eAccessibility of public sector services in the European Union

Executive briefing

Foreword

The use of ICT is transforming how our governments across the European Union interact with businesses and citizens. As European governments work to improve their public services through the innovative use of ICT, we have to ensure that all citizens, who wish to, can access and use what public administrations offer as far as is reasonably possible.

This means that the channels we use and the content we provide and the electronic services we offer have to be responsive to people's needs. This is not just beneficial for the individual, but equally so for society at large. When inclusion is built-in to public service design from the outset, individual opportunities in education, employment, health and social life are enhanced and this, in turn, has the potential to bring about a significant economic impact in Europe. This aspiration is, as this EU-wide research project shows, a real, yet surmountable challenge that we all face.

I am pleased that this research project into eAccessibility has uncovered many examples of good practice across the European Union from which we can all learn. It also shows, however, that we have some way to go before we substantially reduce the barriers that are experienced by many users. This project has analysed a number of these barriers and offers recommendations for various stakeholders, which, if adopted, could significantly improve the accessibility of our online public services.

Jim Murphy MP
Parliamentary Secretary
UK Cabinet Office

Over the past five years there has been a major drive to put government services online supported by significant investments by Member States and European institutions. In the emerging multi-channel environment, the online channel has the clear potential to increase accessibility of services to those excluded from traditional forms of interaction with public authorities. Achieving inclusion is an essential objective of e-government agendas across Europe and eAccessibility of online services is a key enabler to achieving this objective.

The latest estimates of internet usage in the European Union show that nearly 48.1% (222m of the 460m population) have access to the internet. It is also estimated that 39m of the EU population are disabled.

How we carried out the study

The purpose of this report is to present results from a comprehensive assessment of the eAccessibility of government online services across the European Union (EU). The study breaks new ground in aiming to test how well the 25 Member States of the EU and the European Commission meet this requirement in 2005.

The study comprises two parts. The first part relates to a survey carried out in May and June 2005 of policies towards accessibility of online public services in each of the 25 Member States of the EU and the European Commission.

The second part of the study relates to work carried out in June and July 2005 comprising a detailed assessment of 436 government service websites across Europe. The main objective was to report conformance of public sector websites with the World Wide Web Consortium (W3C)'s WCAG 1.0 at Levels A and Double-A.

Assessment of eAccessibility

This project conducted automatic evaluation of the accessibility of the selected services supported by manual evaluation across a sample. Consistent with similar studies that have taken place, the results found relatively few sites that achieve even Limited Pass Level A conformance with the W3C Web Content Accessibility Guidelines (WCAG 1.0).
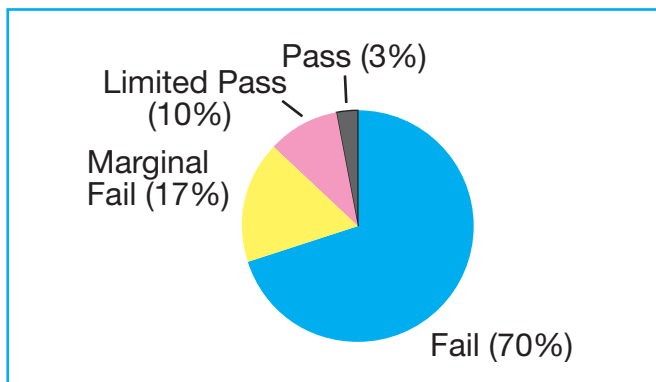

Chart 1   **Conformance with Level A (WCAG 1.0)**

- 3% of the websites assessed achieve Level A conformance, passing the full suite of both automated and manual checks.

- A further 10% of services fully passed all the automated checks, but showed a material failure on one or more of the manual checks — referred to here as a Limited Pass Level A.

- Another 17% of sites failed one or more of the automated checks, but this failure was limited in extent or scope — referred to as a Marginal Fail Level A.

- Finally, the remaining 70% of sites showed relatively pervasive failure against one or more of the automated checks — referred to as a Fail Level A.

