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A Report On

INCLUSIVE DIGITAL INDIA

[A Comprehensive Review of ICT Accessibility in Government Platforms]

JUNE 2023 | REPORT

CONTENTS

I. ACKNOWLEDGEMENTS

We would like to express our sincere gratitude to all those who have contributed to the successful completion of this report on the assessment of ICT accessibility for government websites and apps. The importance of this project becomes pertinent in today's economy which relies heavily on digital platforms. The failure to access any e-gov website or app means denial of the fundamental right to life.

This idea has led us to pursue this study along with our partners National Association for the Blind, Delhi and Sumatak Technologies, without whom this study would have been incomplete in achieving its objectives.

We would also like to thank Ms. Ira Singhal IAS (AGMUT 2015) for her able guidance. Her invaluable insights, guidance, and support have been instrumental in shaping the direction of this project and ensuring its relevance to the needs of people with disabilities.

We are also grateful to all the stakeholders who participated in our focus group discussions and provided valuable feedback on the report. Their inputs have enriched our understanding of the issues and challenges related to ICT accessibility and informed our recommendations.

Finally, we would like to express our appreciation to our colleagues, team members and Shivangi Pathak, intern at Chase India who helped us with this project and contributed to this report through their hard work, dedication, and commitment to promoting ICT accessibility for all.

Team Chase India

II. FOREWORD

Dear Readers,

I am delighted to provide a foreword for the report titled “INCLUSIVE DIGITAL INDIA: A Comprehensive Review of ICT Accessibility in Government Platforms” It is an honour for me to be writing this foreword, as this report focuses on a topic that is close to my heart.

In India’s stupendous journey towards digitisation, it is important that all websites and applications especially those created by the Government, are accessible to all. For achieving India’s vision for *amritkaal* of inclusive development, it is important that no one is left behind in India’s digital journey. At the same time, I would like to applaud the government’s efforts to promote digital accessibility through its laws, policies and campaigns.

On this backdrop, this report assesses the implementation of web accessibility guidelines adopted by the Government of India and recommends a comprehensive way forward taking into account the technical assessment and responses received from persons with disabilities. The truly remarkable feature of this report is that it has considered the opinions of the actual beneficiaries as well. The endeavour has also been to assess government applications and websites which will have a direct impact on persons with disabilities to ensure that any recommendation results in actual benefit to the end user.

The report provides a comprehensive and nuanced view of the current state of accessibility in India and highlights the need for a more comprehensive and enforceable policy and regulatory framework. I hope that it will serve as a valuable resource for policymakers, advocates, and stakeholders who are working towards creating a more accessible and inclusive society.

I would like to thank the authors and researchers for their hard work and dedication in preparing this report. I would also like to express my gratitude to Chase India, NAB Delhi, Sumatak Technologies and individuals who participated in the study and provided their valuable insights.

I hope that all of us continue to be inspired and motivated to work towards an accessible and inclusive society.

Sincerely,
Ira Singhal IAS
Special Secretary (Education),
Govt of Arunachal Pradesh

III. ABBREVIATIONS

SDG	Sustainable Development Goals
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities.
PWD	Persons with Disabilities
LDCs	Least Developed Countries
SIDS	Small Island Developing States
RPWD	The Rights of Persons with Disabilities
WCAG	Web Content Accessibility Guidelines
HTML	Hypertext Markup Language
CSS	Cascading Style Sheets
BIS	Bureau of Indian Standards
ICT	Information and Communication Technologies
IAAP	International Association of Accessibility Professionals
MeitY	Ministry of Electronics and Information Technology
UDID	Unique Disability Identification
BPL	Below Poverty Line
APL	Above Poverty Line
GIGW	Guidelines of Indian Government Websites
STQC	Standardisation Testing and Quality Certification
CERT	Computer Emergency Response Team
SIPDA	Scheme for Implementation of Persons with Disabilities Act
RTI	Right to Information
NIC	National Informatics Centre
DoPT	Department of Personnel and Training
DEPwD	Department of Empowerment of Persons with Disabilities
MSJE	Ministry of Social Justice and Empowerment
UPCOP	Uttar Pradesh Police
NeGD	National e-Governance Division
UIDAI	Unique Identification Authority of India
CPGRAMS	Centralised Public Grievance Redress and Monitoring System
DARPG	Department of Administrative Reforms and Public Grievances
IRCTC	Indian Railway Catering and Tourism Corporation Ltd, Ministry of Railways
EPFO	Employee Provident Fund Organisation
UPSC	Union Public Service Commission
SSC	Staff Selection Commission
PMKVY	Pradhan Mantri Kaushal Vikas Yojana
NDIS	National Disability Insurance Scheme
PEAT	Partnership on Employment & Accessible Technology

IV. EXECUTIVE SUMMARY

According to the 2011 Census of India, there are over 26 million people with disabilities in the country, which accounts for about 2.21% of the total population. With the rapid evolution of information and communication technologies (ICT), there has been significant transformation in the way we live, work and interact with each other. This has become even more enhanced with the onset of COVID-19 that paralysed many normal day-to-day activities and operations. The pandemic exposed and exacerbated existing social and economic inequalities and forced us to turn to digital solutions to cope with the challenges it brought about. However, for people with disabilities, the digital ecosystem has not been able to close the existing inequality in accessing services. They continue to face barriers to accessing the services offered by private and public agencies that have inaccessible content on their digital platforms.

To address this issue, it is important that all the content available digitally should be accessible to everyone, including people with disabilities and those with limited digital literacy. To support this endeavour, India enacted the Rights of Persons with Disabilities (RPwD) Act, 2016 which mandates that every service provider, whether government or private, must make their services disabled-friendly in accordance with RPwD Rules, 2017. However, the implementation of these rules on digital platforms has been slow and has not kept pace with a rapidly evolving digital landscape.

This report delves deeper into this subject and examines the accessibility of platforms released under the Digital India Initiative. It focuses on the compliance of government websites and apps with accessibility standards and the needs and experiences of people with disabilities in accessing digital services. The report adopts user survey, a technical assessment of government websites and apps and comprehensive review of the legal landscape to analyse the current levels of accessibility awareness in India.

Overall, while the assessment revealed that we are on the right path towards achieving accessibility, we would require some course correction activities with collaborative efforts from central and state departments to make inclusive design a priority for Digital India. The user survey reveals that people with disabilities face a range of barriers in accessing digital services, including incompatibility of some websites with screen readers, lack of alternative text, colour contrast and labeling issues. The technical assessment of government websites and apps revealed moderate levels of issues in most websites and apps that were reviewed, requiring minor improvements with no significant overhaul of websites. The highest volume of issues was found with touch, target size and colour contrast for mobile applications that affected the legibility of content available.

Based on these findings, the report recommends a series of measures to improve the accessibility of ICT in India. These include the regular development and enforcement of accessibility standards and guidelines with a deadline, training for service providers and developers, and inclusion of persons with disabilities in user testing for ensuring accessibility before the final release of the website.

Overall, the report emphasises the importance of ensuring that digital services are accessible to all to promote an inclusive and equitable society. By taking a proactive approach to ICT accessibility, India can improve the lives of millions of people with disabilities and promote ease of living by realising the full potential of digital technologies for holistic social and economic development.

V. INTRODUCTION

The rapid growth of digital technology and the internet has transformed the way governments interact with citizens. In today's digital age, governments are increasingly relying on digital platforms to provide information and services to their citizens. While this has made it easier for citizens to access government information and services, it has also created new challenges for people with disabilities. Therefore, there is a greater need to focus on digital accessibility.

Digital accessibility refers to the practice of designing digital content in a way that can be accessed and used by people with disabilities. The Guidelines for Indian Government websites were formulated by the National Informatics Centre with a view to improving the quality of information and services through electronic media and enhancing government-citizen interaction. However, the key to digital accessibility lies in the actual implementation of the guidelines.

According to the 2011 Census of India, there are over 26 million people with disabilities in the country, which accounts for about 2.21% of the total population. This number is likely to have increased in the last decade, given the overall population growth in the country. The large number of people with disabilities in India requires significant efforts on the part of the government and industry to ensure accessibility of the websites and applications. As per the Annual Report 2021-22 released by the Ministry of Electronics & IT, 95 websites of Ministries/ Departments/Apex were made accessible under the Content Management Framework project for Government Websites[1].

The lack of digital accessibility feature on government websites has significant implications for people with disabilities. It means that they are unable to access important information and services online, which can hinder their ability to participate in society and limit their opportunities for education, employment, and social interaction.

Despite legislative support that requires government websites to be accessible to people with disabilities, the implementation of these laws needs to be reevaluated to ensure that they are effective in meeting the needs of people with disabilities. With the COVID-19 pandemic and India's emphasis on digital transformation, making web accessibility to government services has become even more important. Therefore, with a view to understanding the adoption of web accessibility standards to address the gaps and to strategise the way forward, a collaborative effort between Chase India, National Association for the Blind (NAB) Delhi and Sumatak Technologies LLP was undertaken. The report, based on the joint exercise, focuses on the assessment of the top 25 widely used government websites, user surveys of persons with disabilities, and reviews of government tenders to check for inclusion of universal design and assistive devices. We have also studied various use-cases of assistive and emerging technology to understand how they can be helpful in bridging the gap.

1. Pg 52-53, Ministry of Electronics & Information Technology, Annual Report 2021-22, https://www.meity.gov.in/writereaddata/files/MeitY_AR_English_2021-22.pdf

VI. ICT ACCESSIBILITY LEGAL LANDSCAPE

India has shown its commitment to accessibility through its national laws and policies and by becoming signatories to stringent conventions, declarations etc. This section covers India's commitment, both nationally and internationally.

INDIA'S INTERNATIONAL COMMITMENTS

India's international commitments on accessibility are guided by the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), 2006, Incheon Strategy and the Beijing Declaration, Sendai Framework, SDG Goals etc. These international obligations deal with accessibility as a whole and are not limited to just ICT Accessibility. Some of the key highlights of India's international commitments are as follows:

A. **UNCRPD**[2]: India signed and ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), 2006 on 30 March, 2007 (signed) and 01 October, 2007 (ratified) respectively. It made sure that the accountability of implementation of rights of Persons with Disabilities (PwDs) are given to State, private and civil society agencies for their empowerment. The Convention mandated State parties to –

i. Implement provisions of the Convention
ii. Harmonise country laws with the Convention
iii. Prepare country report to improve accountability by 2010.

B. **Incheon Strategy**[3]: Adopted by India in 2012, the Incheon Strategy offers the first set of regionally-agreed inclusive development goals to "Make the Right Real" for persons with disabilities in Asia and the Pacific. In particular, ICT Accessibility is referenced in goal 3 that states the need to enhance access to the physical environment, public transportation, knowledge, information and communication.

C. **Sendai Framework for Disaster Reduction (2015-2030)**[4]: Adopted at the Third UN World Conference on Disaster Risk Reduction held in March 2015, the Sendai Framework provides an action-oriented framework for disaster risk reduction. It recognises the importance of including persons with disabilities in disaster risk reduction and response activities. Later, India also developed guidelines for disaster risk reduction and management that take into account the needs of persons with disabilities[5].

D. **Sustainable Development Goals (SDGs):** The United Nations identified 17 'Sustainable Development Goals' (SDGs), as a "...blueprint to achieve a better and more sustainable future for all," to be achieved by 2030. Disability is referenced in various parts of SDGs and especially in parts related to education, growth and employment. For instance –

i. **Goal 4** - inclusive and equitable quality education for all focuses on eliminating gender disparities in education and ensuring equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities.

2. https://social.desa.un.org/issues/disability/crpd/convention-on-the-rights-of-persons-with-disabilities-crpd
3. https://www.unescap.org/resources/incheon-strategy-make-right-real-persons-disabilities-asia-and-pacific-and-beijing
4. https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030
5. https://ndma.gov.in/sites/default/files/IEC/Booklets/Disability%20inclusive%20DRR.pdf

ii. Goal 8 - promotes sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. The international community aims to achieve full and productive employment and decent work for all women and men, including for persons with disabilities, and equal pay for work of equal value.

iii. Goal 10 - strives to reduce inequality within and among countries by empowering and promoting the social, economic and political inclusion of all, including persons with disabilities.

iv. Goal 11 - works to make cities and human settlements inclusive, safe and sustainable.

v. Goal 17 - stresses that in order to strengthen the means of implementation and revitalise the global partnership for sustainable development, the collection of data and monitoring and accountability of the SDGs are crucial. Member States are called ·upon to enhance capacity-building support to developing countries, including Least Developed Countries (LDCs) and Small Island Developing States (SIDS), which would significantly increase the availability of high-quality, timely and reliable data that is also disaggregated by disability.[6]

SDGs call for countries to ensure that persons with disabilities are not left behind in development efforts.

INDIA EFFORTS

These international commitments listed above have been implemented through national laws and policies such as the Rights of Persons with Disabilities Act, 2016 (RPwD Act), National Policy for Persons with Disabilities 2006, Accessible India Campaign, etc. The key policies and laws in chronological order are as follows:

1 National Policy for Persons with Disabilities, 2006[7] – It recognises that Persons with Disabilities constitute a valuable human resource for the country and that a majority of such persons can lead a better quality of life if they have equal opportunities to access education, employment, healthcare and rehabilitation services. It emphasises the need for the participation of people with disabilities in policy-making and implementation processes for achieving inclusion in society.

2 Rights of Persons with Disabilities Act, 2016 (RPwD)[8] – A comprehensive legislation enacted in December 2016 represents a significant step towards creating a more inclusive and accessible world for Persons with Disabilities. This Act recognised various disabilities, including physical, sensory, intellectual, and mental disabilities, and provided measures for their empowerment, inclusion, and participation in all aspects of society, akin to UNCRPD definitions. It provided some specific guidelines and standards for web accessibility to ensure that persons with disabilities have equal access to information and communication technology that can promote their participation in the economy and society. Among other things, the Act mandated universal design for all government websites, mobile applications, electronic documents and other digital content as mentioned in Section 43 and 42. This includes providing alternative formats such as Braille, audio, or large print, as well as ensuring that electronic documents are readable by assistive technologies such as screen readers.

Later, the Rights of Persons with Disabilities Rules, 2017 were also framed under the Rights of Persons with Disabilities Act, 2016, with the aim of providing detailed guidelines for the implementation of the Act. The Rules set out specific compliance requirements for digital accessibility and had set a deadline of April 2022 for websites and mobile applications to comply with the Web Content Accessibility

6. https://social.desa.un.org/issues/disability/sustainable-development-goals-sdgs-and-disability
7. https://disabilityaffairs.gov.in/upload/uploadfiles/files/National%20Policy.pdf
8. https://www.tezu.ernet.in/PwD/RPWD-ACT-2016.pdf

Guidelines (WCAG) 2.0 Level AA standards. In addition to this, the Rules require that all electronic documents used for official purposes by the government must be made accessible to persons with disabilities in formats such as Braille, large print, and accessible PDFs. To ensure compliance with these requirements, the Rules provide for the establishment of a Central Coordination-cum-Advisory Committee on Accessible ICT, which is responsible for promoting and monitoring the accessibility of ICT products and services. The Committee is also responsible for developing accessibility standards and guidelines, monitoring compliance, and enforcing penalties for non-compliance.

The Rights of Persons with Disabilities (Amendment) Rules, 2023[9] were recently notified, amending Rule 15 of the RPwD Rules, 2017 mandating websites, apps, ICT based public facilities and services, electronic goods and equipment which are meant for everyday use and ICT based consumer products and accessories to comply with the Indian Standards IS 17802 (Part 1), 2021 and IS 17802 (Part 2), 2022, published by the Bureau of Indian Standards.

3 **Draft National Policy for Persons with Disabilities, 2022** – The draft policy released by the Department of Empowerment of Persons with Disabilities (DEPwD) is a review of the existing 2006 policy to bring India's policy in consonance with the developments that have taken place since then. The policy covers multiple causes of disabilities, apart from traditional causes i.e., medical negligence, malnutrition, impairments caused by disasters, etc. The purpose of the policy is to state the clear commitment of the government to the empowerment and inclusion of persons with disabilities and to provide a detailed mechanism for intervention in disability prevention, education, healthcare, social security, sports and culture.

4 **National Policy on Universal Electronic Accessibility, 2013** - Recognising that access to technologies and the Internet is fundamental for ensuring democratic, effective, efficient and equitable participation in an information society, the Government of India released the National Policy on Universal Electronic Accessibility in 2013 to eliminate discrimination on the basis of disabilities as well as to facilitate equal access to electronics and Information and Communication Technologies (ICTs). It proposed universal access to electronics and ICT products and services and set implementation guidelines for the policy. It also called for creating awareness of universal design and electronics accessibility, capacity building, research and development, and developing procurement guidelines for electronics and ICTs for accessibility and assistive needs.

Apart from the above-mentioned policy measures to promote inclusion of Persons with Disabilities, India has introduced various schemes, initiatives and guidelines that ensure no individual is left behind and that developments in these initiatives are in sync with the present strides in digitalisation.



9. https://www.disabilityrightsindia.com/p/the-rights-of-persons-with-disabilities_27.html

VII. ACCESSIBILITY INITIATIVES AND GUIDELINES

The Digital India Campaign kickstarted the goal of enabling a better ecosystem of digital governance through India Enterprise Architecture (IndEA) 1.0 and the Draft InDEA 2.0,[10] which was released by the Ministry of Electronics and Information Technology (MeitY) in 2022 to enable the government and private sector enterprises to design IT architecture that allows universal access to all target groups, including those residing in remote areas and to disadvantaged groups. Its focus was to develop technology that provides citizen-centric public services. It included an inclusive and universal design as one of the key components of the framework.

The table below showcases the range of initiatives undertaken by the government in various sectors.

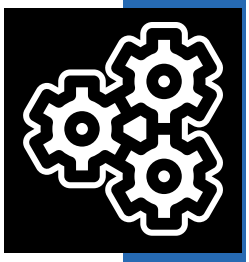
ACCESSIBILITY PROJECTS

Accessible India Campaign (Sugamya Bharat Abhiyan)[11]- Launched by the Department of Empowerment of Persons with Disabilities (DEPwD) in December 2015 as a nationwide campaign to create accessible and inclusive India for PwDs. It also aimed to achieve this objective by improving physical infrastructure, transportation and ICT accessibility in the country. It clearly explains the importance of ICT in making decisions in daily life with access to information. It sets the objective of enhancing the proportion of accessible documents and websites, sign language interpreters and access to audio-visual media. It does so by setting the target of -

a. Target 5.1: Conducting accessibility audit of 50% of all government (both Central and State Governments) websites and converting them into fully accessible websites by June 2022.

b. Target 5.2 : Ensuring that at least 50% of all public documents issued by the Central Government and the State Governments meet accessibility standards by June 2022.

NITI Aayog on Assistive Devices Industry[12] - NITI Aayog deliberated upon the use of emerging technologies in assistive devices. The multi-stakeholder discussion pondered on challenges and opportunities for the assistive devices industry and the need for policy intervention required, such as capacity building and incentivisation for private players to invest in the industry. This meeting was extremely relevant to bring different stakeholders together and create a launchpad for future collaboration in assistive technology.



GOVERNANCE

Unique Disability Identification (UDID) Project[13]- The Department of Empowerment of Persons with Disabilities has launched this project with a view to create a national database of Persons with Disabilities (PwDs) and to issue unique identity cards to them. Application Software for this project has been developed and hosted on the NIC cloud since May 2016. It provides an online platform for the issuance of disability certificates. The database will subsequently help in tracking the physical and financial progress of benefit delivery at all levels of hierarchy of implementation – from Village, Block, District, State and National level.

