ACCESSIBILITY OF POLITICAL PARTIES WEBSITES IN INDIA

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Table of Contents

Introduction	. 3
Highlights	. 3
Methodology	
Findings and Interpretations	
Known, Likely and Potential Problems	
HTML and CSS Validation Errors	. 6
Alternate Text for Non-text Objects	. 6
Recommendations	. 7
Appendix A: List of Websites and Accessibility errors	. 8

Introduction

The Internet has rapidly become a preferred medium for accessing information on various topics, ranging from politics, news, governance, recreation, business, education and carrying on social interaction. While this was initially a trend found more in urban areas, with the proliferation of the mobile phone, there is an ever expanding number of rural, elderly and illiterate persons accessing and downloading content from the Internet.

The focus shift of the government to carrying on administration and governance through electronic media and to enable G2C transactions over the Internet underscores the absolute necessity of ensuring that information and communications technologies realise their full potential as a tool for inclusion and participation. Even policymakers and parliamentarians have started using it as an effective medium to engage with the public. The Government of India has made some efforts in this direction, since it formulated Guidelines for Indian Government websites and also the recently notified National Policy on Universal Electronic Accessibility. Both of these require all Government websites and those of other entities such as essential service providers, research and academic institutions and other stakeholders to conform to the Web Content Accessibility Guidelines (WCAG) 2.0, the universally accepted standard for measuring web accessibility formulated by the World Wide Web Consortium (W3C). Since inaccessibility of websites impedes access on all platforms, it is one of the most important domains of electronic accessibility.

Given the impending elections in India across April and May 2014, a test was conducted to determine the accessibility of websites of the Election Commission of India, the Parliament and some key political parties in India. This report summarises the results of the test.

Highlights

- 41 websites were tested
- 13 websites failed to open or had no official website address / URL
- Most of the remaining 28 websites have some accessibility barriers, with only 2 websites having no known accessibility errors
- The average number of errors per homepage across all tested websites is 91, with around 10 websites having more than 100 errors.
- 28.5% of homepages have over 500 cumulative errors
- 21.4% of websites have no alternate text for non-text objects
- 21.4% of the websites have no navigation-markup
- Only 1 website has a colour change option
- Around 50% of the web pages have form links of which only 50% were accessible

Methodology

The websites chosen for the audit were taken from the list of political parties available on the website of the ECI¹, the ECI itself and the parliament. All the national parties and at least one party from each state were included in the audit.

The initial step of the audit was to carry out a preliminary round of testing using an open source online automated tool called A-Checker which would check for errors such as missing descriptions for images or links and HTML and CSS errors. This was later supplemented with a limited manual test to determine substantive issues such as inaccurate description of links or inaccessibility of forms. The standard against which the websites were measured was the WCAG 2.0. The principal requirements of this standard are that all web pages, elements and content (such as information in text, multimedia, video and audio) should be:

- **Perceivable**: be presented to users in ways they can perceive, such as giving textual description for non-text objects (image, audio, etc), separating structure and information from presentation, ensuring that there is sufficient colour contrast between foreground and background and having synchronized alternatives (such as captions for videos) for multimedia.
- **Operable**: i.e., all functionality must be accessible with the mouse as well as the keyboard and there must be standard mechanisms in place such as marking various subsections with HTML headings (h1...h6) to aid users to find and work with content.
- Understandable: i.e., pages should be simple and predictable, with help for clarification.
- **Robust**: i.e., web content should be properly marked up and there should be no HTML and CSS validation errors.

Issues identified while testing have been categorized as below:

- 1. **Known problems**: These are problems which AChecker knows with certainty are accessibility barriers.
- 2. **Likely problems**: These are problems which AChecker has identified as probably barriers, but require human decision for confirmation.
- 3. **Potential problems**: These are problems that require human identification.
- 4. **Hypertext Markup Language (HTML) Validation errors**: Non-conformance to HTML standards which is important for assistive technology to be able to process the pages and present them to the end user.
- 5. Cascading Style Sheet (CSS) Validation errors: Non-conformance to CSS standards, which is used for the presentation / formatting of content, especially on dynamic pages, for instance to control the text / web object colour, size, attributes, etc., would render it impossible to ensure that a webpage appears similar across browsers and devices.
- 6. **Alternate text for non-text objects**: Absence of alternate means of access for objects such as images, audio and video through text, captions etc. which could help persons with different disabilities access the objects
- 7. **Colour change option**: Absence of the option for allowing users with low vision or colour blindness to change text colour or text size and optimise the website to suit their vision requirements.