The policy survey

This identified ten factors that might influence web accessibility. These were combined into an index of engagement for analysis between eAccessibility and policy approaches across the Member States. This shows that general levels of policy engagement in this area are linked to improved results. The single most significant influencing factor was found to be the existence of legal incentives. Eight out of 25 Member States reached Limited Pass Level A (or at least Marginal Fail Level A) in at least 40% of public sector websites. These Member States tend to have a higher than average index of engagement.
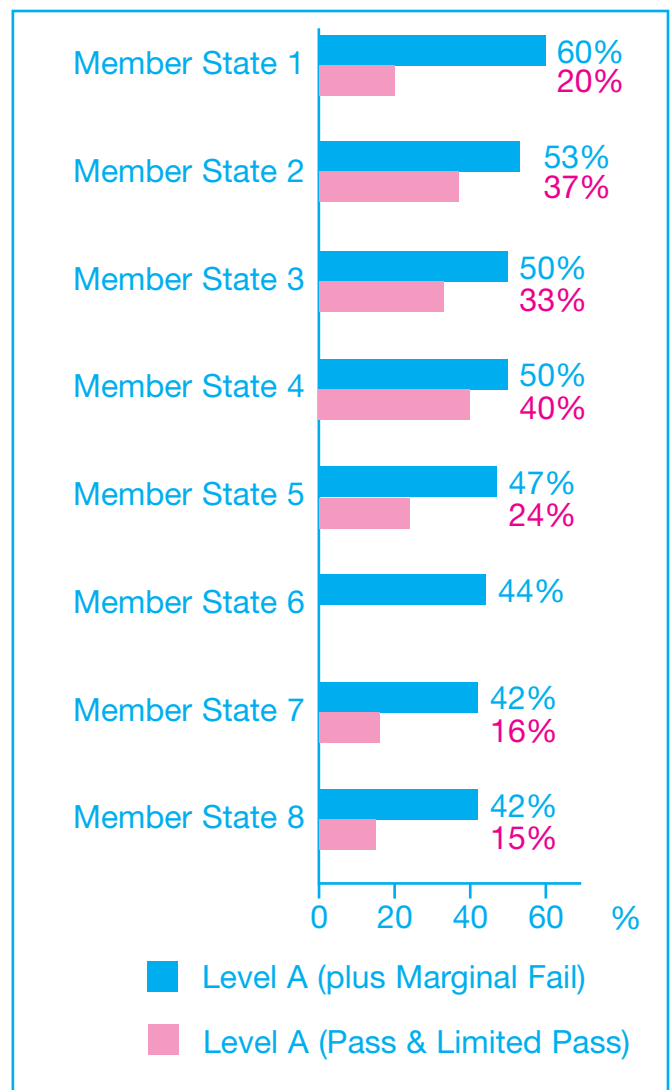

Chart 2   **Member States with highest levels of conformance**

Overview of good practice

Web managers, developers and policy-makers alike can learn from the good practice shown by some of the sites that have performed well during our evaluation. A further step in the process of assessment was used to select good practice sites from those that achieved Limited Pass Level A. Overall, twelve such features are described here. The site shown below demonstrates many of the features of good practice:

- **Accessibility page** containing policy and user guidance

- **Alternative text** for all types of images and objects

- **'Breadcrumb' navigation** to show users where they are

- **Cascading style sheets** to separate presentation from content

- **Changing font sizes** to give the user the ability to decide

- **Headings** that structure each page appropriately

- **Keyboard accessibility** because not everyone uses a mouse

- **Site map** to provide an overview of the site

- **Page titles** to be unique and meaningful to users

- **Skip navigation** taking the user directly to the content

- **Validation of pages** (use of standards-compliant mark-up)

- **Warning of link opening in a new browser window**

Example of good practice
Social Security Administration website   www.seg-social.es (as at October 2005)

Overview of common reasons for failure

Level A

It is vital to understand where the reasons for failure lie in order to propose actions for improvement. We show in Chart 3 below the most common reasons for failure at Level A, identified by automated evaluation. This identifies a high incidence of failure across the full sample of sites for three of the five fully automated checks.
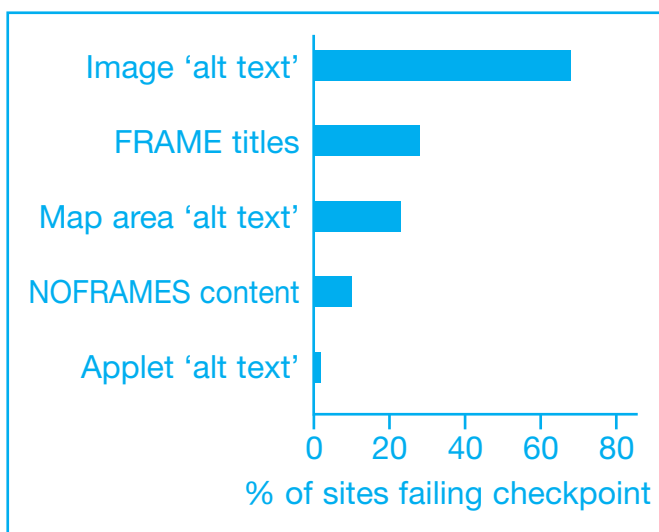