10. https://www.meity.gov.in/writereaddata/files/InDEA%202_0%20Report%20Draft%20V6%2024%20Jan%2022_Rev.pdf
11. https://disabilityaffairs.gov.in/content/page/accessible-india-campaign.php
12. https://pib.gov.in/newsite/PrintRelease.aspx?relid=194866
13. https://www.swavlambancard.gov.in/

It will also encourage transparency, efficiency, and ease of delivering government benefits to persons with disabilities. The database captures personal details, identity details, disability details (type of disability, percentage of disability etc.), education status, employment details, income level (BPL/APL, etc.), scheme related details etc. This project is a pathbreaking initiative to link all service delivery schemes and programmes.

Research on disability related technology, products and issues[14] - The scheme was launched in January 2015 by the DEPwD. While considering a continuation of the scheme for a further period of five years beginning 2021-22, the objectives of the Schemes have also been realigned with the provisions of the Rights of Persons with Disabilities (RPwD) Act, 2016. From 2019-20, it has become a part of the SIPDA. The scheme focuses on research and development on disability issues for evidence-based policy decisions, rehabilitation, intervention etc.

ICT ACCESSIBILITY GUIDELINES

1. **Guidelines of Indian Government Websites (GIGW)**[15] - National Informatics Centre (NIC) has released three versions of Guidelines of Indian Websites – the first version was released in 2009, the second version in 2019, and the latest third version was released in March 2023.

- GIGW 1.0 – The 2009 version, based on the Web Content Accessibility Guidelines (WCAG) 1.0, provided detailed information on various accessibility features such as text alternatives for images, resizable text, and colour contrast. The guidelines also mandated that all government websites should be compatible with assistive technologies such as screen readers and provided guidelines for testing the accessibility of government websites.

- GIGW 2.0 – A significant improvement over the previous version, the 2019 version was based on WCAG 2.0 and covered a wider range of disabilities including visual, auditory, physical, and cognitive impairments. The guidelines included detailed information on various accessibility features such as keyboard accessibility, colour contrast, and text resizing. It mandated that all new government websites should comply with the WCAG 2.0 Level AA accessibility standards.

- GIGW 3.0 – Released in March 2023, this is the most advanced version of GIGW formulated jointly with Standardisation Testing and Quality Certification (STQC), Directorate of the Ministry of Electronics and Information Technology and Indian Computer Emergency Response Team (CERT-In). It is aimed at improving the user interface and user experience of government websites. These guidelines are especially designed to incorporate features like intuitive page loading (using AI and analytics) based on user profile. It takes special cognisance of mobile revolution and seeks to enhance accessibility and usability of mobile apps developed by government agencies. The guidelines have been designed keeping in mind the public digital infrastructure initiatives that will enhance government's delivery of services, benefits and information. It also includes critical aspects such as API level integration for integration with social media, India Portal, DigiLocker, Aadhaar-based identity, single sign-on and data sharing on open formats.

Overall, these guidelines serve as a single point of reference for all three aspects of digital systems of the internet i.e., quality, accessibility and security.

14. https://disabilityaffairs.gov.in/upload/uploadfiles/files/Approved%20revised%20guidelines%20of%20R%26D%20sub%20scheme.pdf
15. https://darpg.gov.in/sites/default/files/Guidelines%20for%20Indian%20Govt%20Websites%20-%20GIGW2018_Released%20version%20%281%29.pdf

2. Bureau of Indian Standards 17802 – Accessibility of ICT Products and Services Standards released by the Bureau of Indian Standards have been released two parts - Part 1 and Part 2. Part 1 released in December 2021, covers a wide range of products and services including mobile phones, laptops, software applications, websites and electronic documents. The standards specify that products and services must include certain accessibility features. For instance, mobile phones must have features such as text-to-speech and screen magnification, which enable persons with visual impairments to use the devices. In addition to specifying the accessibility features that should be included in products and services, the standards also provide guidelines for testing and evaluating their accessibility. Part 2, released in April 2022, specifies the test procedures and evaluation methodology for the accessibility requirements of ICT products and services mentioned in Part 1 of the Standards. These guidelines include criteria for testing accessibility, methods for conducting tests, and tools for evaluating accessibility. The Standards also specify the testing and evaluation process that should be followed for each product or service, and mandate that the testing and evaluation should be conducted by qualified professionals. These Standards also got featured in MeitY's response in the Lower House of Parliament, regarding accessibility of websites and applications to differently abled people.[16] The Rights of Persons with Disabilities (Amendment) Rules, 2023[17] now mandate that websites and apps should adopt these standards. A time period of two years has been given for service providers to adopt these standards.[18]

3. Knowledge & Resource Centre for Accessibility in ICT (KAI)[19] - A Project funded by Meity to develop procurement guidelines for accessible hardware & software, it has identified 5 products from different domains for testing accessibility, including IRCTC, BHIM app, and Talkative ATM.

EDUCATION

The National Education Policy, 2020 - It provides "a barrier-free access to education for all children with disabilities". It gives details on providing knowledge and know-how to faculties to teach children with special disabilities, facilitation of assistive devices, appropriate technology-based tools, language appropriate teaching-learning materials and high-quality modules to teach Indian Sign Language. It also calls for universal inclusive education in classrooms and Indian Sign Language and closed captioning in their educational videos.

HEALTH

Accessibility Standards for Healthcare[20] - Released in 2022, it covers the provision of accessible healthcare services to PwDs to preventive, curative and rehabilitative medical services and serves as a manual for training of staff in accessibility, communication with people with disabilities and taking care of special needs of PwDs. It has a special mention of website accessibility and compliance with GIGW 2.0 and BIS standards for Accessibility for ICT Products and services. Under BIS, it specifies adoption of accessibility Standards in Co-Win, Aarogya Setu etc., without any delay.

16. https://pqals.nic.in/annex/1711/AU3559.pdf
17. https://www.disabilityrightsindia.com/p/the-rights-of-persons-with-disabilities_27.html
18. Section 46 of the Rights of Persons with Disabilities Act, 2016
19. https://www.meity.gov.in/accessibility
20. https://main.mohfw.gov.in/sites/default/files/Accessibility%20Standard%20for%20Healthcare%20%281%29_0.pdf

SKILLING AND EMPLOYMENT

National Action Plan for Skill Development of Persons with Disabilities [Under Scheme for Implementation of Persons with Disabilities Act (SIPDA)][21] – It seeks to provide a synergistic framework for people with disability, for improving vocational training and employment opportunities for them with the eventual goal of providing them with livelihoods and independence. The plan envisages use of Information Technology for content, training delivery and employer connect. The goals of empowering and capacitating PwDs will have substantial gains for the economy at large.

Another scheme that focuses on employment by the private sector is the **Incentive Scheme for Providing Employment to Persons with Disabilities in the Private Sector (Incentive Scheme),**[22] which encourages the private sector to employ Persons with Disabilities. It is a scheme of incentives to employers in private sector for providing employment to PwDs. launched in the year 2008-09 and revised w.e.f. April 1, 2016. The scheme is also expected to be revamped for ensuring greater participation of the private sector.

TOURISM & TRANSPORTATION

Draft Accessible Tourism Guidelines[23] - Released by the Ministry of Tourism, these guidelines focus on building inclusive destination management services and on the requirement of providing seamless experience for all guests in hotels or hospitality establishments.

Draft Guidelines on Accessibility of Indian Railway Stations and facilities for PwDs[24] – In its commitment to make Indian Railways accessible for Persons with Disabilities, the Ministry of Railways has provided detailed guidelines and implementation strategy which covers information systems, station, platform, and train coach accessibility. It has one chapter on Information System accessibility that includes IRCTC website, mobile app, public announcement system and signages to facilitate easy flow of information to PwDs.

Accessibility Standards and Guidelines for Civil Aviation, 2022[25] – These guidelines by the Ministry of Civil Aviation, Government of India, intend to address the accessibility needs of persons with disabilities, elderly, women, children and other user groups with special needs, in context of built environments and services associated with air travel.

In the above list, we have restricted ourselves to ICT and electronics initiatives across sectors. There are several other schemes aimed at rehabilitation of PwDs, targeted at awareness generation such as the Deendayal Disabled Rehabilitation Scheme, National Awards for Empowerment of Persons with Disabilities, Scholarships for Persons with Disabilities, Accessible elections, etc.

21. https://disabilityaffairs.gov.in/upload/uploadfiles/files/NAP(2).pdf
22. https://disabilityaffairs.gov.in/upload/uploadfiles/files/Incentive%20Scheme%20under%20SIPDA.pdf
23. https://tourism.gov.in/sites/default/files/2022-07/Notice%20%26%20Draft%20version%20of%20Accessible%20Tourism%20Guidelines%20%281%29%20%281%29.pdf
24. https://indianrailways.gov.in/railwayboard/uploads/directorate/Station_Development/2021/Draft%20Document%20on%20Guidelines%20on%20accessibility%20of%20Indian%20Railway%20Stations%20%20for%20public%20consultation.pdf
25. https://www.civilaviation.gov.in/sites/default/files/Accessibility%20Standards%20and%20Guidelines%20for%20Civil%20Aviation_English%20%282%29%20%281%29_compressed_0.pdf

VIII. METHODOLOGY FOR MEASURING ICT ACCESSIBILITY FOR DIGITAL PLATFORMS

While initiating this project, we realised that the need for access to digital platforms is influenced by many factors, including a person's functional ability, level of awareness, socioeconomic status, living context, and interaction with the environment. Thus, to fully understand ICT accessibility and to identify the key barriers to accessing websites and apps, we have adopted the following methodology to achieve the objective of this study -

1. USER SURVEY

A user survey was conducted to gather feedback and opinions from end-users about the accessibility of government websites and apps. The survey was conducted through an online questionnaire, which was shared in our network and relevant forums, The survey included questions related to awareness, ease of use and experience on using a few popular e-governance websites and apps. A copy of the questionnaire is added in Annexure II of this report.

Limitations of the Survey - The survey was conducted using online Google forms in the hope of covering different types of disability. Though the number of users who responded to the survey went beyond the expected 30 to 40 users, there were not many users with disabilities other than visual impairment. Hence, this is not a representative survey that covers all kinds of disabilities and does not serve as a representation of actual accessibility standards compliance as many users are not regular users of websites/apps.

However, with the responses received, we can confidently say that this represents a good statistic of usual internet users who are already familiar with digital platforms and use them frequently. So, this is a good measure of comparison between websites that follow general acceptable standards of accessibility with government websites. It mostly captures urban users who are familiar with internet and its usage and in that comparison, how they rate the experience of using government websites/apps.

2. ACCESSIBILITY ASSESSMENT OF WEBSITES AND APPS

A technical assessment of government websites and apps was conducted to evaluate their compliance with accessibility guidelines and standards. The assessment involved a thorough review of the technical aspects of the websites and apps, such as their colour contrast, text alternatives to images or sensory compatibility with different devices and platforms. The evaluation has been performed based on the Web Content Accessibility Guidelines (WCAG) version 2.1 Level A, AA & AAA on which Guidelines of Indian websites 3.0 are based on.

For the purpose of this evaluation, we have selected 25 popular websites and apps that represent the digital initiatives promoted by Government of India to provide more transparency, accountability and enhance citizen engagement. We have tried to capture assessment of those websites and apps that attract maximum traffic, criticality of services offered and relevance for PwDs. In addition to the central web portals, we have also included a few state specific portals that act as primary instruments to receive information on administrative, public services and safety information.

DIGITAL INDIA INITIATIVES			
NAME OF WEBSITE/APP	**DEFINITION**	**YEAR OF LAUNCH**	**NODAL MINISTRY**
Governance			
MyGov	A citizen engagement platform that enables citizens to participate in governance by providing feedback, ideas, and suggestions to the government.	2014	National Informatics Centre (NIC), Ministry of Electronics and Information Technology (MeitY)
RTI	RTI enables citizens to obtain information from public authorities by filing an application under the Right to Information 2005.	2005	Department of Personnel and Training, Ministry of Personnel, Public Grievances and Pensions (DoPT)
Unique Disability ID	An integrated system for Issuance of Universal ID & Disability Certificates for Person with Disabilities with their identification and disability details.	2016	Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment (MSJE)
Office of Chief Commissioner for Persons with Disabilities	It provides information on various disability related laws, policies, and guidelines, and also provides a quasi judicial platform for PwDs to file complaints and raise grievances related to the violation of their rights.	2007	Ministry of Social Justice and Empowerment (MSJE)

NAME OF WEBSITE/APP	DEFINITION	YEAR OF LAUNCH	NODAL MINISTRY
DEPwD	It provides information on various schemes, policies, and initiatives taken by the government for the welfare of PwDs.	2012	Department of Empowerment of Persons with Disabilities, Ministry of Social Justice & Empowerment (MSJE)
UP COP	Uttar Pradesh Citizen Service Portal enables citizens to report complaints, grievances and request for services online.	2016	Uttar Pradesh Police
Delhi Police	Online portal to access information on crime prevention, safety tips, process to report crime.	2003	Delhi Police
Aaple Sarkar of Maharashtra	A single window access to Maharashtra government services and information.	2015	Maharashtra Government
UMANG (App)	Unified Mobile Application for New Age Governance (UMANG) provides a common unified platform to facilitate a single point of access to all government services. It integrates major government services from various sectors such Agriculture, Education, Health, Housing, etc.	2017	National e Governance Division (NeGD), Ministry of Electronics and Information Technology (MeitY)
DigiLocker (App)	It is a digitalization service that provides an account in cloud to every Aadhaar holder to access authentic documents.	2015	Ministry of Electronics and Information Technology (MeitY)
MAadhaar (App)	Mobile application to provide an interface to Aadhaar Number Holders to carry their demographic information viz. Name, Date of Birth, Gender and Address along with photograph as linked with their Aadhaar Number in smart phones.	2017	Unique Identification Authority of India (UIDAI)
Social Welfare			
CPGRAMS	Centralized Public Grievance Redress and Monitoring System) is an online platform for providing a single window system for registering public grievances.	2007	Department of Administrative Reforms and Public Grievances (DARPG)

Rajasthan Sampark	Enables citizens to register complaints and grievances related to government services in the state of Rajasthan.	2016	Dept. of Administrative reforms, Rajasthan Govt
Mera Ration (App)	Facilitates information related to Public Distribution system (PDS), eligibility for ration cards and identify nearest fair price shop.	2020	Ministry of Consumer Affairs, Food and Public Distribution
Citizen Services			
IRCTC	Facilitates online ticketing, catering and tourism services to Indian railways passengers.	2002	Indian Railway Catering and Tourism Corporation Ltd, Ministry of Railways
e Pathshala	Facilitates digital learning and provides access to a range of educational resources, including textbooks, audio and video content, and other supplements for students from class 1 to 12.	2015	National Council of Educational Research and Training (NCERT(
Employee Provident Fund Organisation (EPFO)	Facilitates registration for EPFO scheme, check Provident Fund (PF) balance, make online claims for PF withdrawals, etc.	2015	Employees' Provident Fund Organisation, Ministry of Labour and employment
National Handicapped Finance & Development Corporation	Facilitates application for loans to enable persons with disabilities to lead a self sufficient life.	2008	Ministry of Social Justice and Empowerment
Aarogya Setu (App)	Open Source app to provide users with information about virus, track health status and provide guidelines for self quarantine and testing for COVID 19.	2020	Ministry of Electronics and Information Technology
DIKSHA (App)	e learning platform that includes interactive and multimedia content for teachers and students in 12 multiple languages.	2017	Ministry of Education
e SHRAM (App)	Creates database of unorganised workers and provides them with social security benefits.	2021	Ministry of Labour and Employment

NAME OF WEBSITE/APP	DEFINITION	YEAR OF LAUNCH	NODAL MINISTRY
Skilling & Employment			
UPSC	Allows registration for exam, fill application forms, download admit card to applicants.	2016	Union Public Service Commission
SSC	Online platform for candidates to apply for various Group B and Group C exams, and access other exam related information.	2018	Staff Selection Commission
National Career Service	IT enabled career centers providing a digital platform for stakeholders in the employment market.	2015	Directorate General of Employment, Ministry of Labour and Employment
Pradhan Mantri Kaushal Vikas Yojana (PMKVY)	Provides information of various training programs and courses and allows candidates to apply for training programs online.	2015	National Skill Development Corporation, Ministry of Skill Development and Entrepreneurship

Table 1: Description of selected websites/apps in the study, year of launch and Operating body

3. REVIEW OF TENDER DOCUMENTS

Lastly, a review of tender documents was conducted to analyse the criteria and specifications used by government agencies for the selection of vendors and service providers for website and app development. The review of the tender documents also provided insights on inclusion of universal design specifications from the initial stage of website/app development. Any mention of accessibility requirement or specific compliance of standards implies a department's priority to enable inclusion for all, and their proactive effort in improving user participation.

Overall, by adopting multiple methods for assessment of websites, we have tried to reduce bias and provide a more accurate and comprehensive analysis. Overall, we have ensured to combine both qualitative and quantitative methods and provide a more nuanced understanding of the accessibility needs of end-users and the government's approach to website and app development.

IX. FINDINGS AND ANALYSIS

This section contains findings and analysis of the report which is the culmination of comprehensive technical assessment, survey results and review of tender documents conducted parallelly to gain a holistic understanding of the current state of digital accessibility. The objective is to identify key issues and challenges that are hindering the realisation of an accessible digital ecosystem and to provide actionable insights to bridge the gap.

To arrive at these insights, we have analysed the data collected from various sources, including user surveys, expert reviews, and technical evaluations of the government websites and applications. We have also conducted an extensive review of relevant policies, regulations, and standards to provide a comprehensive understanding of the legal framework around digital accessibility. By triangulating and correlating the findings from these diverse sources, we have gained a holistic view of the digital accessibility landscape in India.

USER SURVEY FINDINGS

The survey was conducted through an online questionnaire which was responded to by a total of 56 participants. The users' ages ranged from 14 years to 62 years, with most of the survey participants falling under the young category. All the users participating in this survey revealed their disability type with the majority of users reporting to be visually impaired followed by users with locomotor disability.

PARTICIPANT/USER'S DISABILITY	PERCENTAGE
Blindness	66.7
Low Vision	16.7
Locomotor disability	14.8
Disability caused due to blood disorders	1.8
Multiple disability	1.8

Table 2: Disability profile for survey users

Based on the user responses, following are the key findings from the survey –

- 89 per cent of users indicated that they have used the government websites or apps for accessing services while 11 per cent users reported never having used them.

- **Out of the 89 per cent that reported using government portals, the most frequently visited websites on a monthly basis are IRCTC, Income Tax, MyGov, Aarogya Setu, DigiLocker and Co-Win.** Although the state is the primary agency to provide critical services, a smaller number of users was seen visiting the state portals/apps. This may have been partly due to lack of accessibility and partly due to lack of awareness among users about these apps and websites.

- Out of the users surveyed, 23 revealed that they were aware of the accessibility standards/ guidelines put in place by the government for the websites and apps while 20 said they were not specifically aware and rest 13 have not provided any response to this question.

- For the rating of the websites and apps on a scale of 1 to 5, where 1 means 'no accessibility' and 5 is 'good accessibility', 26 users rated the Umang App/Website as 'not accessible'. **The most accessible rated websites indicated through the survey are MyGov, IRCTC, Income Tax and Co-Win.** Most other applications /websites received a very poor rating in meeting the users' accessibility needs which indicates the low level of involvement in user testing of the apps and websites. From this, we may also infer that in comparison to other websites that offer ease of use to PwDs, these websites with low ratings have not met the same benchmark.