^{1.} http://eci.nic.in/eci_main/SR_KeyHighLights/SE_1951/StatRep_51_DELHI.pdf

- 8. **Navigation markup**: Absence of navigation mechanisms such as different heading levels or skip links, which allow persons with blindness or persons with motor difficulties to navigate a page in a structured manner without having to repeat key strokes.
- 9. **Form accessibility**: Absence of proper labels for each input field such as text entry box, selection and other input fields so that they can be programmatically determined and announced by the screen reader to the end user.

Findings and Interpretations

A total of 41 websites were identified from the ECI list for the accessibility audit. However, results have been given only for 28 of them, since the remaining 13 websites failed at the first hurdle itself – they either did not open or had no official website and hence could not be tested.

Most of the websites tested have accessibility issues. Details of the kinds of errors are given below:

Known, Likely and Potential Problems

The table below outlines the results of testing for known, likely and potential problems.

Particulars	Known Problems	Likely Problems	Potential Problems
Average errors per website	122.64	3.42	305.92
Number of websites that have 0 errors under this category	2	17	3
Minimum error count	0	0	0
Maximum error count	2181	41	1434

Thus, we see that the known errors vary in number from 0 to 2181. Only 2 websites have no known errors and 4 websites have more than 100 errors. 26 websites have at least one known accessibility issue and hence, can be said to be inaccessible.

The situation is better when it comes to likely problems, as around 17 of the websites surveyed have no likely problems and the maximum number of likely errors is 41. The average number of likely problems per website is around 3.42. This is acceptable as long as these do not pose any major accessibility challenges.

In the case of potential problems however, 20 of the websites surveyed have more than 100 potential problems and 3 have no potential problems. Thus again, similar to the situation with known errors, around 25 websites have potential accessibility problems and a manual check is necessary to decide whether or not they need to be corrected. The number of potential problems per website ranges from 0 to 1434.

On an average, websites have 122.64 known accessibility issues per page and 305.92 potential accessibility issues per page. The situation with likely accessibility issues appears less bleak, with an average of 3.42 errors per page (8.72 errors excluding the websites that had zero errors).

HTML and CSS Validation Errors

The table below outlines the results of testing for HTML and CSS Validation.

Particulars	HTML Validation	CSS Validation
Average errors per website	9.57	46.71
Number of Websites that have 0 errors under this category	27	2
Minimum error count	0	0
Maximum error count	268	207

96.42 per cent or 27 websites have 0 HTML Errors

The situation with CSS validation is worse, with only 2 websites having no CSS validation errors and an average of 46.71 errors on the Home pages of various sites. In terms of errors, on an average, there are 9.57 HTML validation errors and 46.71 CSS validation errors per page.

Alternate Text for Non-text Objects

The table below outlines the availability of alternate text for non-text objects in the websites tested.

Particulars	Count	Percentage
Number of web pages on which non-text objects have no alternate text	6	21.42
Number of web pages on which most non-text objects have alternate text	10	35.71
Number of web pages on which all non-text objects have alternate text	3	10.71
Number of web pages on which a few non-text objects have alternate text	9	32.14

6 of the websites have no alternate text available for any of the images while around 3 websites have alternate text for all the images. The remaining websites have alternate text available partially.

