

# Website Accessibility in Australia and the Australian Government's *National Transition Strategy*

Vivienne L. Conway  
Edith Cowan University, Mt. Lawley Campus  
Perth, Western Australia, Australia  
vconway@our.ecu.edu.au

## ABSTRACT

The Australian Government has implemented the *Web Accessibility National Transition Strategy* (NTS) which mandates compliance with WCAG 2.0. Those sites not covered by the NTS fall within the purview of the Australian Human Rights guidelines, which recommend WCAG 2.0 AA as a minimum standard. This research will assess this strategy over the period of its implementation as well as building a framework to assist other organisations in their efforts to build more accessible websites.

## General Terms

measurement, documentation, verification

## Keywords

accessibility, e-government, compliance, assessment

## 1. INTRODUCTION

In Australia, it is estimated that one in five Australians or 3.95 million people, experience long term impairment. The Australian Government Information Management Office (AGIMO) report that 2.6 million of these people are under the age of 65 which equates to 15% of people under 65. Of these, 86% report they experience a core limitation, affecting their mobility, communication and may restrict either their schooling or employment. (Australian Bureau of Statistics, 2010)

In June 2010 the Australian Government released the *Web Accessibility National Transition Strategy* (NTS) (AGIMO, 2010). This document outlines the plan for the adoption and implementation of *Web Content Accessibility Guidelines Version 2.0* (WCAG). Under this plan, all websites of the federal agencies are required to conform to WCAG 2.0 in two stages, Priority Level A by December 2012 and AA by December 2014. States and territories must also meet WCAG 2.0; however they are not mandated to follow the NTS. They must comply with Priority Level A by 2012 and are encouraged to apply higher standards. (AGIMO, 2010)

Accessibility of all Australian websites is governed by the Australian Human Rights Commission. The latest version of their *Advisory Notes, Version 4.0* (2010) was published

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. *W4A2011 – Google Student Award* March 28-29, 2011, Hyderabad, India. Co-Located with the 20th International World Wide Web Conference. Copyright 2011 ACM 978-1-4503-0476-4 ...\$5.00.

in October 2010. The *Advisory Notes* reinforce the NTS, and also advise all non-government website holders to ensure compliance to WCAG 2.0. New non-government websites must adhere to WCAG 2.0 AA, and existing website owners have until December 31, 2013 to comply with this same level.

Australians have clearly embraced using the Internet as their preferred method of dealing with the various levels of government. It is estimated there are over 4600 registered domains in the gov.au space, with more than 4.2 million documents. Australians enter the federal government web space through 'www.australia.gov.au' which has led the transition to WCAG 2.0 by stating their site is compliant to WCAG 2.0 AA, with some elements complying to the AAA level. (AGIMO, 2009)

It is expected that the implementation of the NTS will improve accessibility of all government websites. AGIMO as a government body, has the ability to ensure compliance with the strategy and the means to require the necessary compliance checks by 2015.

There has never been such impetus and drive to get awareness of this strategy out there and make sites accessible. Not only that, but the NTS is a well thought out plan that understands the issues agencies will face and helps them with realistic timeframes, a staged approach and a dedicated team in AGIMO (albeit far too small) to provide assistance. The time is now, let's hope we grab it. (Personal communication, S. Luxton, WA Public Service Commission 2011)

## 2. RESEARCH QUESTIONS

*Did the Australia Web Accessibility National Transition Strategy achieve its goals of bringing about national compliance against WCAG 2.0?*

This research will address the success of the NTS. Having a plan is good, developing a work plan is good, but ascertaining the success of this plan is crucial if we are to assist others to also meet the goal of having truly accessible websites.

While assessing the success of the NTS, other information critical to developing a successful framework for future use will be collected. Some of the questions critical to this aim include: the type of organisation and the role played by this factor, key elements of a universal framework, critical success factors and obstacles.

## 3. LITERATURE REVIEW

This research will examine studies that have been completed by other countries. Preliminary research shows that while countries have been assessing their government sites, there is little demonstration of WCAG 2.0 compliance.

A study of the accessibility of public library websites within Western Australia (Conway, 2010) ascertained that at present none of the public library websites met WCAG 2.0 Level A. These websites are all attached to local government websites and as such will require compliance with WCAG 2.0. This study also demonstrated the lack of understanding of website accessibility guidelines, and its benefits.