- For the open-ended question on their suggestions to enhance the accessibility of websites/apps, some key suggestions that came forward were – mandatory compliance of accessibility guidelines with deadline, replacement of the captcha code with One Time Password (OTP), designated email-ID to report inaccessible content, continuous engagement of users with disabilities in the development process of websites, compatibility with screen reader software, training to programmers and basic accessibility features like - word description of images, proper easy-to-understand links, avoidance of mouse over links, logical heading navigation, as well as less graphical and more clear instructions to facilitate easy navigation.

- Additional suggestions included – compulsory compliance by the private sector as well, more accountability of website managers and annual audit of websites.

ACCESSIBILITY ASSESSMENT OF WEBSITES AND APPS

TEST FAILURE CRITERIA	DESCRIPTION
Minor Impact	Causes nuisance and annoyance to users
Moderate Impact	Causes hindrance to access content, still available
Serious Impact	Causes Barrier, communication inconsistencies with screen readers etc.
Critical Impact	Accessibility defect, core content and features are not available

Table 3: Website assessment impact categorisation

The accessibility evaluation for this study is based on Web Content Accessibility Guidelines (WCAG) version 2.1 developed by World Wide Web Consortium (W3C) to ensure that digital content is accessible to a wide range of disabilities including visual, auditory, physical, neurological, etc. The top popular 25 selections of websites and apps were evaluated with a collection of 170 tests across the WCAG criteria that measure key principles of accessibility – Perception, Operability, Understandability, and Robustness with other assistive technologies.

These test results are then categorised as minor, moderate, serious and critical, based on how a test criteria failure would impact a user with disability. After completion of the test, a score is proposed for ease of accessibility.

A total score of 0 to 39 is bad, 40 to 89 needs improvement, 90 to 100 is good.

WEBSITE ASSESSMENT FINDINGS

- A total of 18 websites were analysed. Some of the key findings are - DEPwD website (90) scored the highest in test evaluation while National Handicapped Finance & Development Corporation (63) scored the lowest in access to digital content.

- The percentage of failure test criteria ranges between 11% to 20% across all the websites. Out of the 18 websites, there are no websites which are in the lowest score level (score below 40), one website i.e. DEPwD is in the highest score level (equal to or above 90), while the rest of the websites are in the mid-range score level (between 63 to 83).

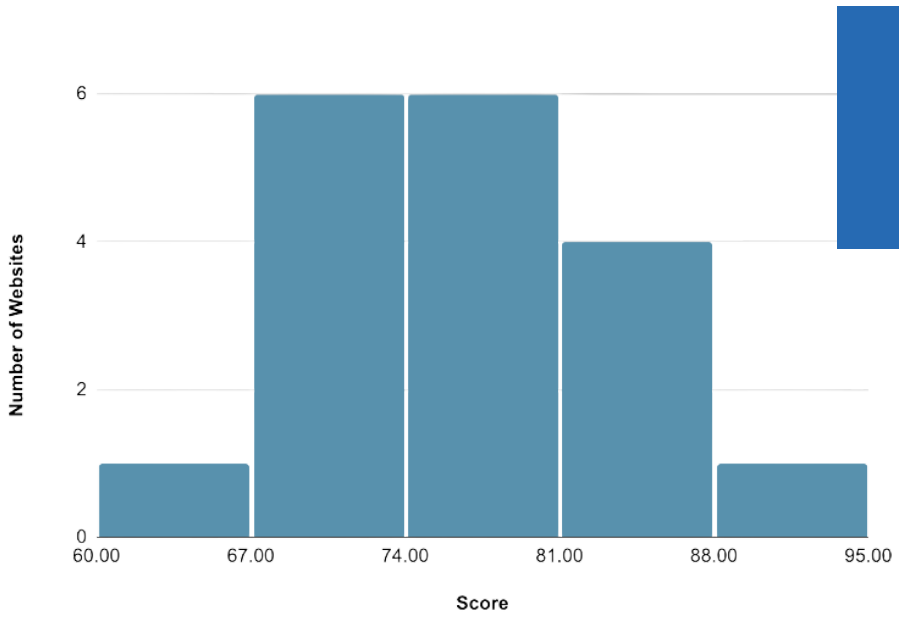


Figure 1: Max number of websites with mid-range of scores

Analysis – The moderate level of scores signifies that most of the websites were found to be on the right path towards accessibility and no significant overhaul of the website is needed to achieve accessibility readiness. Only some minor improvements are required, as specified in Annexure I.

- Average critical test failure is 31% of the total failed test criteria. On an average, only 21% issues were found to be critical.

  Analysis - This means that the critical issues resulting in accessibility barriers are limited and can be fixed.

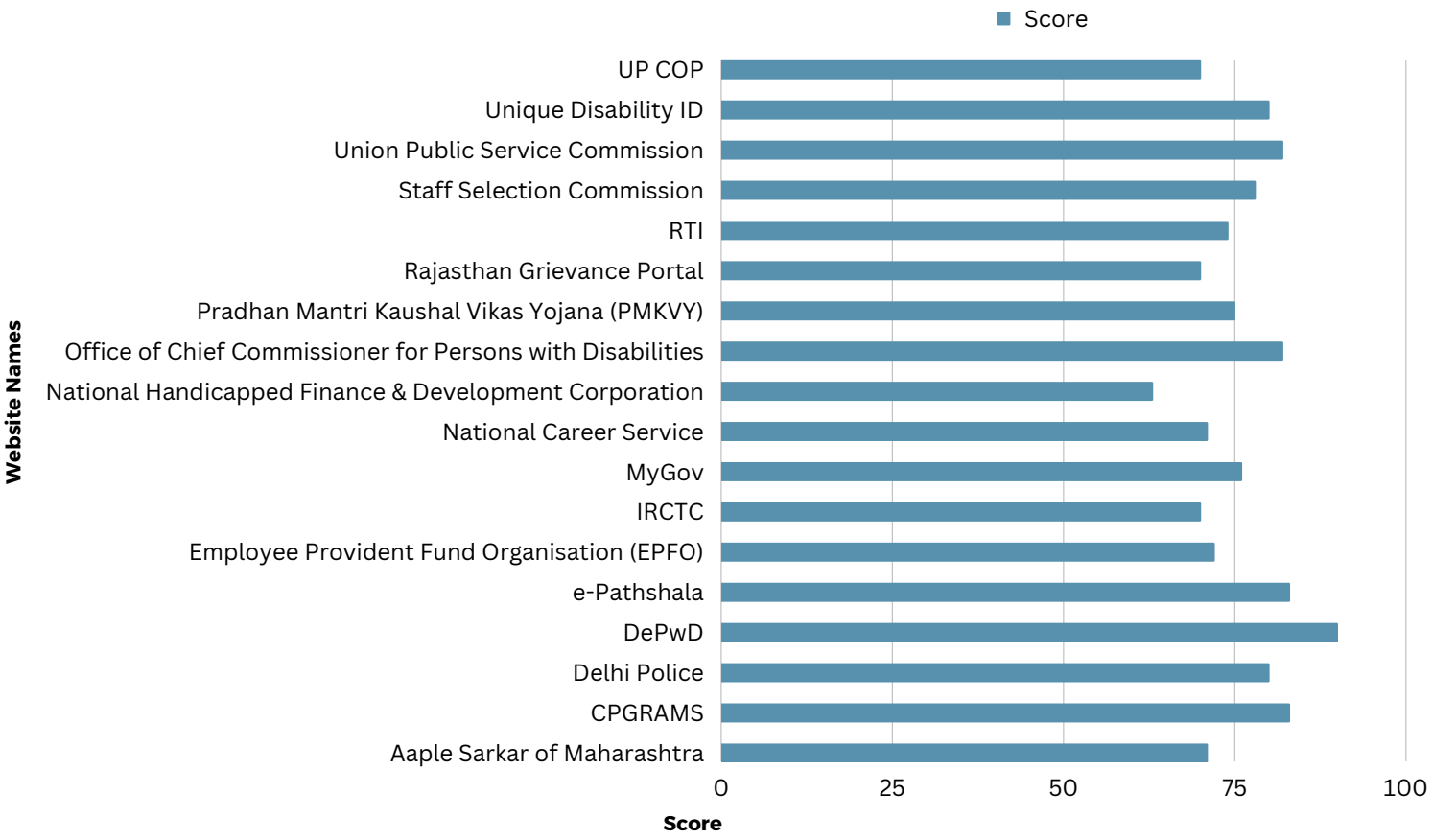


Figure 2: Website Assessment Scores

- The most common accessibility issue category across all websites is keyboard compatibility with 37% failures, followed by with the text alternatives issue (17%) and name role value issue (12.9%). These three categories account for the majority of accessibility issues across all categories.

  Analysis - Keyboard category ensures that users can interact with all interactive elements using only a keyboard, without requiring the use of a mouse or other pointing device. This is important for users who rely on keyboards or other assistive technologies to navigate the website. Websites should ensure that all interactive elements such as buttons, links, and form fields are accessible through the keyboard alone.

MOBILE ASSESSMENT FINDINGS

The mobile applications evaluation was done for 7 apps using the accessibility scanner which identifies accessibility issues in these areas: Content labels, Layout implementation, Touch target size, and Colour Contrast which ensure the following-

MOBILE EVALUATION CRITERIA	DESCRIPTION
Content Labels	User interface controls that are indicated using visual cues can be made accessible by content labels. Visually impaired users access this using screen readers.

Layout Implementation	Links that don't work, buttons that are too close together, or text that is hard to read are some of the implementation issues. Text boxes or buttons are layout items that help people understand the screen page.
Touch Target Size	Defines size of clickable and long-clickable elements that are necessary for people with motor impairments to interac
colour Contrast	Difference in colour between the foreground and background of text or images. Making improvements to the colour contrast ratio of your app can make it more accessible to users with visual impairments. This test identifies contrast ratio lower than 3.0, which makes users difficult to read or view.

Table 5: Mobile evaluation criteria

Based on the test, we identified following key points –

- DIKSHA (80) app has the highest score while the app with the lowest score is mAadhaar(55). The mAadhaar app has the least number of screens among the mobile apps tested and there were no contrast issues with the application.

- The most frequently seen high volume issue is the touch target size. The percentage of touch target size issues ranges from 41 to 75%.

  Analysis - Small touch targets can cause difficulty for these users and may result in frustration or errors. By having large touch targets, the accuracy and ease of use for all users increases, including for those with disabilities. Additionally, having larger touch targets can also benefit users without disabilities who may be using the interface with one hand or in a moving vehicle where precision may be difficult.

- The second most frequently seen high volume issue is colour contrast. The percentage of colour contrast issues ranges from 4% to 51%. Colour contrast ratio is important in mobile apps because it affects the legibility and readability of text and images, especially for users with visual impairments.

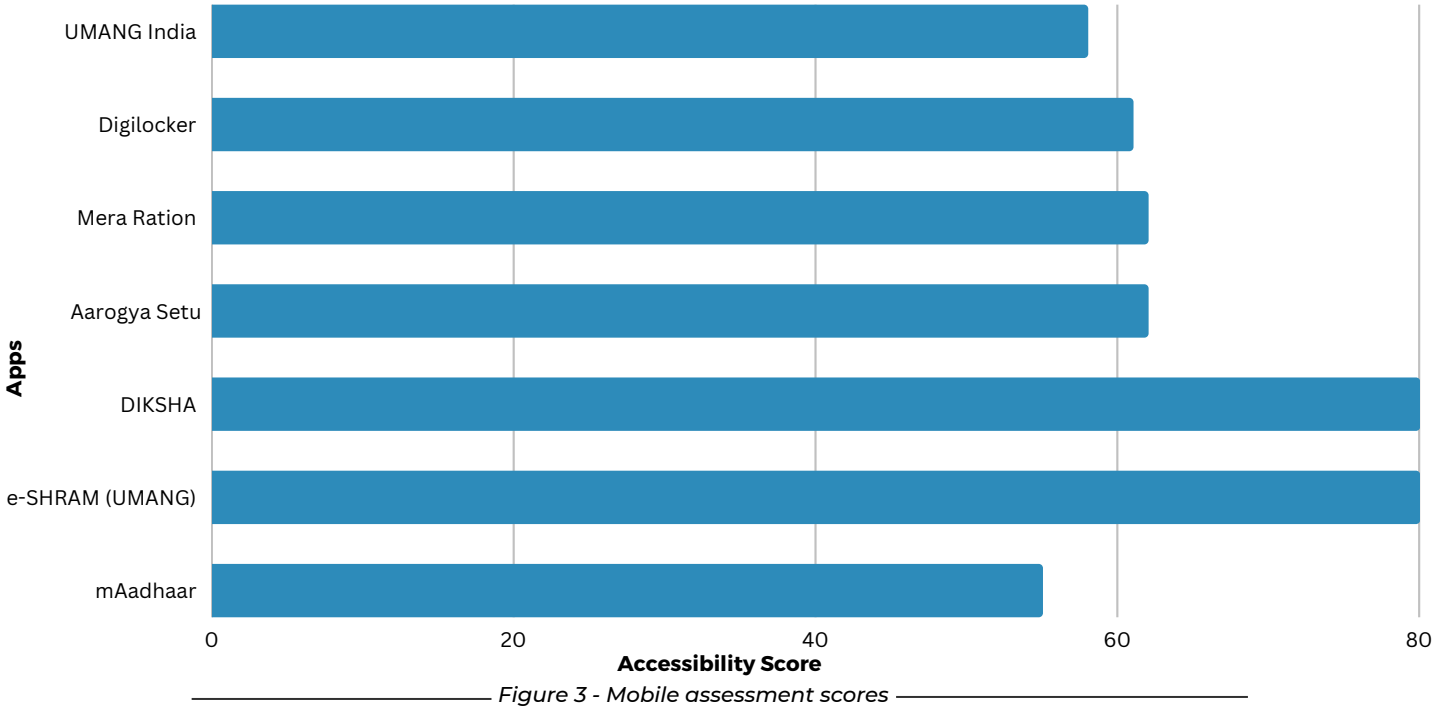


Figure 3 - Mobile assessment scores

REVIEW OF TENDERS

The Department of Expenditure notified the Manual for Procurement of Goods, 2022 and Manual for Procurement of Services 2022 that facilitates administrative goals of other Departments of Government (for example, ensuring tax or environmental compliance by participants, Energy Conservation, accessibility for People with Disabilities etc. to the extent specifically included in the 'Procurement Guidelines') as one of the broader objectives of the guidelines. With this view, we have analysed tender documents of the e-governance initiatives to assess whether accessibility for persons with disabilities has been kept in mind while designing the RFPs. Our assessment found that out of 25 websites/apps analysed, 8 websites/apps have kept accessibility for persons with disabilities in mind since inception while designing the RFPs. 13 websites and apps such as mAadhaar, CPGRAMS, IRCTC, EPFO were developed in-house by NIC (National Informatics Centre) or by their own department and had not rolled out tenders for designing websites. The remaining 4 websites/apps for which we were able to find tenders did not include mention of inclusive design or compliance with ICT Accessibility standards. Additionally, some websites/apps that mention compliance for accessibility, fail to mention the accessibility criteria that developers are required to follow. It is therefore important that tenders must include accessibility related guidelines rights at inception to ensure that the accessibility is built into the system.

X. BEST PRACTICES OF ICT ACCESSIBILITY

India has made remarkable progress in digitalisation of its services, and it is working towards bringing more departments and state players to take part in digital transformation through various initiatives. It is important that citizens' or customer needs are kept in mind to improve adoption, so that the level of service is improved and customers receive exceptional accessible and inclusive service. Accessibility and inclusiveness should be a baseline consideration for digital transformation so that we are able to –

- Bridge the digital divide.
- Democratise development by ensuring everyone has the same opportunities to access and offer products, services, information, lifelong learning, skills development, and employment.
- Provide a level playing field by helping close knowledge gap among people.
- Find new sources of talent as technology helps people with disabilities to become a more active part of society.
- Change how we communicate and collaborate.
- Provide new and distinct channels for income generation that will help reduce poverty.
- Facilitate access to education and literacy, as well as employment opportunities and financial inclusion.
- Allow e-governance and increased civic participation.
- Improve disaster management by guaranteeing access to instant and reliable information and communications before, during, and after emergencies.
- Apart from the benefits and opportunities mentioned above, there are several examples of use cases of ICT Accessibility from various other countries that have helped bridge the digital divide, they are-

ICT ACCESSIBILITY IN EMPLOYMENT[26]	ASSISTIVE TECHNOLOGY FOR REMOVING DIGITAL COMMUNICATION BARRIERS[27]
In United States of America, The United States Department of Labor with the support of the Partnership on Employment & Accessible Technology (PEAT) launched TalentWorks, a free online resource that provides guidance for organisations to ensure that their web based job applications and recruiting processes are accessible for persons with disabilities. Building a platform to provide accessibility guidance for employers may potentially improve hiring processes leading to a more diverse and inclusive workforce. Considering that most of the recruitment processes have moved online recently, this sort of initiative is necessary to promote equal opportunities to access the labour market.	Microsoft Team, a communication platform offered as part of Microsoft 365 suite is powered by Azure Cognitive Services and supports speech to text transcription and captioning for meetings and calls, making it easier for people with hearing disabilities to participate in online communication. Its accessibility features are based on WCAG 2.1 AA level and facilitates easy access to and consumption of digital content for those who are blind or have impaired vision, as well as those who have dyslexia, ADHD, or autism.

26. https://www.dol.gov/agencies/odep/resources/peat
27. https://www.timesnownews.com/technology-science/6-ways-azure-ai-is-empowering-people-with-disabilities-article-99727313

ASSISTIVE TECHNOLOGY BACKED BY GOVERNMENT ECONOMIC ASSISTANCE[28]

In Australia, the government introduced National Disability Insurance Scheme (NDIS) to fund eligible people with disability, including support for assistive technology to help them live more independently in community. It provides individualized funding, specific to meet the person's needs such as mobility aids, communications devices and home modifications once registered with the administrative agency. The funding scheme also creates new business and employment opportunities for the country.

ICT ACCESSIBILITY FOR EMERGENCY PREPAREDNESS[29]

The Emergency Preparedness Guide for People with Disabilities/Special Needs is a resource developed by the Canadian government to help individuals with disabilities and special needs to prepare for emergencies and disasters. The guide is available in a variety of formats, including audio, large print, and Braille, to ensure that it is accessible to as many people as possible and covers range of disabilities, such as visual or hearing impairments, mobility impairments, and cognitive disabilities. It includes, Canadians who have a hearing or speech disability and who have registered can now send a text message of ¨9 1 1¨ in the case of an emergency.[30]

ASSISTIVE TECHNOLOGY FOR READING BOOK[30]

There are several standards for document accessibility such as Daisy which stands for Digital Accessible Information System and is an internationally accessible multimedia publishing system. It provides digital books to persons with print disabilities in an accessible, feature rich and navigable format. While other e texts are in a single format, a Daisy book can include multiple formats such as text, audio and a combination of both and now even starting on video Daisy allows a reader to directly navigate to parts of a book such as headings, paragraphs, chapters etc.

ACCESSIBILITY ASSESSMENT TOOL TO MEASURE COMPLIANCE WITH INTERNATIONAL GUIDELINES[31]

Infosys accessibility testing tool (iATT) earlier known as Infosys iProwe is product for web accessibility assessment and remediation. iATT leverages built in intelligence to automatically analyze accessibility issues of websites and provides reports including recommendations to make websites accessible. It assesses conformance with many international and Indian guidelines which significantly reduces time, cost, effort in accessing and fixing web accessibility issues.