Websites were checked for a few accessibility requirements, such as whether content can be perceived with multiple senses, whether information is not dependent on colour alone, whether labels for input fields can be identified programmatically and whether navigation mechanisms are available on the pages. The results were as follows:

- 1. Alternate text for non-text objects: The test revealed that 21% of the web pages have either no image labels or images labelled incorrectly.
- 2. Colour change option: Only 1 out of 28 web pages has the option to change the colour for text or background.
- 3. Navigation markup: About 6 of 28 (21.4%) web pages do not have any navigation markups. Out of remaining 22, only 20 have headings and 2 have skip links. About 4 web pages used the site map as a navigation markup. However, this alone cannot be relied on for proper navigation within the webpage.
- 4. Form accessibility: Forms were found to be fairly accessible. The details are as follows:
 - i) Number of websites that had a form to enter data: 12
 - ii) Number of forms that were found completely accessible:6
 - iii) Number of forms that were midway accessible: 1
 - iv) Number of forms that were accessible but difficult due to non-labelled objects: 5
 - v) Number of forms that were completely inaccessible: 0

Recommendations

The current state of the accessibility of political websites is clearly inadequate. The government website of the Election Commission of India itself has 64 known accessibility errors and the website of the Indian Parliament has 21 known errors. The only websites that have no known, likely or potential accessibility errors are those of the Bharatiya Janata Party and the DMK. As these are only 2 websites out of the 41 websites tested, there is much work to be done to ensure that the 2014 elections in India are truly inclusive for persons with disabilities. We strongly recommend that the government and political parties take rapid action to make their sites compliant with the WCAG guidelines and demonstrate their commitment to development for all.

Appendix A: List of Websites and Accessibility errors

Table 1

D 1'' 1	XX7 1 ', 11	l 11	// T '1 1	11	11	II CCC	// C 1.
Political party	Website address	#	# Likely	#	#	# CSS	# Cumulative
		Known	errors	Potential	HTML	errors	errors
		errors		errors	errors		
Bahujan Samaj Party	http://www.bspindia.org/						
(BSP)		105	1	435	0	34	575
Bharatiya Janata Party	http://www.bjp.org/	0	0	0	0	43	43
Communist Party of	http://www.communistparty.i						
India (CPI)	n/	2	0	58	0	75	135
Communist Party of	http://www.cpim.org/						
India (Marxist)		68	9	411	0	200	688
Indian National	http://www.inc.in/						
Congress		61	0	425	0	103	589
Socialist Unity Centre	http://www.suci-						
of India (Communist)	c.in/intro/about/about.htm	4	0	2	0	0	6
Aam Aadmi Party,	http://www.aamaadmiparty.or						
-	g/	7	0	299	0	12	318
AIADMK	http://aiadmk.com/page-post-						
	elements/	18	6	380	0	51	455
All India Trinamool	https://aitmc.org/index.php						
Congress		2181	5	1434	0	15	3635
Biju Janata Dal	http://www.bjdodisha.org.in/	94	0	366	0	21	481
Nationalist Congress	http://www.ncp.org.in/						
Party		196	14	669	0	148	1027
DMK	http://www.dmk.in/	0	0	0	0	15	15
J&K People's	http://jkpdp.org/						
Democratic Party		42	2	457	0	64	565
Janata dal (United)	http://www.janatadalunited.or						
	g/	62	0	131	0	2	195
Jammu & Kashmir	http://www.jknc.in/						
National Conference		165	0	612	0	35	812

Janata Dal (Secular)	http://jds.ind.in/	61	1	368	0	64	494
Jharkhand Vikas	http://www.jharkhandvikasmo						
morcha	rcha.in/	25	0	98	0	4	127
Lok Janshakti Party	http://www.lokjanshaktiparty.						
	org.in/	9	0	151	0	4	164
Mizoram People's	http://mizorampeoplesconfere						
Conference(MPC)	nce.com/						
Party		5	0	164	0	59	228
Rashtriya Janata Dal	http://rjd.co.in/	18	0	299	0	7	324
Shiromani Akali Dal	http://www.shiromaniakalidal.						
	org.in/	21	2	341	0	9	373
Shiv sena	http://www.shivsena.org/	80	0	344	0	16	440
Telugu Desam	http://www.telugudesam.org/t						
	dpcms/	5	0	88	0	12	105
Asom Gana Parishad	http://www.asomganaparishad						
(AGP)	<u>.org/</u>	51	0	476	0	207	734
Indian National Lok	http://indiannationallokdal.co						
Dal	<u>m/</u>	7	8	0	268	88	371
Indian union Muslim	http://www.indianunionmusli						
League	mleague.in/	62	7	347	0	2	418
Indian Parliament	http://parliamentofindia.nic.in						
	<u>/</u>	21	0	50	0	0	71
Election Commission	http://eci.nic.in/eci/eci.html						
of India		64	41	161	0	18	284