Chart 3 **Reasons for non-conformance (Level A)**

Of the sites that were found to fail these specific checks, over a fifth were considered to have failed marginally, the failures being limited in variety and/or scope across the site. These sites were classified as Marginal Fail A. If these sites were able to have this core set of accessibility defects corrected, then they would be converted into the Limited Pass A category; and, as a result, 30% of sites would achieve this level. This would be a significant short-term step in improving web accessibility for potentially little effort.

Level Double-A

We show in Chart 4 below the most common reasons for failure at Level Double-A. Results are from a number of tests relating to WCAG 1.0 Priority 2 checkpoints. Most of these checks relate to issues where results depend critically on improvements in content management systems or authoring tools. These issues are of long-term importance to improving web accessibility.
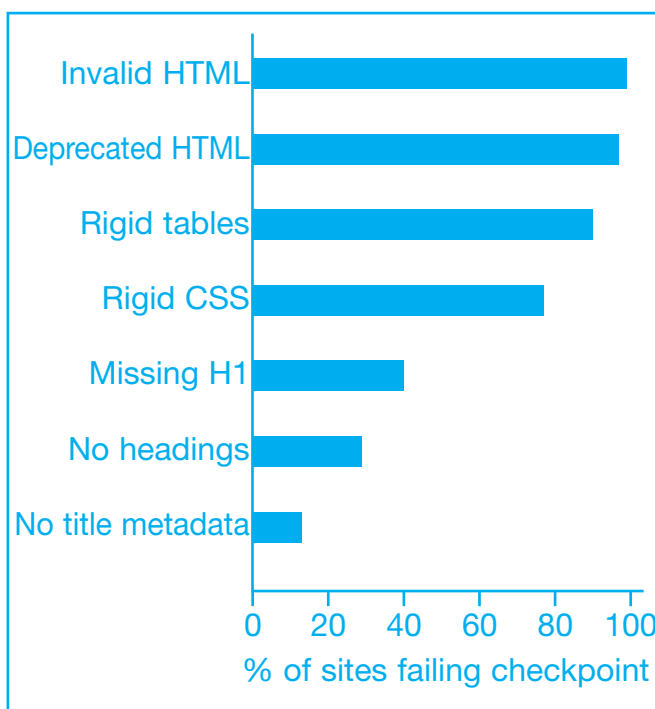

Chart 4 **Reasons for non-conformance (Level Double-A)**

From our analysis of the common reasons for failure at Level A and Level Double-A, a set of recommendations for action has been developed to bring as many websites up to Level A as possible in the shortest amount of time. By following this plan, public administrations across Europe will rapidly achieve significantly higher levels of eAccessibility.

Recommendations

If the W3C WAI Guidelines are followed, websites can be made accessible to a very wide variety of people with disabilities. In this way the delivery of inclusive government services via the internet becomes an achievable objective. In order to achieve both the specific objective of online services that conform with these guidelines and the broader objective of inclusive services, recommendations should be focused on the different contributions made by different groups of stakeholders.

Public policy-makers at European Union level
Recommendation 1
Set a clear target for making all public sector websites in the EU conform with WCAG 1.0 Level Double-A by 2010 as part of the i2010 strategy to promote an inclusive European information society.

Recommendation 2
Develop feedback mechanisms for closing the information gap between policy planning and actual outcomes across the EU (The European Internet Accessibility Observatory Project (EIAO) may provide a mechanism for such collaboration).

Recommendation 3
In particular, aim to test systematically, and on a regular basis, the progress that should now be made. This may include the revisiting the current study in 12 to18 months' time, and should be integrated with ongoing i2010 monitoring activities.

Recommendation 4
Ensure effective liaison with all EU-wide organisations (e.g. EIAO, EDeAN, Support-EAM, eAccessibility Expert Group) to encourage the sharing of best practice and a harmonised approach across the EU so that eAccessibility becomes part of the mainstream for online services, e.g. the link between accessibility and usability.