28. https://www.ndis.gov.au/
29. https://www.chha.ca/hearing-education/t-911/
30. https://daisy.org/activities/standards/daisy/
31. https://www.infosys.com/services/incubating-emerging-technologies/documents/accessibility-testing-tool.pdf

ICT ACCESSIBILITY IN QATAR[32]

Qatar is amongst the top performers in G3ict ranking of e accessibility (DARE Index 2020) because of Accessible Qatar Initiative that focuses on accessibility for people with special needs not only to public places and services, but also to information and e services. This is reflected in official government websites that have implemented the minimum required accessibility functions, such as text resize. They have partnered with local Qatari businesses and international partners to raise societal awareness on the importance of including persons with disabilities to promote social acceptance.

32. https://e-inclusion.unescwa.org/book/2052

XI. RECOMMENDATIONS

The Government of India launched the Digital India Initiative with the objective of transforming India into a digitally empowered society and knowledge economy. This initiative included various components that focused on infrastructure development, citizen engagement and e-governance to transform the way government interacts and operates with citizens. However, for Digital India 2.0 to realise this potential, government has to make accelerated progress to make its platforms inclusive, prioritising accessibility. Accessibility refers to the design of digital products and services in a way that allows everyone to use them without barriers. By promoting accessibility, government can ensure the platforms are accessible to all, including persons with disabilities, old and even people with limited digital skills.

Accessibility also becomes more important for individuals with limited financial resources to afford assistive technology. With digital inclusion, they will be better equipped to participate in society and become independent. The legal framework of RPwD Act, 2016 referenced in this report, includes mention of service providers to be legally obligated to make their platforms accessible for all, although the implementation of such resolutions has been met with uneven success across the platforms. In such cases, the evaluation of the accessibility aspect of the digital portals is the first step in making the ecosystem more inclusive and accessible.

1. ***Adopt and Implement Accessibility guidelines:*** The Central & the State Governments must mandate each department to comply with Accessibility guidelines for website and mobile applications. Strategy and road map should be prepared with timelines and assessment reporting every year to make all ICT products and services of the organisation compliant with accessibility guidelines. Indian Standards IS 17802 (Part 1), 2021 and IS 17802 (Part 2), 2022, published by the Bureau of Indian Standards and mandated by RPwD (Amendment) Rules, 2023 should be implemented in letter and spirit across all websites and applications in a timely manner.

2. ***Tender Documents:*** The Central and the State Governments must ensure that all ICT platforms consider ICT accessibility from the ideation stage. Therefore, the tender documents must include relevant ICT accessibility guidelines as system/product specifications. This will ensure that websites are designed and developed in accordance with the established accessibility guidelines at the outset rather than as an afterthought. The tender documents should also specify aspects such as conducting user testing by persons with disabilities, ensuring regular accessibility audits etc. These aspects have been dealt in detail below.

3. ***Conduct user testing:*** Government must ensure that websites must be tested by users involving people with disabilities before they are launched, to gather feedback on the accessibility of government websites and also ensure development of targeted solutions that accommodate the needs of a wide range of users.

4. ***Ensure regular accessibility audits:*** Conducting regular accessibility audits of government portals would ensure that the established guidelines are being met. The ICT Standards of accessibility released by BIS in 2021 are still lacking in implementation in a few digital portals. These standards are mandated by the RPwD (Amendment) Rules, 2023. It is important that these standards are adopted within the prescribed time frame. If a regular audit for accessibility by Certified Accessibility Professionals is mandated, then organisations can ensure that their digital products and services remain accessible and compliant with evolving guidelines and standards. It also helps organisations keep a check and identify accessibility issues before they become more serious and potentially costly to fix.

   Additionally, monitoring the accessibility of a website or application over time is necessary as it undergoes updates, modifications, and new releases. Even content changes may contribute to accessibility issues. Hence, it is important to test the accessibility of each new version or release and compare the results with the previous version to identify any accessibility regressions or improvements. Tracking accessibility over changes, it helps ensure that accessibility is not overlooked during the development or content management process and that any accessibility issues are

identified and addressed promptly, rather than waiting for a complete audit at a later date. The government must also ensure their audits are conducted by independent third-party auditors who specialise in accessibility and preferably have IAAP certifications, like the recent roll-out of tender by NeGD to assess compliance with ICT Accessibility standards.

5 *Feedback cycle for accessibility issues:* All website owners should mention how they comply with the accessibility policies and should provide an accessibility statement, which clearly outlines the website's commitment to accessibility and details how users can provide feedback about accessibility issues. Providing the ability for users to give feedback and report issues related to accessibility will not only improve the accessibility readiness but also provide good customer experience. Displaying the accessibility score publicly on the website also improves the visibility and commitment to accessibility readiness.

6 *Set up accessibility compliance division/wing:* Setting up an accessibility compliance division is an important step for organisations to ensure that they are meeting the needs of all their users, including those with disabilities.

a. A senior official should be made head of the designated department or a SPOC/focal point.
b. As far as possible, Certified Professionals for accessibility should be hired. Alternatively, the organisation can enter into agreements with companies or NGOs working in the field of digital accessibility and have certified professionals on board.
c. Make accessibility compliance a mandatory condition in the procurement of new ICT products and services.
d. Make certifications of accessibility mandatory by this department to launch a website.

We suggest that a separate dedicated Accessibility Wing be set up under the NIC or MeitY with expert professionals who are responsible for ensuring that accessibility standards are complied with in a time-bound manner to a target set of websites and applications, and certifications are offered based on their compliance status. Such certifications will ensure accountability and feedback-loop for websites/ apps to strive more towards accessibility and be certified. These certified apps would appear as benchmark platforms for PwDs to navigate with ease and access any service readily. Apart from technical expertise that MeitY holds, it would also ensure that accessibility would be part of mainstream, normal scheme of things of the department and not as a separate department. This would result in better coordination and collaboration. The key here is to convert it as a line function from staff function of the organisation.

7 *Leverage automation for productivity and prioritise issues:* The developers and testers of the digital portals must prioritise accessibility issues to be resolved and use automation tools to help accelerate the progress towards accessibility readiness. The automation will reduce the overheads, and shorten the time to detect, prevent and mitigate, thereby increasing the productivity of the teams. The developers must focus on prioritising the critical and serious impact failures first and then move on to other issues. Some of the initial items to be prioritised are-

- Issues identified as critical (accessibility barriers) on the home page
- Issues redundant in multiple pages
- Any issues in the template
- Issues identified as critical (accessibility barriers) on the high traffic pages

8 *Compulsory accessible design for all web design courses offered as part of skill development programs:* In order to internalise accessibility with design feature of any product or service, it is crucial for the government to ensure that students are trained from the very beginning of their professional careers. Hence, the government should make accessible design compulsory for all IT based web design course curricula. This can come as part of AICTE (All India Council for Technical Education) model curriculum which should be adopted by all institutions, universities and training centres in their web development courses. This is similar to the requirement for all architecture courses to include

universal accessibility design features for PwDs.[33] At the same time website owners should provide training and resources for their developers and designers on how to design, develop and maintain accessible websites and applications. This would ensure that accessibility is considered throughout the website development process, from planning to deployment.

9 *Making accessibility a priority for Digital India:* Government of India should make accessibility a priority to achieve inclusion in building India for a $1 trillion digital economy. The envisioned digital economy[34] relies heavily on empowering every citizen with quality education, employment and opportunities to participate in economy. With ICT Accessibility the pathways to inclusion and digital literacy narrow, providing easier accessibility for PwDs to pursue education and other skill trainings. The budget allocation to Digital India Initiatives must grant provisions to make the digital ecosystem accessible to all. The Accessible India Campaign that was initiated in 2015 should be brought under the Digital India Initiative to meet the objectives of ICT ecosystem accessibility with intensified focus. Under MeitY, ICT falls under direct scope of work handled by NIC for e-governance websites and apps. As per the Annual Report of MeitY for 2022-23, 724 state websites out of 917 have been made accessible as per the GIGW standards while "Development of Common Minimum Framework (CMF)" project implemented by NIC has enabled accessibility for 95 out of 100 websites.[35] However, the progress of enabling accessibility to websites have been stagnant for the past 3 years from 2019.[36] [37] Hence, to fully achieve objectives of Digital India, we must make accelerated progress towards making websites accessible for all citizens including PwDs, with MeitY as the nodal department to monitor the progress made and enable quick modification.

10 *Ensuring accountability to Consumer Complaints Mechanisms:* For e-governance initiatives it is imperative that consumer complaints mechanisms are also accessible. Therefore, adequate training in accessibility should be provided to the help-desk representatives to handle and effectively redress the queries of persons with disabilities. This specifically concerns portals that cater to grievance redressal of customers like RTI, CPGRAMS, state administrative departments and police departments.

33. https://coa.gov.in/images/image-001.pdf
34. https://www.meity.gov.in/writereaddata/files/india_trillion-dollar_digital_opportunity.pdf
35. https://www.meity.gov.in/writereaddata/files/AR_2022-23_English_24-04-23.pdf
36. https://www.meity.gov.in/writereaddata/files/MeitY_AR_English_2021-22.pdf
37. https://www.meity.gov.in/writereaddata/files/MeitY_AR_English_2020-21.pdf

ANNEXURES

XII. ANNEXURE I ASSESSMENT OF DIGITAL PLATFORMS

INDIVIDUAL TEST REPORTS – WEBSITES

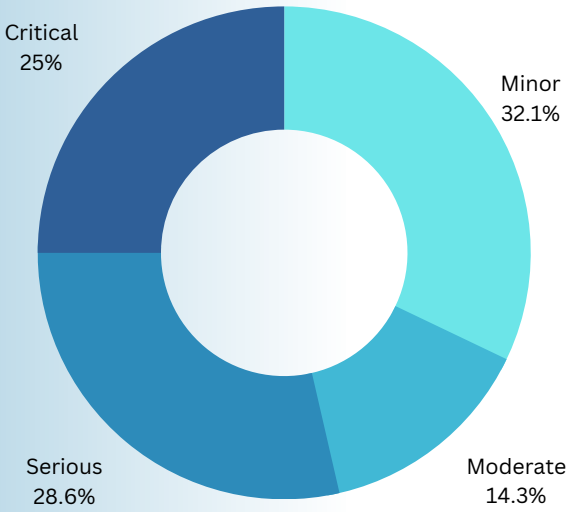
MYGOV

OVERVIEW

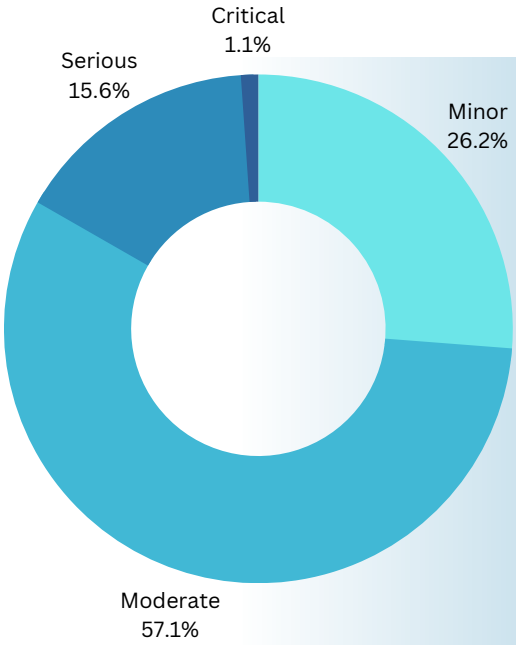
Website Base URL: https://www.mygov.in/
Website Name: MyGov
Number of pages tested: 508
Test Score: 76
Test Criteria Failure: 17%
Number of test criteria: 168
Number of Failed Test Criteria: 28

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **28** in total. The following chart shows the further breakdown by end user impact.



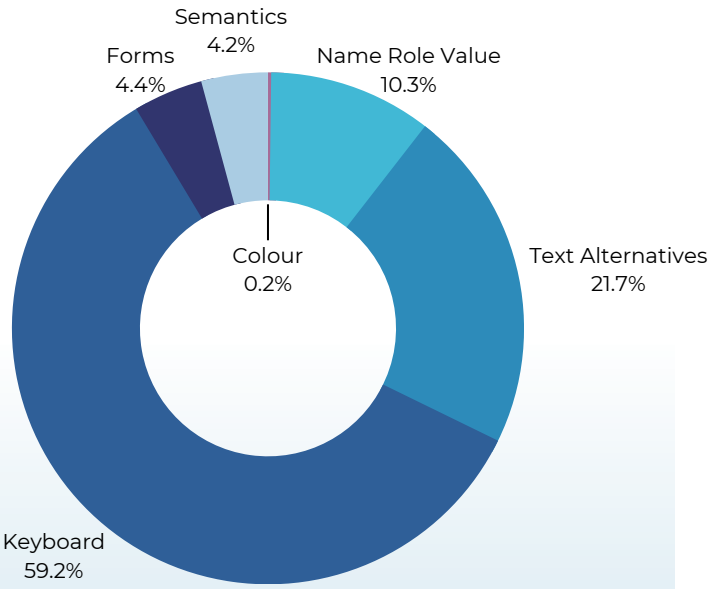
FAILED TEST CRITERIA BY IMPACT (MYGOV)



This pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **33238** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (MYGOV)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template itself could be flawed. For example, this could be in the header, footer or logo element.

1. `[aria-hidden=\"true\"]` elements do not contain focusable descendents
Impact: Critical
Total Failing Elements: 311
1 Elements affecting all the pages (could be a template issue)

2. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 51

3. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 6
1 Elements affecting 2 pages

4. No Accessible Name (Iframe)
Impact: Critical
Total Failing Elements: 4

5. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 3

6. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 2
1 Elements affecting 2 pages

ISSUES BY CATEGORY (MYGOV)

7. Ambiguous Link
Impact: Serious
Total Failing Elements: 3097
4 Elements affecting all the pages (could be a template issue)

8. Ensures that every form element has a visible label and is not solely labeled using hidden labels, or the title or aria-describedby attributes
Impact: Serious
Total Failing Elements: 860
3 Elements affecting all the pages (could be a template issue)

9. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 631
1 Elements affecting all the pages (could be a template issue)

INDIVIDUAL TEST REPORTS – WEBSITES

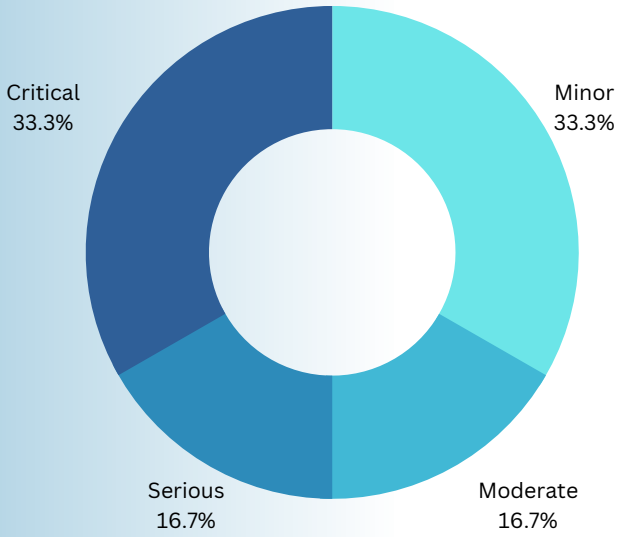
RTI

OVERVIEW

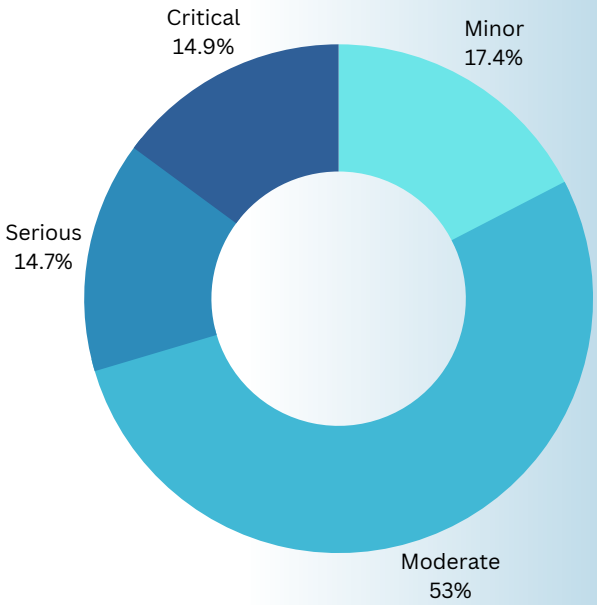
Website Base URL: https://rtionline.gov.in/
Website Name: RTI Online
Number of pages tested: 16
Test Score: 74
Test Criteria Failure: 11%
Number of test criteria: 168
Number of Failed Test Criteria: 18

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **18** in total. The following chart shows the further breakdown by end user impact.



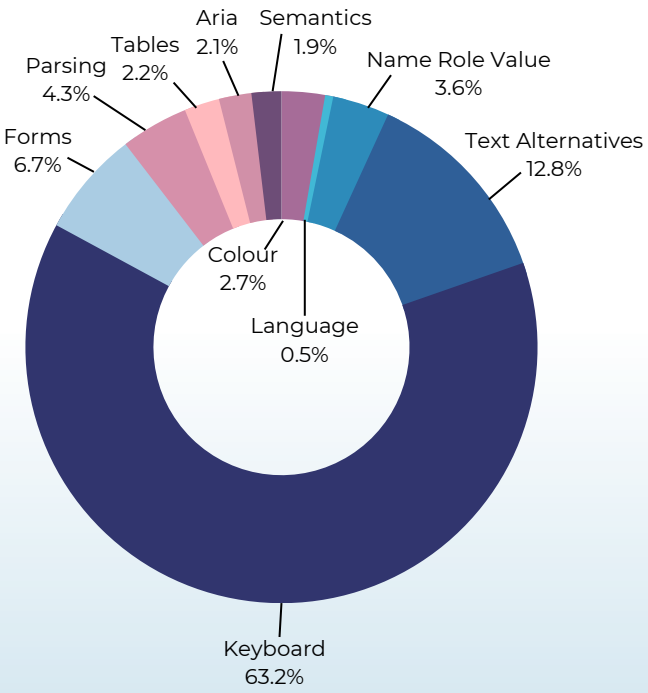
FAILED TEST CRITERIA BY IMPACT (RTI)



ISSUE BREAKDOWN BY IMPACT (RTI)

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **585** in total. The following chart shows the further breakdown by end user impact.

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 39
1 Elements affecting all the pages (could be a template issue)
1 Elements affecting 6 pages.
6 Elements affecting 3 pages.

