provisions were expanded under the Communications Act 2003 to include commercial channels and have been prescriptive in terms of imposing statutory quantitative targets for subtitling, signing and audio description. However, it can be said that recent modification of OFCOM's Code on Television Access Services to include non domestic channels licensed by Ofcom (and meeting requisite audience share thresholds and affordability test) has been influenced to a degree by changes to the AVMS Directive that came into force in December 2009 which required Member States to encourage media service providers [including broadcasters] under their jurisdiction to ensure that their services are gradually made accessible. http://stakeholders.ofcom.org.uk/consultations/access-services-non-domestic/summary)
AU	The Broadcasting Services Amendment (Improved Access to Television Services) Act 2012 received Royal Assent on 28 June 2012. The Act implements the government's response	A review of requirements for other than core free to air channels to be captioned. Further consideration of policy on audio	n/a

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
	to key recommendations from the Media Access Review final report, which was developed after extensive stakeholder consultation. The Act creates a new Part 9D in the Broadcasting Services Act 1992, which requires that broadcasters must comply with rules and standards relating to captioning of television programs for the deaf and hearing impaired which include: • new captioning targets for commercial and national television broadcasters • new captioning obligations and targets for subscription television broadcasters and narrowcasters • a requirement that the Australian Communications and Media Authority (ACMA) develop standard(s) on captioning quality • a requirement that broadcasters transmit emergency warnings in the form of text and speech, and caption those warnings where practicable • new annual compliance reporting and record keeping requirements to support new captioning obligations • making compliance with the captioning obligations under Part 9D a licence condition Requiring the ACMA to conduct a statutory review of Part 9D in 2015 and give the Minister a report of the review before 30 June 2016.	description, based on outcomes of a technical trial conducted in 2012. The Australian Communications and Media Authority is required to determine captioning standard(s) about the quality of captioning services provided by national and commercial television broadcasters and subscription television licensees before 31 December 2012.	
CA	Qualitative Standards, Establishment of the Broadcasting Accessibility Fund to underwrite projects leading to 100% accessibility by 2020 through tangible benefits and cable levies. 4 hours per week of Video Description, 2 of which	There currently are none. Television broadcaster licence renewals allow for review, compliance and specifics to individual licences that may go beyond	n/a

	The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
	original to the programming service.	overarching policies. Licence renewals vary from 1 -7 years at the discretion of the CRTC.	
		Canada is in the implementation stages of the changes mentioned above. Gap analysis and reporting.	
US	On August 25, 2011, the FCC was finally able to vote (unanimously) to reinstate video description, effective July 1, 2012. ABC, CBS, Fox, NBC, USA, the Disney Channel, Nickelodeon, TNT, and TBS are each required to provide 50 hours of video-described prime time or children's programming per calendar quarter Starting July 1, the 21st Century Communications and Video Accessibility Act requires service providers (cable operators, satellite companies, etc.) to provide at least 200 hours per year of programming with video descriptions of programs originated by the four major broadcast networks (ABC, NBC, CBS, and Fox) and the top five Nielsen-rated cable networks (e.g., USA, Disney Channel, TNT, Nickelodeon and TBS). The larger programming networks are planning to add logos and audio tones to let people know that a particular show will be enhanced with video descriptions. The programming guide channel on a television may eventually provide that information next to the name of a show. The web sites of the various cable networks and the site of the Federal Communications Commission (FCC) will also have links leading to information about video descriptions. Phasing of video description requirements After 1 year, restores FCC rules requiring 4 hours per week of video description on 9 television channels (top 4 broadcast networks and top 5 cable channels) in the top 25 most populated markets. [See UPDATE above] After 2 years, requires FCC to report to Congress on video	See phasing of video description requirements etc. (previous column)	n/a

The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
description.		
After 4 years, permits the FCC to increase video description to 7 hours per week on 9 television channels.		
After 6 years, requires the FCC to apply the video description requirements to the top 60 most populated markets (not just the top 25 most populated markets).		
After 9 years, requires the FCC to report to Congress on the need for additional markets to carry video description.		
After 10 years, permits the FCC to expand video description to 10 new markets annually to achieve 100 percent nationwide coverage.		
<u>Equipment</u>		
Requires cable/satellite set-top box on-screen text menus and guides to be audibly accessible to individuals who are blind or have low vision, if achievable.		
To provide access to built-in closed captioning and video description features through a mechanism that is reasonably comparable to a button, key, or icon designated for activating the closed captioning or accessibility features.		
Requires devices designed to receive or play back video programming:		
to make controls of built-in functions accessible to and usable by individuals who are blind or have low vision, if achievable;		
2. to make controls of built-in functions accessible to and usable by individuals who are blind or have low vision through audio output;		
3. to provide access to built-in closed captioning and video description features through a mechanism that is reasonably comparable to a button, key, or icon designated for activating the closed captioning or accessibility features.		

The main legislative and/or policy changes on television accessibility implemented since 2007/2008 (if any)	Changes planned or currently under discussion (if any)	To what extent have these changes and/or plans been driven by the EU's Audiovisual Media Services Directive?
Emergency Information		
Requires video programming owners, providers, and distributors to make emergency information accessible to individuals who are blind or have low vision.		





DOI: 10.2759/33027 ISBN 978-92-79-33183-1