Table 2

Political party	Website address	Alternate text for non- text objects	Color change option	Navigation markups	Form link	Form accessibility
Bahujan Samaj Party (BSP)	http://www.bspindia.org/	Most	NO	Headings, Site Map	http://www.bs pindia.org/co ntact-us.php	Accessible but difficult due to non labeled

						objects
Bharatiya Janata Party	http://www.bjp.org/	Few	NO	Site Map	NA	NA
Communist Party of India (CPI)	http://www.communistparty. in/	None	NO	Headings	http://www.co mmunistparty .in/	Accessible
Communist Party of India (Marxist)	http://www.cpim.org/	All	Yes	Headings, Skip Links	http://www.cp im.org/	Accessible
Indian National Congress	http://www.inc.in/	Few	NO	Headings	http://www.in c.in/	Accessible but difficult due to non labeled objects
Socialist Unity Centre of India (Communist)	http://www.suci- c.in/intro/about/about.htm	None	NO		NA	NA
Aam Aadmi Party,	http://www.aamaadmiparty.o	Few	NO	Headings, Skip Links, Site Map	http://www.aa maadmiparty. org/become- a-member	Accessible but difficult due to non labeled objects
AIADMK	http://aiadmk.com/page-post- elements/	None	NO	Headings	NA	NA
All India Trinamool Congress	https://aitmc.org/index.php	Few	NO	Headings	https://aitmc.o rg/index.php	Accessible but difficult due to non labeled objects
Biju Janata Dal	http://www.bjdodisha.org.in/	Most	NO	Headings	http://www.bj dodisha.org.in /contactus.jsp #inline_conte nt1	Accessible
Nationalist Congress Party	http://www.ncp.org.in/	Most	NO	Headings	http://www.nc p.org.in/	Accessible but difficult

						due to non labeled objects
DMK	http://www.dmk.in/	Most	NO		NA	NA
J&K People's Democratic Party	http://jkpdp.org/	Few	NO	Headings	NA	NA
Janata dal (United)	http://www.janatadalunited.o	None	NO		NA	NA
Jammu & Kashmir National Conference	http://www.jknc.in/	Most	NO	Headings	http://www.co mmunistparty .in/	Accessible
Janata Dal (Secular)	http://jds.ind.in/	Most	NO	Headings	NA	NA
Jharkhand Vikas morcha	http://www.jharkhandvikasm orcha.in/	None	NO	Headings	NA	NA
Lok Janshakti Party	http://www.lokjanshaktiparty .org.in/	Few	NO		NA	NA
Mizoram People's Conference(MPC) Party	http://mizorampeoplesconference.com/	Few	NO		NA	NA
Rashtriya Janata Dal	http://rjd.co.in/	Most	NO	Headings	http://rjd.co.in /join-us.html	Midway Accessible
Shiromani Akali Dal	http://www.shiromaniakalida l.org.in/	Most	NO	Headings	http://www.sh iromaniakalid al.org.in/join- us/	Accessible
Shiv sena	http://www.shivsena.org/	Most	NO	Headings	NA	NA
Telugu Desam	http://www.telugudesam.org/ tdpcms/	Few	NO	Headings	http://telugud esam.org/cont ribute/	Accessible
Asom Gana Parishad (AGP)	http://www.asomganaparisha d.org/	None	NO		NA	NA
Indian National Lok Dal	http://indiannationallokdal.co m/	Few	NO	Headings	NA	NA
Indian union Muslim	http://www.indianunionmusli	Most	NO	Headings	NA	NA

League	mleague.in/					
Indian Parliament	http://parliamentofindia.nic.i n/	All	NO	Headings	NA	NA
Election Commission of India	http://eci.nic.in/eci/eci.html	All	NO	Site Map	NA	NA