2. Ensures every ID attribute value is unique
Impact: Critical
Total Failing Elements: 19
1 Element affecting all the pages (could be a template issue)
1 Elements affecting 3 pages

3. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 16
1 Element affecting 9 pages
1 Element affecting 3 pages

4. Marquee Found
Impact: Critical
Total Failing Elements: 6
2 Elements affecting 3 pages

5. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 6
1 Elements affecting 3 pages

ISSUES BY CATEGORY (RTI)

6. Table Has No TH
Impact: Critical
Total Failing Elements: 1
1 Element affecting 1 page

7. Link Click But No Keyboard Access
Impact: Serious
Total Failing Elements: 68
3 Elements affecting all the pages (could be a template issue)

8. Ambiguous Link
Impact: Serious
Total Failing Elements: 15
1 Elements affecting all the pages (could be a template issue)

INDIVIDUAL TEST REPORTS – WEBSITES

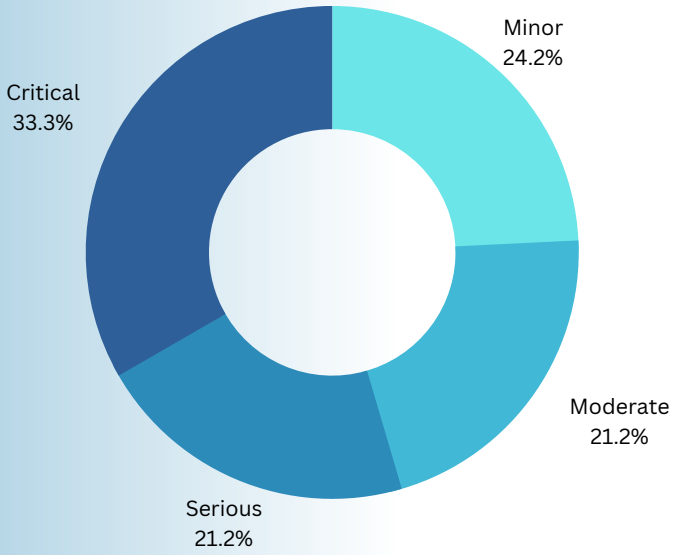
UP COP

OVERVIEW

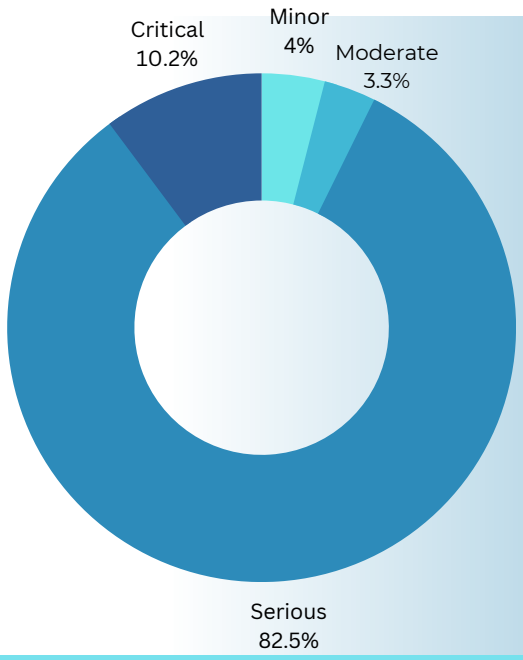
Website Base URL: https://uppolice.gov.in/
Website Name: UP COP
Number of pages tested: 254
Test Score: 70
Test Criteria Failure: 20%
Number of test criteria: 168
Number of Failed Test Criteria: 33

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **33** in total. The following chart shows the further breakdown by end user impact.



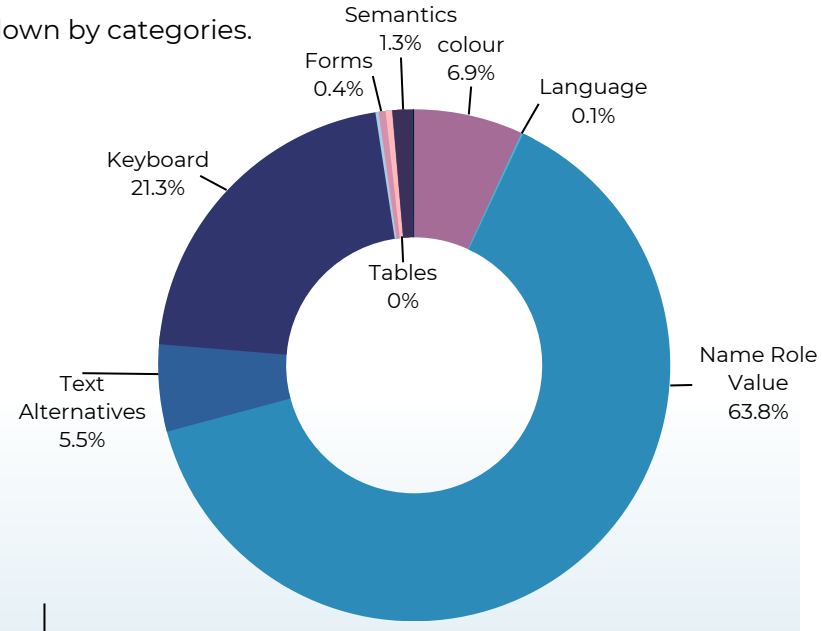
FAILED TEST CRITERIA BY IMPACT (UP COP)



ISSUE BREAKDOWN BY IMPACT (UP COP)

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **116695** in total. The following chart shows the further breakdown by end user impact.

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 7860
52 Elements affecting 78 pages (could be a template issue)
56 Elements affecting 64 pages.
4 Elements affecting 6 pages.

2. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 1743
12 Elements affecting 142 pages (could be a template issue)

3. No Accessible Name (General)
Impact: Critical
Total Failing Elements: 967
4 Elements affecting 142 pages (could be a template issue)
6 Elements affecting 54 pages

4. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 504
2 Elements affecting 143 pages (could be a template issue)
2 Elements affecting 64 pages

5. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 286
2 Elements affecting 65 pages

6. Ensures <area> elements of image maps have alternate text
Impact: Critical
Total Failing Elements: 143
1 Elements affecting 143 pages (could be a template issue)

ISSUES BY CATEGORY (UP COP)

7. Marquee Found
Impact: Critical
Total Failing Elements: 143

8. Page Title Empty
Impact: Critical
Total Failing Elements: 54
Affecting 54 pages

9. Ambiguous Link
Impact: Serious
Total Failing Elements: 73489
505 Elements affecting 78 pages (could be a template issue)
502 Elements affecting 64 pages (could be a template issue)
594 Elements affecting 3 pages (could be a template issue)

10. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 21057
144 Elements affecting 78 pages (could be a template issue)
143 Elements affecting 64 pages (could be a template issue)
9 Elements affecting 55 pages

11. Not Using Semantic Heading Markup
Impact: Serious
Total Failing Elements: 1286
1 Elements affecting 142 pages (could be a template issue)
8 Elements affecting 78 pages (could be a template issue)
8 Elements affecting 65 pages

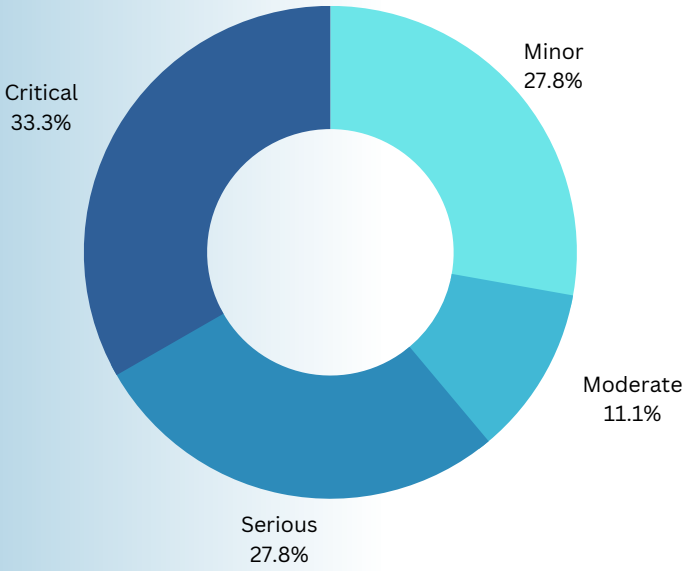
UNIQUE DISABILITY ID

OVERVIEW

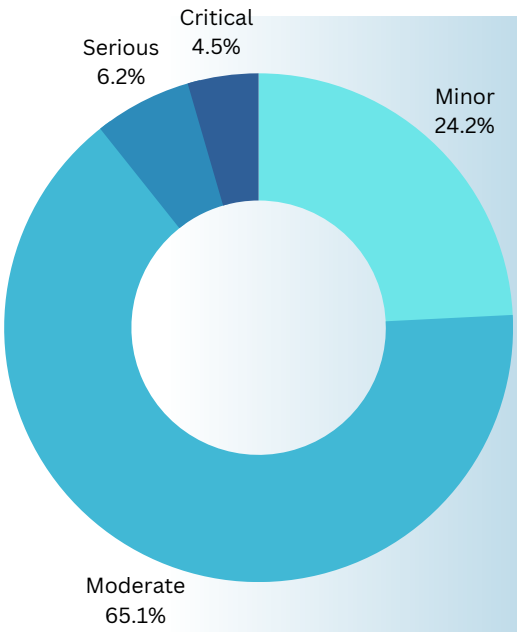
Website Base URL: https://www.swavlambancard.gov.in/
Website Name: Unique Disability ID
Number of pages tested: 64
Test Score: 80
Test Criteria Failure: 11%
Number of test criteria: 168
Number of Failed Test Criteria: 18

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **18** in total. The following chart shows the further breakdown by end user impact.



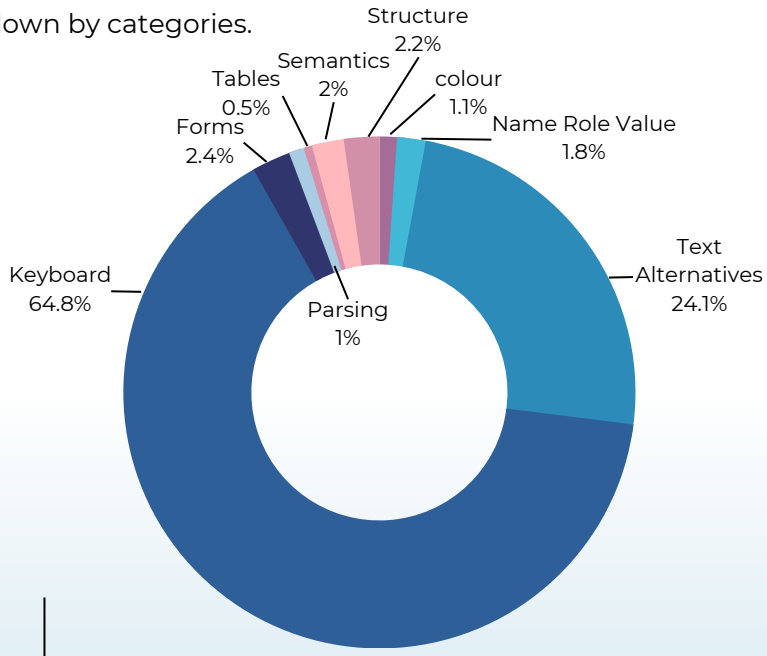
FAILED TEST CRITERIA BY IMPACT (UNIQUE DISABILITY ID)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **2822** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (UNIQUE DISABILITY ID)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 69
1 Elements affecting all the pages (could be a template issue)
1 Elements affecting 3 pages.

2. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 29
1 Elements affecting 9 pages.
1 Elements affecting 4 pages.
1 Elements affecting 2 pages.

3. Page Title Empty
Impact: Critical
Total Failing Elements: 26
Affecting 26 pages

4. No Accessible Name (General)
Impact: Critical
Total Failing Elements: 2

5. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 47
1 Elements affecting 47 pages

ISSUES BY CATEGORY (UNIQUE DISABILITY ID)

6. Ambiguous Link
Impact: Serious
Total Failing Elements: 38
16 Elements affecting 2 pages

7. Anchor Target Not Found
Impact: Serious
Total Failing Elements: 26

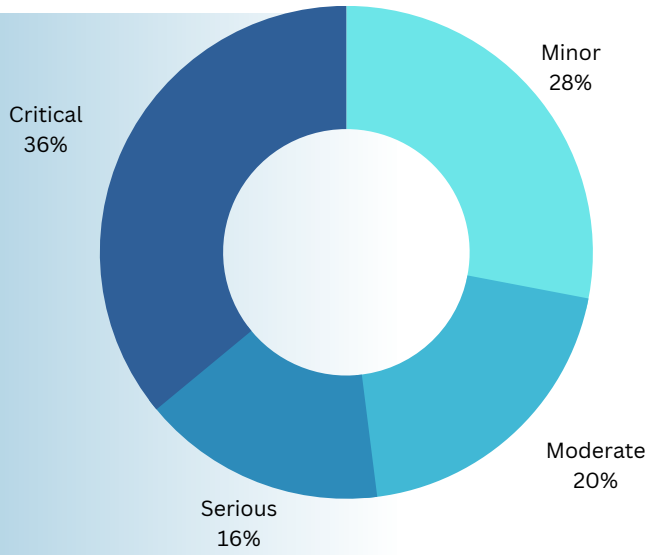
OFFICE OF CHIEF COMMISSIONER FOR PERSONS WITH DISABILITIES

OVERVIEW

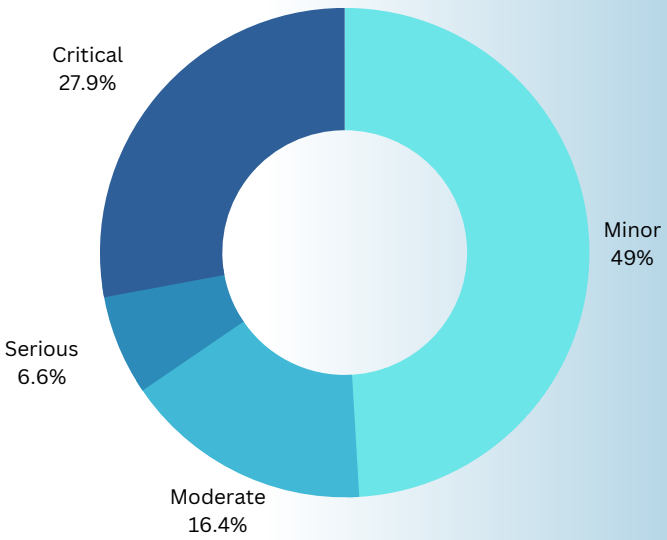
Website Base URL: https://www.ccdisabilities.nic.in/
Website Name: Office of Chief Commissioner for Persons with Disabilities
Number of pages tested: 354
Test Score: 82
Test Criteria Failure: 15%
Number of test criteria: 168
Number of Failed Test Criteria: 25

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **25** in total. The following chart shows the further breakdown by end user impact.



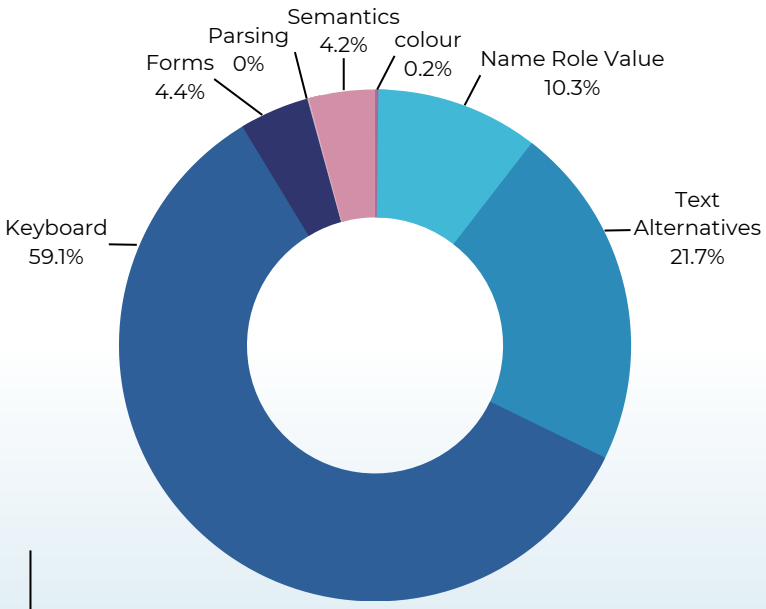
FAILED TEST CRITERIA BY IMPACT (OFFICE OF CHIEF COMMISSIONER FOR PERSONS WITH DISABILITIES)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **4387** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (OFFICE OF CHIEF COMMISSIONER FOR PERSONS WITH DISABILITIES)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

ISSUES BY CATEGORY (OFFICE OF CHIEF COMMISSIONER FOR PERSONS WITH DISABILITIES)

1. No Accessible Name (General)
Impact: Critical
Total Failing Elements: 650
2 Elements affecting all the pages (could be a template issue)

2. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 501
19 Elements affecting 5 pages (could be a template issue)

3. Table Mixing Scope and Headers
Impact: Critical
Total Failing Elements: 18
2 Elements affecting 3 pages
3 Elements affecting 2 pages

4. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 18

5. Table Has No TH
Impact: Critical
Total Failing Elements: 17
2 Elements affecting 4 pages
4 Elements affecting 2 pages

6. Ensures every ID attribute value is unique
Impact: Critical
Total Failing Elements: 12
2 Elements affecting 6 pages

7. No Accessible Name (Iframe)
Impact: Critical
Total Failing Elements: 5
2 Elements affecting 2 pages

8. No Page Title
Impact: Critical
Total Failing Elements: 3
Affecting 3 pages

9. `[id]` attributes on active, focusable elements are unique
Impact: Critical
Total Failing Elements: 2
1 Elements affecting 2 pages

10. Ambiguous Link
Impact: Serious
Total Failing Elements: 248
1 Element affecting 67 pages (could be a template issue)
1 Element affecting 17 pages
4 Elements affecting 4 pages
3 Elements affecting 20 pages
2 Elements affecting 28 pages

INDIVIDUAL TEST REPORTS – WEBSITES

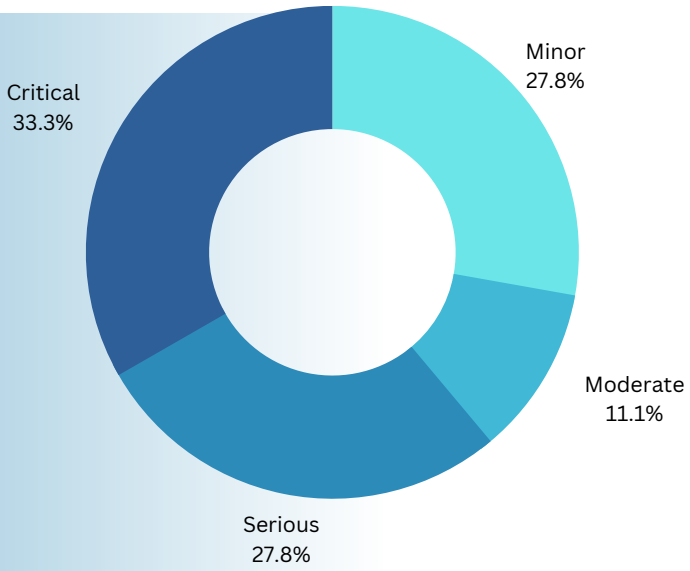
DEPwD

OVERVIEW

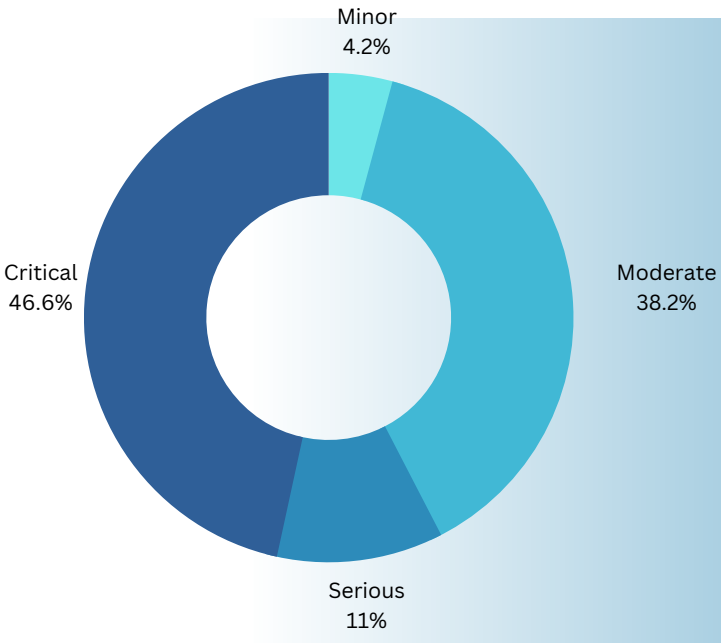
Website Base URL: https://disabilityaffairs.gov.in/
Website Name: Department of Empowerment of Persons with Disabilities
Number of pages tested: 45
Test Score: 90
Test Criteria Failure: 11%
Number of test criteria: 168
Number of Failed Test Criteria: 18

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **18** in total. The following chart shows the further breakdown by end user impact.