Recommendation 5
Ensure that EU public procurement policy now builds applicable W3C WAI guideline requirements into all procurements of new website designs, major upgrades, and all outsourced content production (such as reports, publications etc).

Recommendation 6
Carry out a feasibility study in 2006 into the development of an appropriate qualification in accessible websites for developers, managers and content providers (perhaps aligned with the European Computer Driving Licence).

Public policy-makers in Member States
In line with the strategic objective for 2010 to promote an inclusive European information society, each Member State should produce an implementation plan that will cover at least the following recommendations.

Recommendation 7
Produce by 2006 a short-term public plan that enables a clear measurable improvement for all websites delivering public services.

Recommendation 8
In particular, promote the need for cross-governmental centres of excellence for eAccessibility (within Member States) that will provide special action plans, teams, standards and tools for improving eAccessibility according to clear priorities of ease of execution and impact on service.

Recommendation 9

Review the incentives available to encourage the provision of accessible websites in the public service and, if necessary, consider the need for a strong legislative framework.

Recommendation 10

Produce a plan for improving awareness throughout the country by reviewing all the examples of engagement identified in this survey as ideas for improving awareness of web accessibility.

Recommendation 11

Assess the potential for a practical style guide with common 'look and feel' standards for public service websites in line with the Canadian model, involving disabled users.

Recommendation 12

Ensure that government policy now builds applicable W3C WAI guideline requirements into all public procurements of new website designs, major upgrades, and all outsourced content production (such as reports, publications etc). In the case of software procurement, such requirements should apply equally regardless of the licensing model (open- or closed-source).

Note: This will normally require WCAG 1.0 Level Double-A, and may also include ATAG 1.0 Level Double-A and UAAG 1.0 (with an appropriate conformance profile) where these would also be applicable.

Recommendation 13

Develop feedback mechanisms for closing the information gap between policy planning and actual outcomes so that regular monitoring of performance against eAccessibility is made and communicated.

Web managers and developers in all public sector organisations

Recommendation 14

Plan now to get existing sites up to at least Level A in the short term (by the end of 2006) and to achieve Level Double-A in the mid-term (by end of 2008), prioritising carefully work applied to individual sites in order to enable the quickest resolution of the most common problems and thus achieve the biggest impact. In particular,

- ensure that all images are supported with effective alternative text, appropriate to the situation at all times (including explicitly null alternative text where applicable)

- discontinue the use of obsolete frameset technology. If not immediately possible, make sure that the settings related to its use are fully accessible

- be aware that it may be both efficient and effective to address many Priority 2 issues in parallel with the full achievement of Level A conformance.

Recommendation 15

Make sure that all content commissioners and authors are fully trained in the importance of accessible content, and in the means that are made available to them to achieve this.

Recommendation 16

Build applicable W3C WAI guideline requirements into all public procurements of new website designs, major upgrades, and into all outsourced content production (such as reports, publications etc).

Web designers in the software industry

Recommendation 17

Produce software tools that conform with Authoring Tool Accessibility Guidelines (ATAG1.0) to at least Level Double-A, and/or with the User Agent Accessibility Guidelines (UAAG 1.0) as applicable (including open source software).

Recommendation 18

Build the W3C WAI guidelines into industry codes of practice.

Recommendation 19

Train all web designers in both the requirement for, and the techniques to achieve, fully accessible websites.

Recommendation 20

Develop a competence framework for web designers, which includes web accessibility, and use it for personal development schemes and recruitment campaigns.

Public policy-makers in Member States

Recommendation 21

Designate a champion (an individual and/or an institution) for eAccessibility in each Member State with the responsibility and authority to ensure that improvements are made with the long-term target of achieving Level Double-A for all government websites by 2010.

Priorities for action plan

1 Provide effective text alternatives for all images and image map hotspots.

2 Discontinue the use of frames — use CSS and server-side scripting instead.

3 Create HTML code that validates, and discontinue use of deprecated HTML features.

4 Ensure the site works without requiring the use of a mouse.

5 Warn users if links are set to open in a new browser window.

6 Code content structures correctly.

Contacts

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This report is available online at www.cabinetoffice.gov.uk/e-government /eaccessibility/ along with related information about the project.

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