

# Web Content Accessibility Guideline

## – A step towards inclusion

Shilpi Kapoor<sup>#</sup>

<sup>#</sup>*BarrierBreak Technologies*

<sup>1</sup>shilpi@barrierbreak.com

**Abstract**— The World Wide Web can assist people who are marginalised such as Persons with disabilities to live an empowered life. The Web Content Accessibility Guideline (WCAG) is such a step towards inclusion of these people. This paper will discuss the need and the impact of WCAG and Accessible Rich Internet Application (ARIA) in the India Scenario.

**Keywords**— Web Content Accessibility Guideline, WCAG, Persons with Disabilities, Accessible Rich Internet Application

### I. INTRODUCTION

The World Wide Web has helped to break many barriers. It has made people from round the world come together.

Persons with disabilities are one such group that have been largely marginalised in India. The web can give them a new lease on life. The Web Content Accessibility Guideline (WCAG) is a step towards inclusion of these people. This paper will discuss the need and the impact of WCAG and Accessible Rich Internet Application (ARIA) in the India Scenario.

### II. WEB CONTENT ACCESSIBILITY GUIDELINE

The Web Content Accessibility Guideline (WCAG) 2.0 has been developed keeping in mind achievability and applicability.

#### A. Impact of Accessibility

WCAG considers the needs of different types of disabilities, for example visual, hearing, physical, speech, cognitive and neurological, multiple disabilities, and age-related conditions.

As per a study conducted on the Wide Range of Abilities and Its Impact on Computer Technology [1], with regards to difficulties and impairments among Working-Age Adults:

- Approximately one in four (27%) have a visual difficulty or impairment.
- One in four (26%) have a dexterity difficulty or impairment.
- One in five (21%) have a hearing difficulty or impairment.
- Somewhat fewer working-age adults have a cognitive difficulty or impairment (20%)
- Very few (4%) have a speech difficulty or impairment.

In addition, the WCAG also consider the need of the aging population.

Another area that also needs a mention is the overlaps between the Mobile Web Practices and WCAG, also make it important for us to consider the WCAG guidelines and its impact.

#### B. WCAG Explained

WCAG 2.0 has a total of 12 guidelines that are organized based on the 4 principles, that are:

- Perceivable
- Operable
- understandable
- robust

WCAG 2.0 works on the concept of testable success criteria. These have been divided into three levels, namely:

- Level A
- Level AA
- Level AAA

#### C. India Scenario

The Guidelines for Indian Government Websites [2] have adopted WCAG 2.0 Level A guidelines. Thereby we are harmonizing our standards with WCAG 2.0.

The National Portal of India (<http://india.gov.in> and <http://bharat.gov.in>) as well as the Ministry of Social Justice and Empowerment website has been made accessible keeping in mind Level AA compliance of the WCAG 2.0.

### III. ARIA

As the lines between the web and applications are reducing, as content is getting more and more dynamic in nature, we have to consider the needs of persons with disabilities.

It has always been assumed that if the website has to be used by a visually impaired it should be a text only website. This myth is soon breaking.

Today we see the use of technologies such as AJAX, Javascript, etc on the rise. For the same W3C has worked on the Accessible Rich Internet Applications (W3C-ARIA).

As per ARIA, we need to add attributes to identify the role, the current state and the how elements relate to each other. We can now facilitate navigation on a web page by marking regions such banners, menus, primary content or secondary content.

In the Indian scenario, live regions in W3C-ARIA have been implemented in RTI Online (<http://rti.india.gov.in>)

#### IV. CONCLUSION

It is upto the developers and the delivery agents to ensure that websites are accessible to persons with disabilities.

Why would we like to increase the digital divide, especially when technology can create an impact in the lives of persons with disabilities and empower them in the day-to-day life.

The future of India needs to be that every citizen of India can access the Indian government as well as private corporation websites. That a citizen can apply for his/her own passport or file his/her income tax return online.

A step towards Inclusion of persons with disabilities in main stream life.

#### REFERENCES

- [1] Forrester Report, *The Market for Accessible Technology—The Wide Range of Abilities and Its Impact on Computer Use*, 2003.
- [2] *Guidelines for Indian Government Website*, <http://web.guidelines.gov.in> .