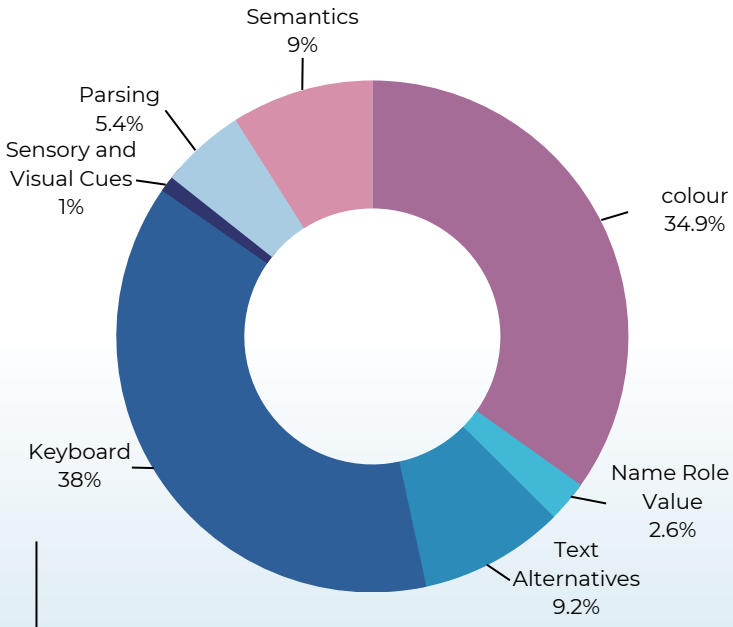
FAILED TEST CRITERIA BY IMPACT (DEPWD)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **502** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (DEPWD)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 171
56 Elements affecting 2 pages (could be a template issue)

2. No Page Title
Impact: Critical
Total Failing Elements: 40
Affecting 40 pages

3. Marquee Found
Impact: Critical
Total Failing Elements: 14
1 Element affecting 3 pages
3 Elements affecting 2 pages

4. `[id]` attributes on active, focusable elements are unique
Impact: Critical
Total Failing Elements: 5
1 Elements affecting 3 pages
1 Elements affecting 2 pages

5. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 3
1 Elements affecting 2 pages

6. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 1

ISSUES BY CATEGORY (DEPWD)

7. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 30
6 Elements affecting 3 pages
6 Elements affecting 2 pages

8. Ambiguous Link
Impact: Serious
Total Failing Elements: 10
3 Elements affecting 2 pages

9. `[user-scalable=\"no\"]` is not used in the `<meta name=\"viewport\">` element and the `[maximum-scale]` attribute is not less than 5.
Impact: Serious
Total Failing Elements: 5
1 Elements affecting 5 pages

10. Anchor Target Not Found
Impact: Serious
Total Failing Elements: 5
1 Elements affecting 3 pages
1 Elements affecting 2 pages

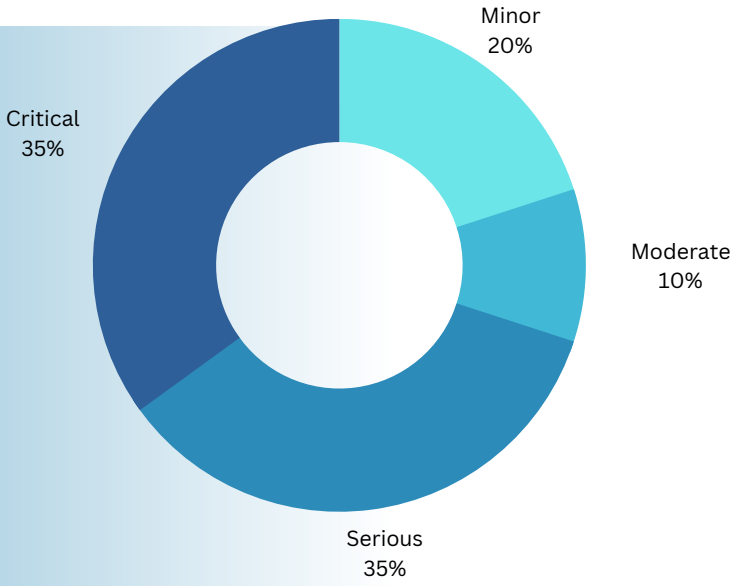
AAPLE SARKAR OF MAHARASHTRA

OVERVIEW

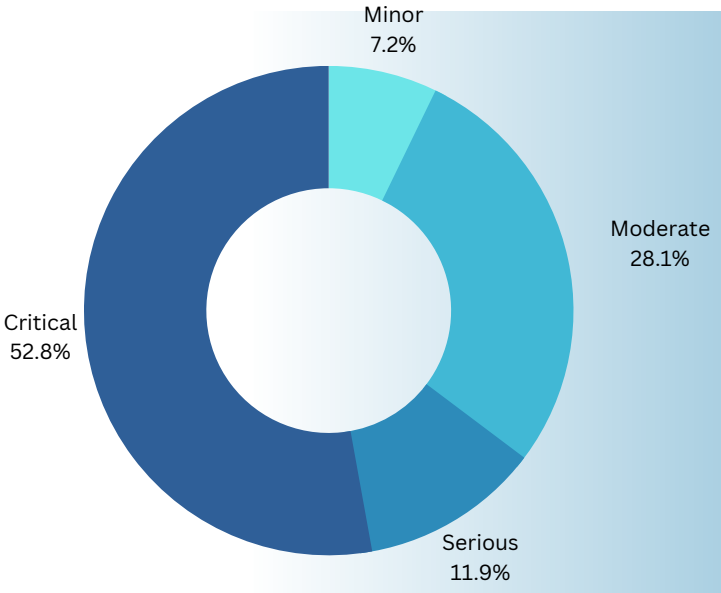
Website Base URL:
https://aaplesarkar.mahaonline.gov.in/
Website Name: Aaple Sarkar of Maharashtra
Number of pages tested: 63
Test Score: 71
Test Criteria Failure: 12%
Number of test criteria: 168
Number of Failed Test Criteria: 20

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **20** in total. The following chart shows the further breakdown by end user impact.



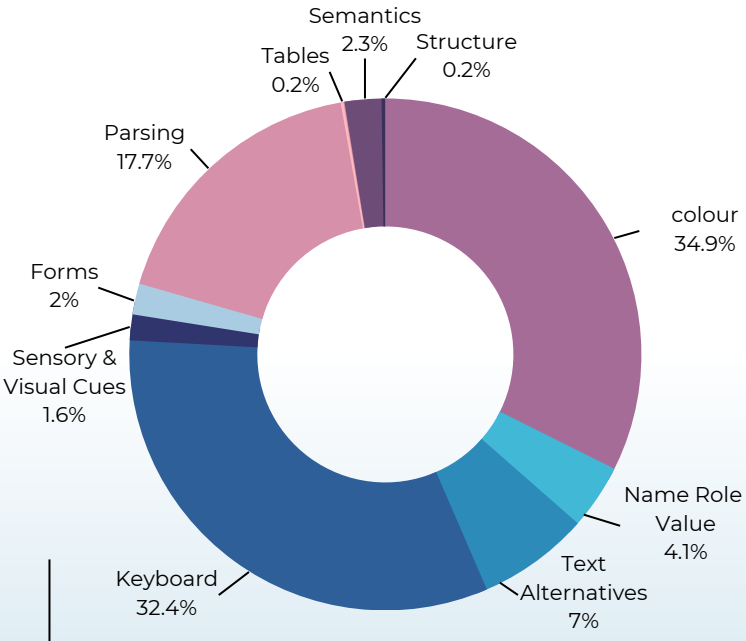
FAILED TEST CRITERIA BY IMPACT (AAPLE SARKAR OF MAHARASHTRA)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **3321** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (AAPLE SARKAR OF MAHARASHTRA)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 1075
16 Elements affecting 28 pages (could be a template issue)
9 Elements affecting 20 pages (could be a template issue)
6 Elements affecting 12 pages (could be a template issue)

2. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 569
2 Elements affecting 27 pages (could be a template issue)
25 Elements affecting 20 pages (could be a template issue)
1 Element affecting 6 pages

3. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 65
1 Elements affecting 20 pages (could be a template issue)
1 Elements affecting 9 pages (could be a template issue)
3 Elements affecting 6 pages (could be a template issue)

4. Marquee Found
Impact: Critical
Total Failing Elements: 20
1 Elements affecting 20 pages

5. No Accessible Name (Iframe)
Impact: Critical
Total Failing Elements: 14
2 Elements affecting 6 pages

ISSUES BY CATEGORY (AAPLE SARKAR OF MAHARASHTRA)

6. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 12
6 Elements affecting 2 pages

7. Table Has No TH
Impact: Critical
Total Failing Elements: 2

8. Ambiguous Link
Impact: Serious
Total Failing Elements: 136
8 Elements affecting 12 pages
5 Elements affecting 8 pages

9. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 78
9 Elements affecting 2 pages

10. Ensures interactive controls are not nested as they are not always announced by screen readers or can cause focus problems for assistive technologies
Impact: Serious
Total Failing Elements: 60

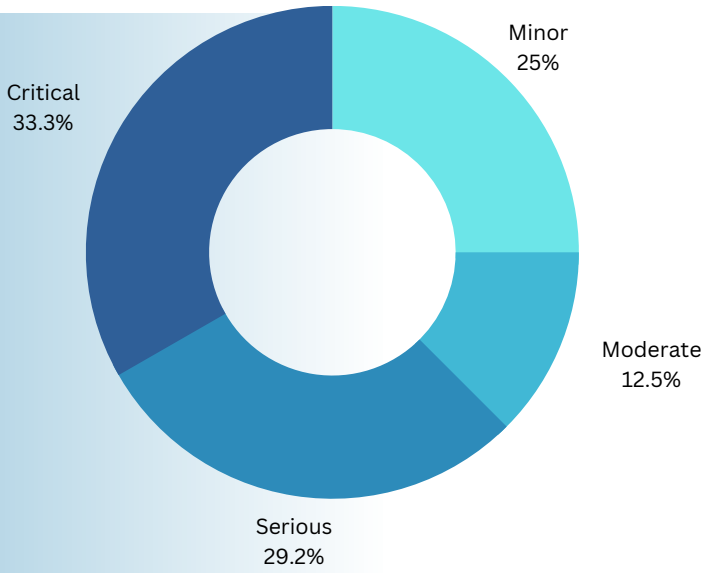
DELHI POLICE

OVERVIEW

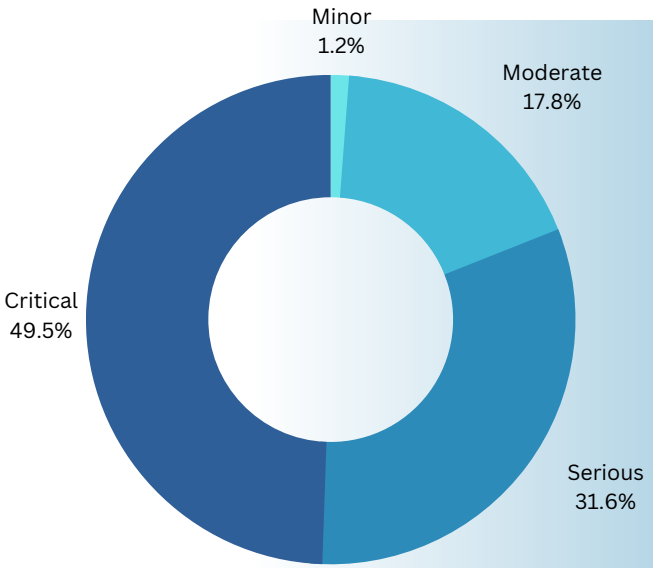
Website Base URL: https://delhipolice.gov.in/
Website Name: Delhi Police
Number of pages tested: 536
Test Score: 80
Test Criteria Failure: 14%
Number of test criteria: 168
Number of Failed Test Criteria: 24

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **24** in total. The following chart shows the further breakdown by end user impact.



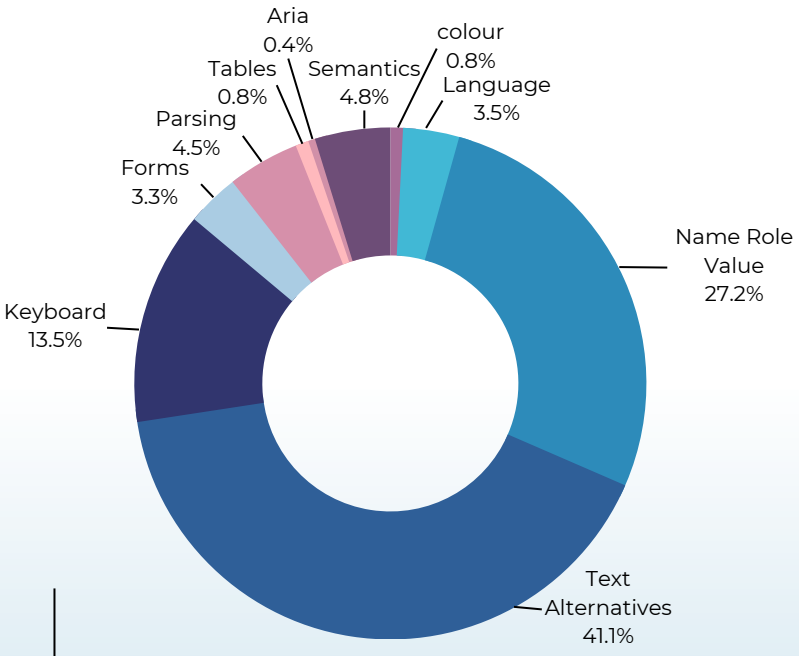
FAILED TEST CRITERIA BY IMPACT (DELHI POLICE)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **10604** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (DELHI POLICE)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 4268
6 Elements affecting all the pages (could be a template issue)
30 Elements affecting 30+ pages (could be a template issue)

2. `[id]` attributes on active, focusable elements are unique
Impact: Critical
Total Failing Elements: 377
13 Elements affecting 29 pages (could be a template issue)

3. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 353
8 Elements affecting 28+ pages (could be a template issue)

4. Marquee Found
Impact: Critical
Total Failing Elements: 86
2 Elements affecting 43 pages

5. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 84
2 Elements affecting 41 pages

6. Table Has No TH
Impact: Critical
Total Failing Elements: 59
2 Elements affecting 29 pages

7. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 16
8 Elements affecting 2 pages

ISSUES BY CATEGORY (DELHI POLICE)

8. ARIA IDs are unique
Impact: Critical
Total Failing Elements: 1

9. Ambiguous Link
Impact: Serious
Total Failing Elements: 2148
1 Elements affecting all the pages (could be a template issue)
24 Elements affecting 58 pages
4 Elements affecting 29 pages

10. Links have a discernible name
Impact: Serious
Total Failing Elements: 731
17 Elements affecting 43 pages (could be a template issue)

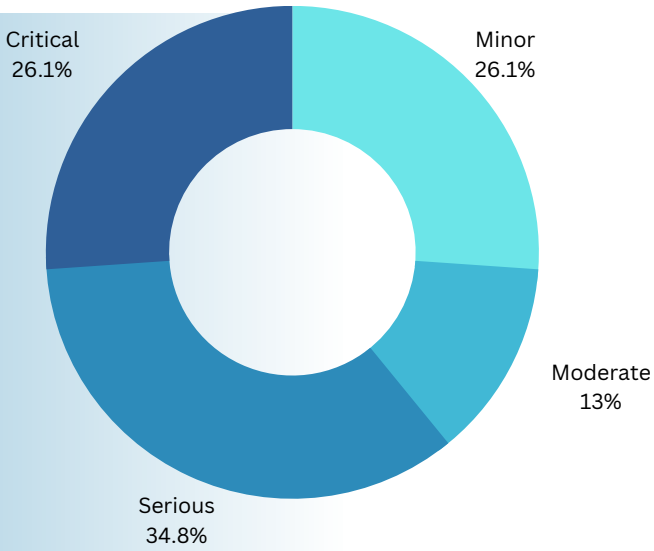
CENTRALISED PUBLIC GRIEVANCE REDRESS AND MONITORING SYSTEM (CPGRAMS)

OVERVIEW

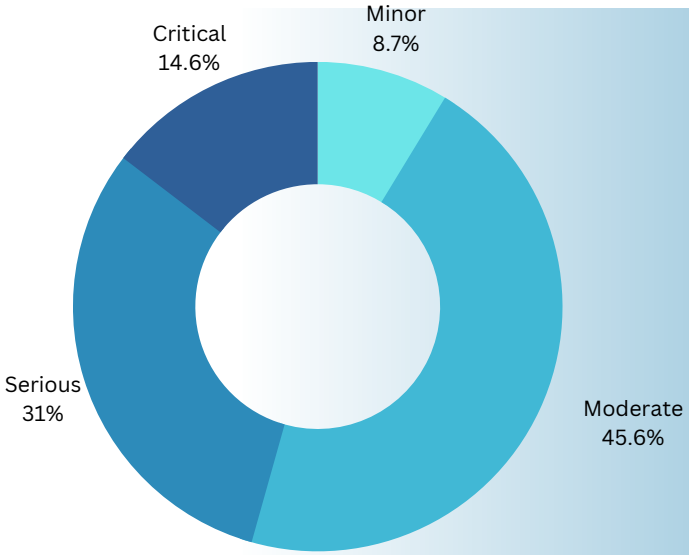
Website Base URL: https://pgportal.gov.in/
Website Name: Centralized Public Grievance Redress and Monitoring System
Number of pages tested: 30
Test Score: 83
Test Criteria Failure: 14%
Number of test criteria: 168
Number of Failed Test Criteria: 23

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **23** in total. The following chart shows the further breakdown by end user impact.