A study comparing website accessibility in South Korea with that of the United States (Hong, Katerattanakkul, & Lee, 2008) examined methods of assessing websites, however the study used the WCAG Version 1.0 guidelines and the automated tool 'Bobby' which is no longer available as freeware. The criteria for assessing the websites was limited to a few categories, however the study did suggest the importance of a longitudinal study to observe changes over time. This research also discussed the need to use both automated tools and human evaluation

A website accessibility evaluation of the Korean e-Government websites (Lee, Kim, & Kim, 2007) discussed the fact that Korea's e-government portal ranked the highest in the world for both 2006 and 2007 (West, 2007), yet was the only country in the top 10 e-governments in the report complying with less than 20% of W3C accessibility guidelines.

In 2009, research into the accessibility of United Kingdom e-government websites (Kuzma, 2009) assessed 130 sites of the U.K. members of parliament. The author cites a 2005 study showing 97% of official sites in the UK government were "unusable by disabled people, largely because they ignored well-known techniques for making data accessible...only 3% of the sites that were studied passed basic W3C accessibility guidelines" (Kuzma, 2009). This study used an automated checking tool, but states a manual check should be used to verify the accuracy of the automated tool as well as identify other issues that might be missed by automated tools. In this study, 23% of the sites met WCAG 1.0 Priority Level A, and only 5% met WCAG 2.0 Level A.

#### 4. RESEARCH DESIGN

In this research, a large case study incorporating a longitudinal study will be conducted which will include approximately 100 websites from all levels of government (federal, state/territory, and local), government-affiliated websites, not-for-profit websites, and corporate websites. All websites in Australia are now being required to transition to WCAG 2.0, by either the NTS or the Australian Human Rights Commission. This fact has led to the decision to include this mix of websites in the research. The websites chosen will represent those citizens using online services most often require such as health, public transportation, banking, and employment.

Website audits will be conducted at regular intervals. The audits will consist of at least two automated tools, and a manual expert evaluation. In addition, interviews will be conducted at the beginning and end of the research period with the target group.

A pre-research survey will be provided to the target group as well as a survey at the end of the research period. These surveys will supply information to assist in developing a framework. It is anticipated that focus groups will be used to provide additional qualitative material to develop the framework.

This research is not solely aimed at documenting a particular point in time. It will use the positive and negative findings of

the case study to suggest a more universal framework for guiding organisations to successful transition strategies for the long term. It will provide information on how to achieve compliance, what obstacles they may face and propose intervention strategies to assist them to overcome these obstacles.

The timeline for the research will closely follow that of the NTS. The preliminary period of February to July 2011 will be set aside for developing the Ph.D. research proposal.

Following approval of candidature, websites within the target population will be contacted, focus groups developed and the initial survey conducted. These websites will be audited regularly, probably on a monthly basis until the end of the initial transition period to WCAG 2.0 Priority Level A, which is December 2012. After this period, a follow-up survey and interviews will be conducted, and research results statistically assessed.

#### 5. CONCLUSION

This proposed research has the potential to provide both a beneficial analysis of how successful such a strategy as the NTS can be, as well as to build a framework to assist organisations as they work toward implementing truly accessible websites.

#### 6. REFERENCES

- [1] AGIMO. (2009). *Interacting with government: Australians' use and satisfaction with e-government services - 2009*. Retrieved from [www.finance.gov.au/publications/interacting-with-government-2009/index.html](http://www.finance.gov.au/publications/interacting-with-government-2009/index.html).
- [2] AGIMO. (2010). *Australian Government web accessibility national transition strategy*. Retrieved from <http://www.finance.gov.au/publications/wcag-2-implementation/docs/wcag-transition-strategy.pdf>.
- [3] Australian Bureau of Statistics. (2009). *Disability, ageing and carers, Australia: Summary of findings, 2009*. Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4430.0>.
- [4] Australian Human Rights Commission. (2010). *World wide web access: Disability Discrimination Act advisory notes: version 4.0*. Retrieved from [http://www.hreoc.gov.au/disability\\_rights/standards/www\\_3/www\\_3.html](http://www.hreoc.gov.au/disability_rights/standards/www_3/www_3.html).
- [5] Conway, V. (2010). *Website accessibility in Western Australian public libraries*. Unpublished Honours Thesis, Edith Cowan University, Perth, WA.
- [6] Hong, S., Katerattanakkul, P., & Lee, D.-h. (2008). Evaluating government website accessibility: software tool vs human experts. *Management Research News*, 31. doi:10.1108/01409170810845930
- [7] Kuzma, J. M. (2009). Accessibility design issues with UK e-government sites. *Government Information Quarterly*, 27(2010), 141-146
- [8] Lee, S., Kim, B. G., & Kim, J. G. (2007). *Accessibility evaluation of Korean e-government*. Paper presented at the Universal Access in Human-Computer Interaction: Application and Services, 4th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2007, held as Part of HCI International 2007.
- [9] West, D. M. (2007). *Global e-government, 2007 (Report)*. Providence, RI: Brown University.