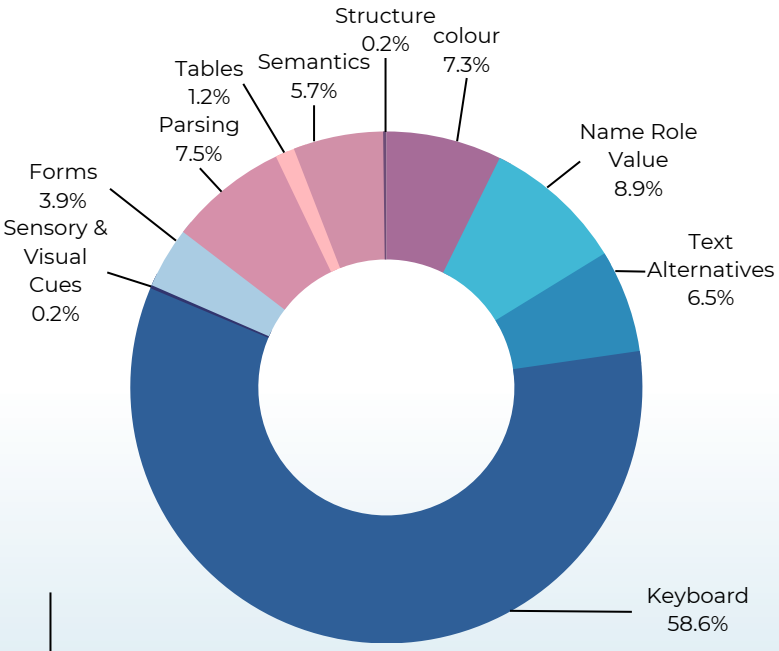
FAILED TEST CRITERIA BY IMPACT (CPGRAMS)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **493** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (CPGRAMS)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 36
3 Elements affecting 5 pages (could be a template issue)
5 Elements affecting 2 pages (could be a template issue)

2. ARIA IDs are unique
Impact: Critical
Total Failing Elements: 18
1 Elements affecting 18 pages (could be a template issue)

3. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 14
1 Elements affecting 4 pages
1 Elements affecting 2 pages

4. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 2

5. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 1

6. Table Has No TH
Impact: Critical
Total Failing Elements: 1

7. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 81
4 Elements affecting 18 pages (could be a template issue)
2 Elements affecting 3 pages

ISSUES BY CATEGORY (CPGRAMS)

8. Ambiguous Link
Impact: Serious
Total Failing Elements: 36
2 Elements affecting 18 pages (could be a template issue)

9. Anchor Target Not Found
Impact: Serious
Total Failing Elements: 18

10. Link Click But No Keyboard Access
Impact: Serious
Total Failing Elements: 8
1 Elements affecting 4 pages
1 Elements affecting 2 pages

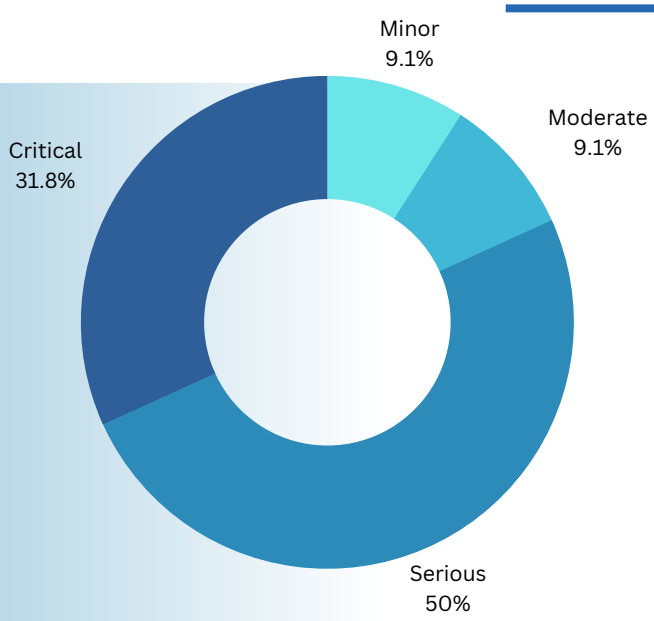
RAJASTHAN GRIEVANCE PORTAL

OVERVIEW

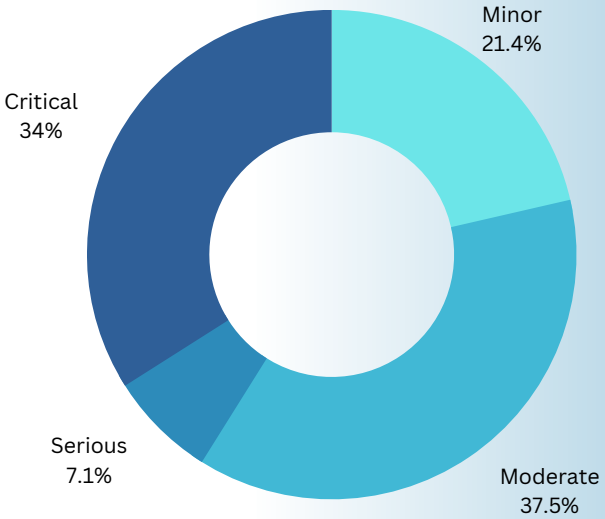
Website Base URL:
https://sampark.rajasthan.gov.in/
Website Name: Rajasthan Grievance Portal
Number of pages tested: 76
Test Score: 70
Test Criteria Failure: 13%
Number of test criteria: 168
Number of Failed Test Criteria: 22

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **22** in total. The following chart shows the further breakdown by end user impact.



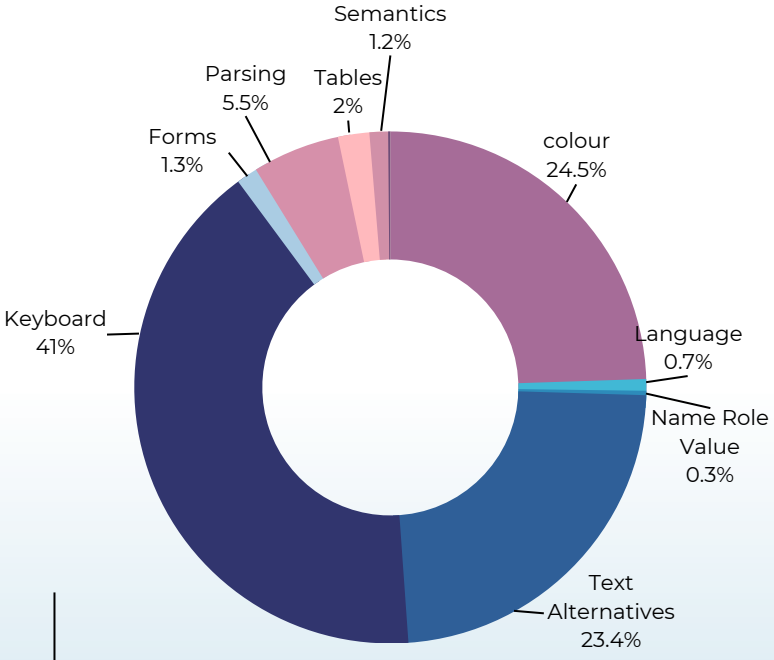
FAILED TEST CRITERIA BY IMPACT (RAJASTHAN GRIEVANCE PORTAL)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **4352** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (RAJASTHAN GRIEVANCE PORTAL)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 1065
6 Elements affecting all the pages (could be a template issue)
15 Elements affecting 32 pages (could be a template issue)
13 Elements affecting 3 pages (could be a template issue)

2. Marquee Found
Impact: Critical
Total Failing Elements: 208
2 Elements affecting all the pages (could be a template issue)
2 Elements affecting 32 pages (could be a template issue)

3. Table Has No TH
Impact: Critical
Total Failing Elements: 75
1 Elements affecting 1 page

4. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 58
5 Elements affecting 3 pages

5. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 41
1 Elements affecting 32 pages (could be a template issue)

6. `[id]` attributes on active, focusable elements are unique
Impact: Critical
Total Failing Elements: 32
1 Elements affecting 32 pages (could be a template issue)

ISSUES BY CATEGORY (RAJASTHAN GRIEVANCE PORTAL)

7. Page Title Empty
Impact: Critical
Total Failing Elements: 2
Affecting 2 pages

8. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 180
2 Elements affecting all the pages
1 Elements affecting 32 pages

9. `<object>` elements have `[alt]` text
Impact: Serious
Total Failing Elements: 32
1 Elements affecting 32 pages

INDIVIDUAL TEST REPORTS – WEBSITES

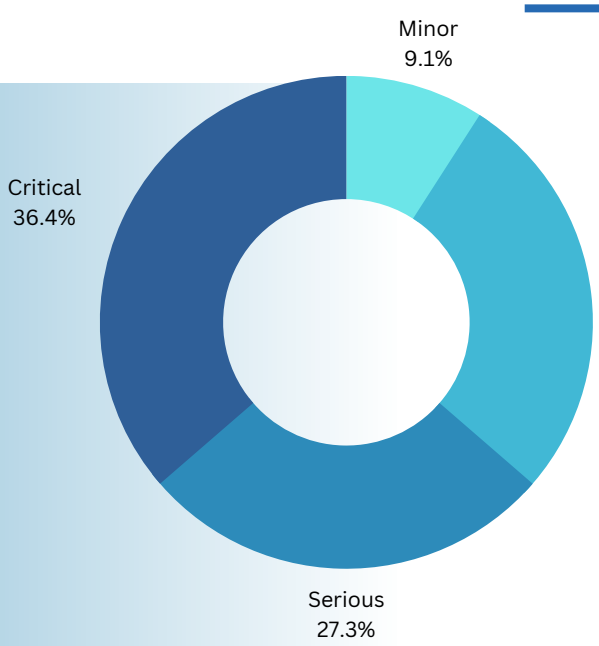
IRCTC

OVERVIEW

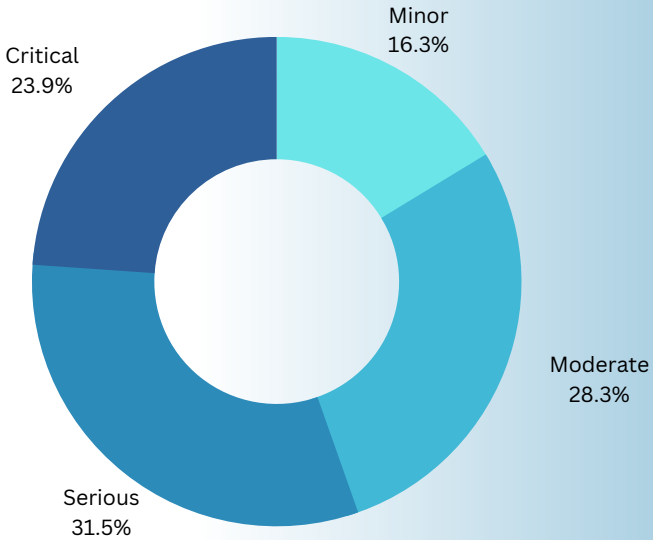
Website Base URL: https://www.irctc.co.in/
Website Name: IRCTC
Number of pages tested: 3
Test Score: 70
Test Criteria Failure: 13%
Number of test criteria: 168
Number of Failed Test Criteria: 22

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **22** in total. The following chart shows the further breakdown by end user impact.



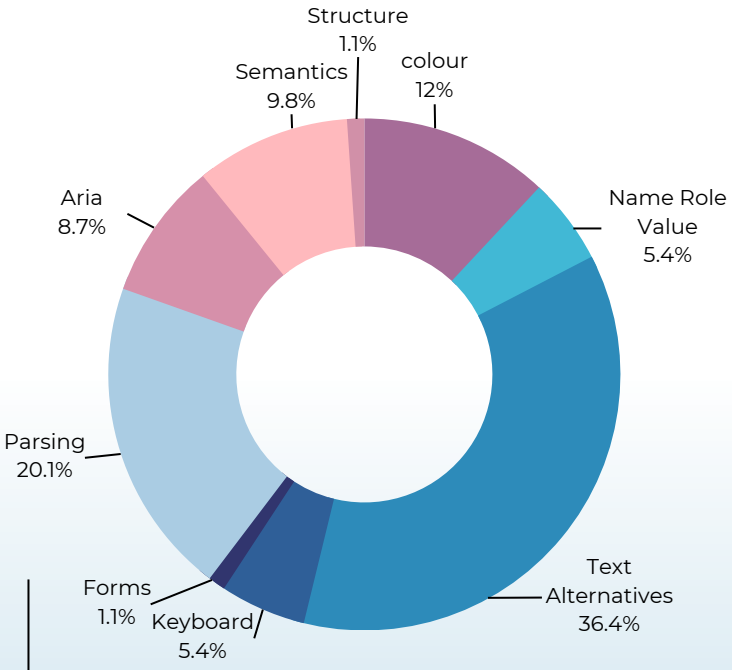
FAILED TEST CRITERIA BY IMPACT (IRCTC)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **184** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (IRCTC)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 22
2 Elements affecting all the pages (could be a template issue)

2. `[aria-*]` attributes match their roles
Impact: Critical
Total Failing Elements: 8

3. No Accessible Name (General)
Impact: Critical
Total Failing Elements: 4

4. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 3

5. No Accessible Name (Iframe)
Impact: Critical
Total Failing Elements: 2

6. ARIA IDs are unique
Impact: Critical
Total Failing Elements: 2

7. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 2
Affecting 2 pages

8. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 1

ISSUES BY CATEGORY (IRCTC)

9. Alt Only For Images
Impact: Serious
Total Failing Elements: 36

10. Ensures that elements labelled through their content must have their visible text as part of their accessible name
Impact: Serious
Total Failing Elements: 8

INDIVIDUAL TEST REPORTS – WEBSITES

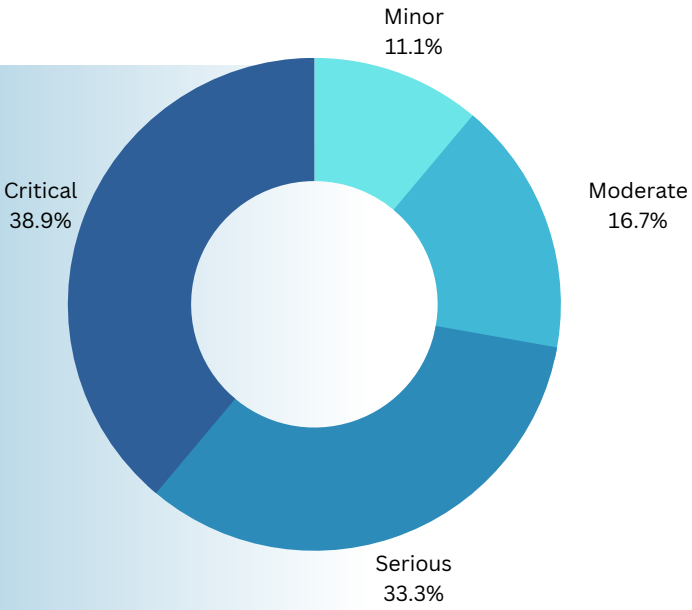
E-PATHSHALA

OVERVIEW

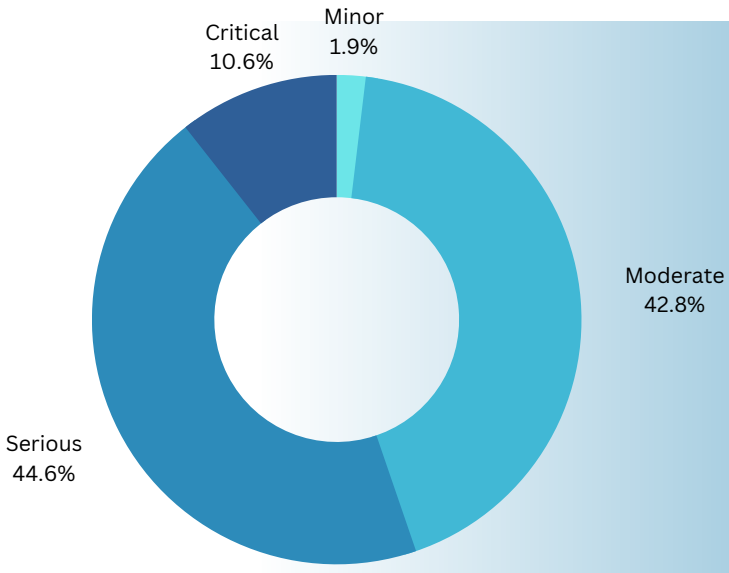
Website Base URL: https://epathshala.nic.in/
Website Name: e-Pathshala
Number of pages tested: 47
Test Score: 83
Test Criteria Failure: 11%
Number of test criteria: 168
Number of Failed Test Criteria: 18

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **18** in total. The following chart shows the further breakdown by end user impact.



FAILED TEST CRITERIA BY IMPACT (E-PATHSHALA)



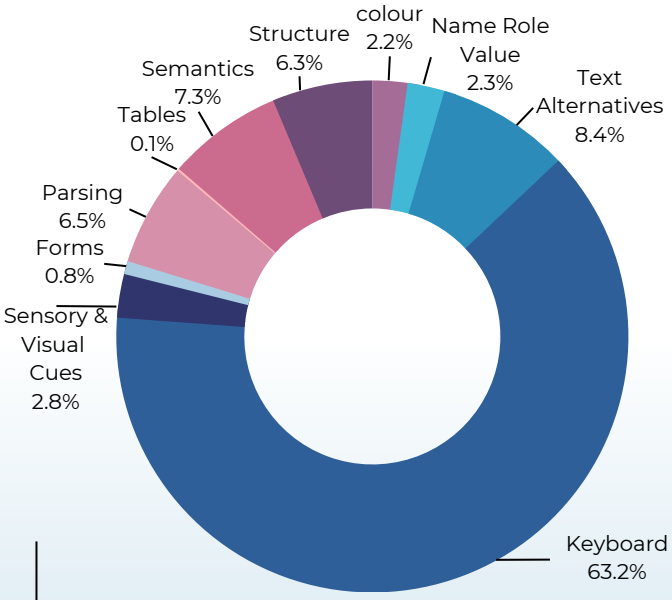
The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **726** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (E-PATHSHALA)

The following pie chart displays the issue breakdown by categories.

TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.



1. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 51
1 Elements affecting 30 pages (could be a template issue)

2. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 16

3. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 6

4. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 1

5. ARIA IDs are unique
Impact: Critical
Total Failing Elements: 1

6. Table Has No TH
Impact: Critical
Total Failing Elements: 1

7. No Page Title
Impact: Critical
Total Failing Elements: 1

8. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 184
4 Elements affecting all the pages
2 Elements affecting 2 pages

ISSUES BY CATEGORY (E-PATHSHALA)

9. Lists contain only `<li>` elements and script supporting elements (`<script>` and `<template>`).
Impact: Serious
Total Failing Elements: 46
1 Elements affecting all the pages

10. Anchor Target Not Found
Impact: Serious
Total Failing Elements: 45
1 Elements affecting all the pages

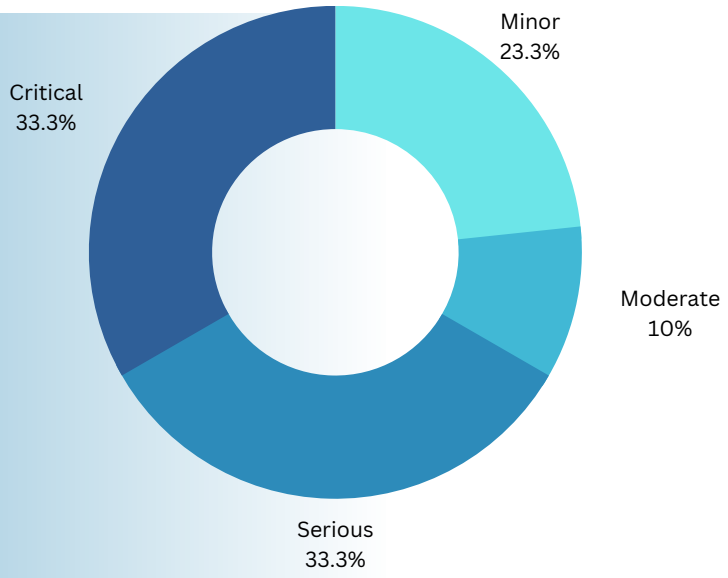
EMPLOYEE PROVIDENT FUND ORGANISATION (EPFO)

OVERVIEW

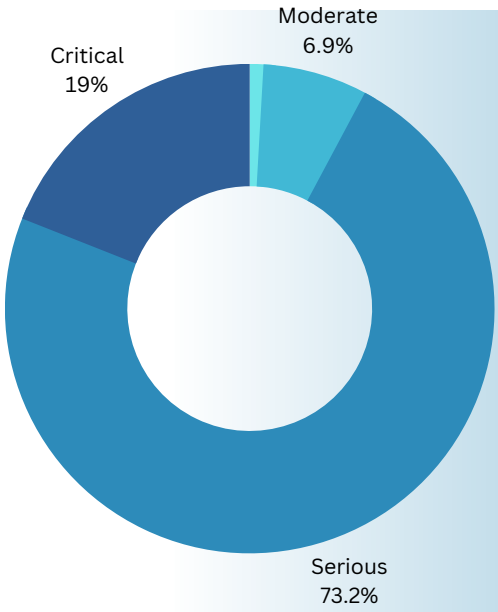
Website Base URL: https://www.epfindia.gov.in/
Website Name: Employee Provident Fund Organisation (EPFO)
Number of pages tested: 567
Test Score: 72
Test Criteria Failure: 18%
Number of test criteria: 168
Number of Failed Test Criteria: 30

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **30** in total. The following chart shows the further breakdown by end user impact.



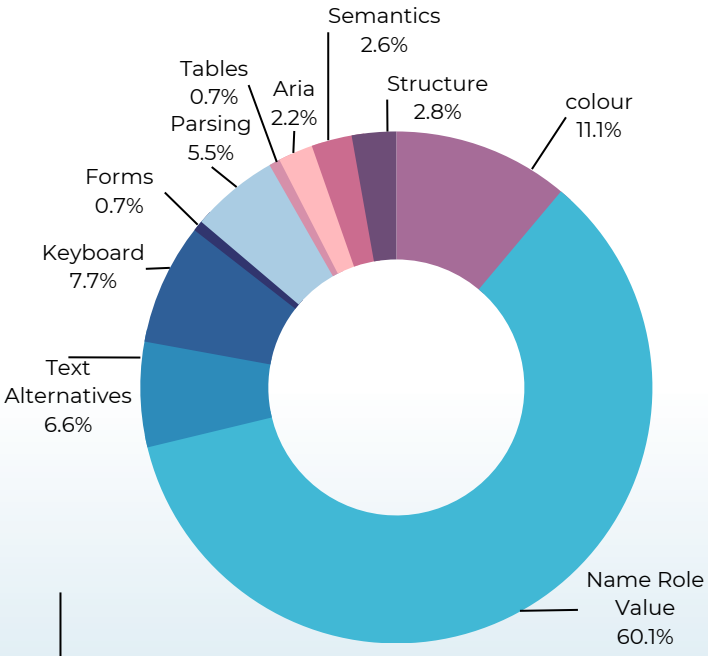
FAILED TEST CRITERIA BY IMPACT (EPFO)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **46045** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (EPFO)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 5110
3 Elements affecting all the pages (could be a template issue)
77 Elements affecting 40 pages (could be a template issue)

2. `[id]` attributes on active, focusable elements are unique
Impact: Critical
Total Failing Elements: 940
2 Elements affecting all the pages (could be a template issue)
2 Elements affecting 39 pages

3. `[aria-*]` attributes have valid values
Impact: Critical
Total Failing Elements: 834

4. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 810
1 Elements affecting all the pages (could be a template issue)
2 Elements affecting 78 pages
5 Elements affecting 27 pages

5. Marquee Found
Impact: Critical
Total Failing Elements: 629
1 Elements affecting all the pages (could be a template issue)
4 Elements affecting 38 pages

6. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 309
4 Elements affecting 55 pages (could be a template issue)
2 Elements affecting 32 pages

ISSUES BY CATEGORY (EPFO)

7. Table Has No TH
Impact: Critical
Total Failing Elements: 96
1 Elements affecting 55 pages
1 Elements affecting 32 pages

8. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 10
4 Elements affecting 2 pages

9. No Page Title
Impact: Critical
Total Failing Elements: 2
Affecting 2 pages

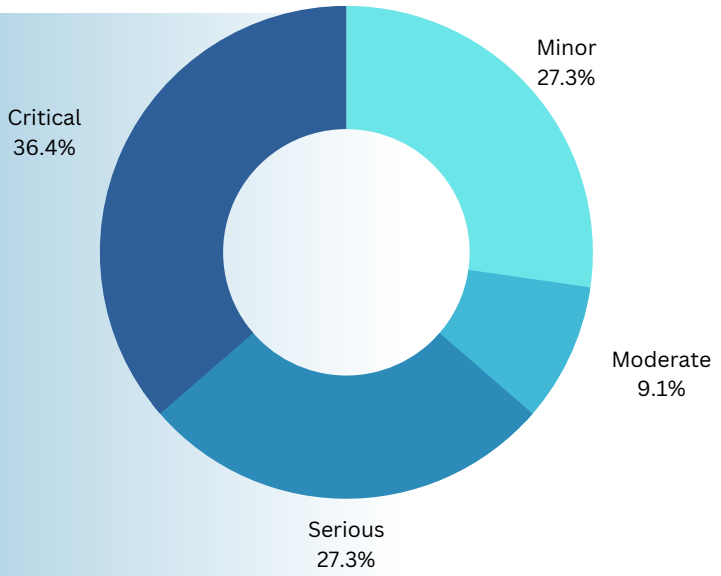
NATIONAL HANDICAPPED FINANCE & DEVELOPMENT CORPORATION

OVERVIEW

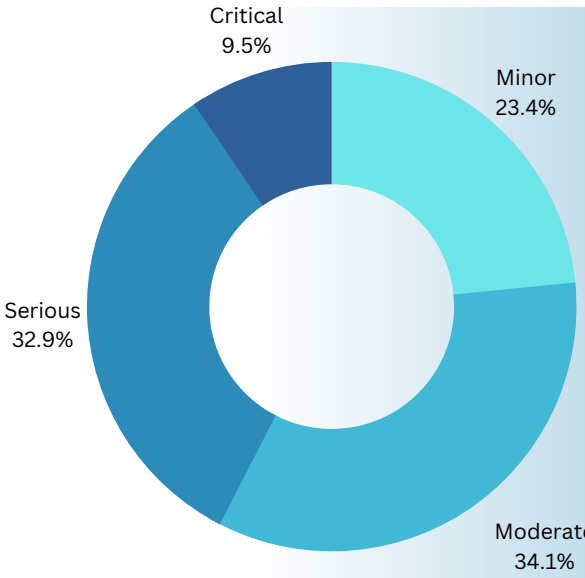
Website Base URL: https://www.nhfdc.nic.in/
Website Name: National Handicapped Finance & Development Corporation
Number of pages tested: 217
Test Score: 63
Test Criteria Failure: 13%
Number of test criteria: 168
Number of Failed Test Criteria: 22

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **22** in total. The following chart shows the further breakdown by end user impact.



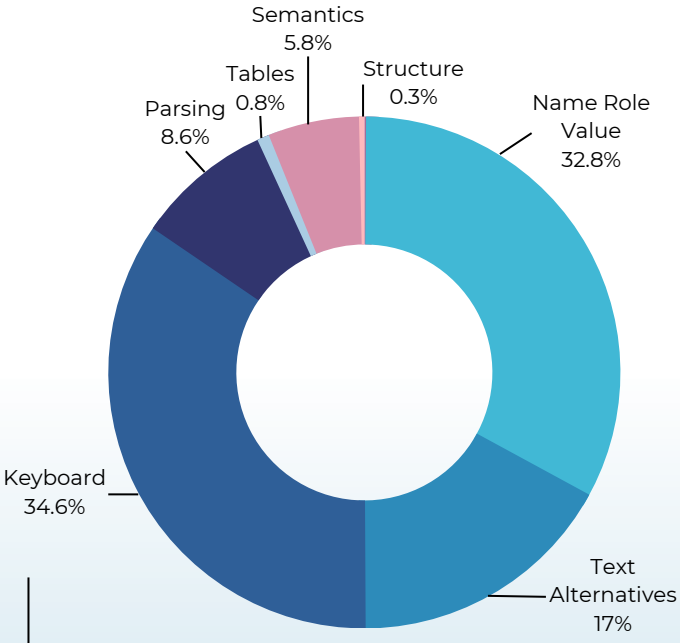
FAILED TEST CRITERIA BY IMPACT (NATIONAL HANDICAPPED FINANCE & DEVELOPMENT CORPORATION)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **29502** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (NATIONAL HANDICAPPED FINANCE & DEVELOPMENT CORPORATION)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 2426
9 Elements affecting all the pages (could be a template issue)
4 Elements affecting 115 pages (could be a template issue)

2. Table Has No TH
Impact: Critical
Total Failing Elements: 217
1 Elements affecting 171 pages (could be a template issue)
1 Elements affecting 44 pages

3. Page Title Empty
Impact: Critical
Total Failing Elements: 113
Affecting 113 pages

4. No Accessible Name (Iframe)
Impact: Critical
Total Failing Elements: 26
4 Elements affecting 2 pages

5. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 17

6. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 3

ISSUES BY CATEGORY (NATIONAL HANDICAPPED FINANCE & DEVELOPMENT CORPORATION)

7. Accesskey Duplicate
Impact: Critical
Total Failing Elements: 3

8. Ambiguous Link
Impact: Serious
Total Failing Elements: 9355
47 Elements affecting 113 pages
38 Elements affecting 99 pages

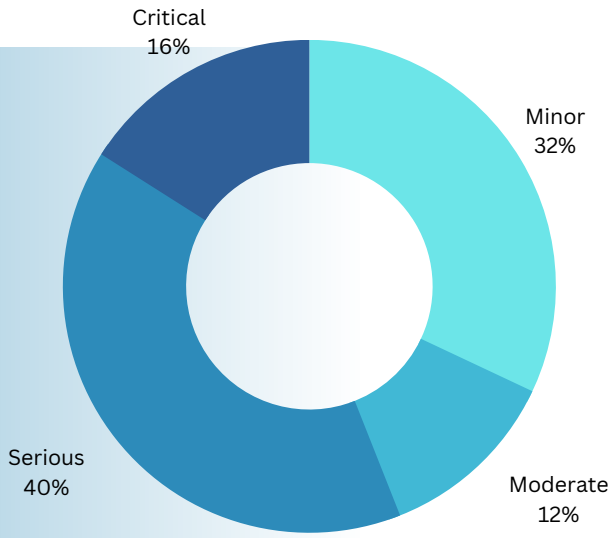
UNION PUBLIC SERVICE COMMISSION (UPSC)

OVERVIEW

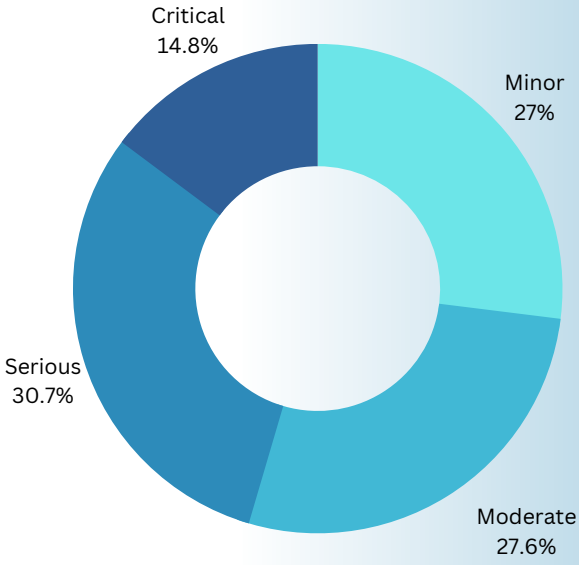
Website Base URL: https://www.upsc.gov.in/
Website Name: Union Public Service Commission
Number of pages tested: 480
Test Score: 82
Test Criteria Failure: 15%
Number of test criteria: 168
Number of Failed Test Criteria: 25

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **25** in total. The following chart shows the further breakdown by end user impact.



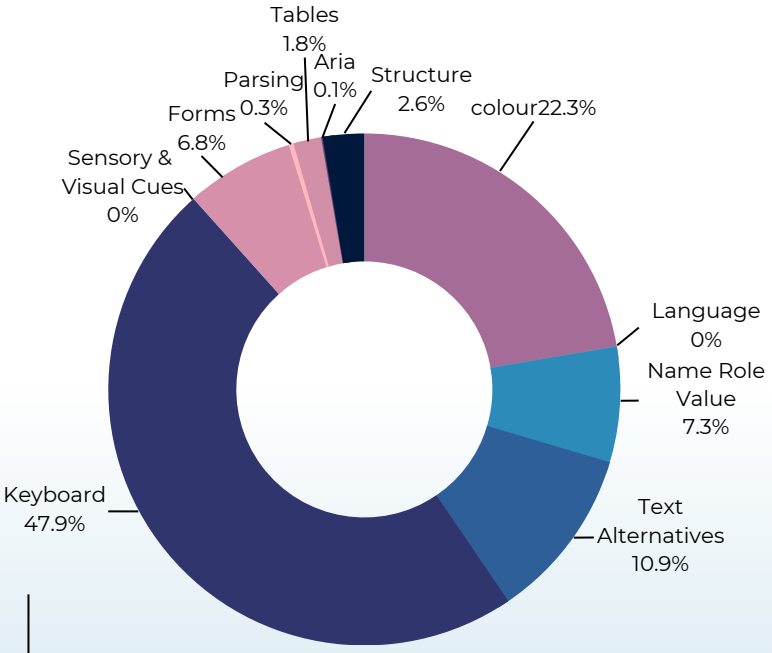
FAILED TEST CRITERIA BY IMPACT (UPSC)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **7009** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (UPSC)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 1010
1 Elements affecting 324 pages (could be a template issue)
2 Elements affecting 155 pages (could be a template issue)
2 Elements affecting 47 pages (could be a template issue)

2. Image Alt Not Descriptive
Impact: Critical
Total Failing Elements: 14
6 Elements affecting 2 pages

3. Marquee Found
Impact: Critical
Total Failing Elements: 8

4. Table Has No TH
Impact: Critical
Total Failing Elements: 7

5. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 958
2 Elements affecting all the pages

6. Ambiguous Link
Impact: Critical
Total Failing Elements: 485
5 Elements affecting 10 pages

7. Ensures that every form element has a visible label and is not solely labeled using hidden labels, or the title or aria-describedby attributes
Impact: Critical
Total Failing Elements: 479
1 Elements affecting all the pages

ISSUES BY CATEGORY (UPSC)

8. Lists contain only `<li>` elements and script supporting elements (`<script>` and `<template>`).
Impact: Serious
Total Failing Elements: 183
1 Elements affecting 68 pages

9. Links have a discernible name
Impact: Serious
Total Failing Elements: 16
2 Elements affecting 4 pages
4 Elements affecting 2 pages

10. Anchor Target Not Found
Impact: Serious
Total Failing Elements: 14

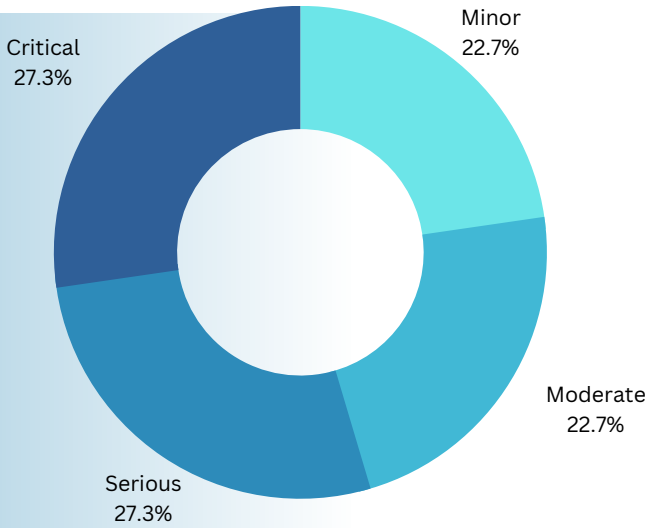
STAFF SELECTION COMMISSION (SSC)

OVERVIEW

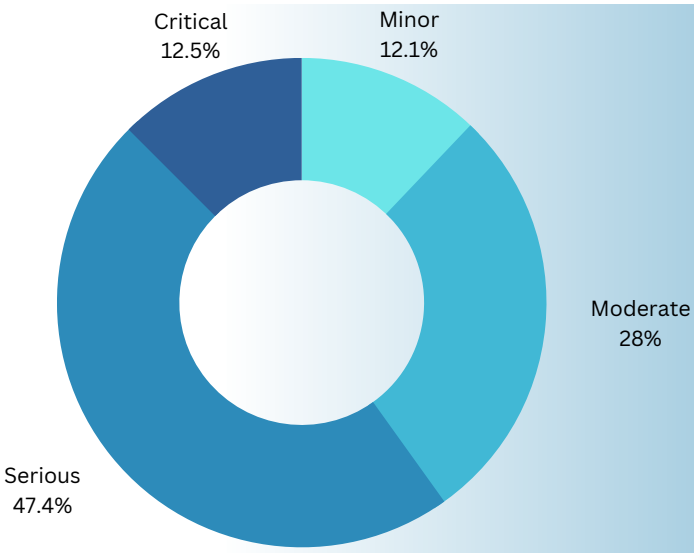
Website Base URL: https://ssc.nic.in/
Website Name: Staff Selection Commission
Number of pages tested: 33
Test Score: 78
Test Criteria Failure: 13%
Number of test criteria: 168
Number of Failed Test Criteria: 22

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **22** in total. The following chart shows the further breakdown by end user impact.



FAILED TEST CRITERIA BY IMPACT (SSC)



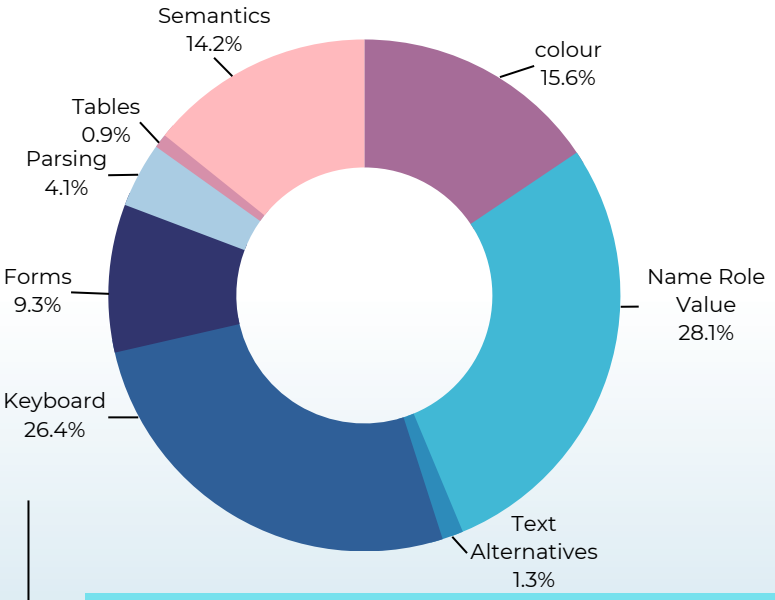
The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **899** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (SSC)

The following pie chart displays the issue breakdown by categories.

TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.



1. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 53
1 Elements affecting all the pages (could be a template issue)

2. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 45
5 Elements affecting 2 pages

3. Image Alt Not Descriptive
Impact: Critical
Total Failing Elements: 11
1 Elements affecting 5 pages

4. Table Has No TH
Impact: Critical
Total Failing Elements: 1

5. No Page Title
Impact: Critical
Total Failing Elements: 1

6. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 1

7. Ambiguous Link
Impact: Serious
Total Failing Elements: 248
2 Elements affecting 2 pages

8. Link Click But No Keyboard Access
Impact: Serious
Total Failing Elements: 95
3 Elements affecting all the pages

ISSUES BY CATEGORY (SSC)

9. Possible Mouse-only Link
Impact: Serious
Total Failing Elements: 48
1 Elements affecting all the pages
2 Elements affecting 3 pages

10. Ensures that every form element has a visible label and is not solely labeled using hidden labels, or the title or aria-describedby attributes
Impact: Serious
Total Failing Elements: 31
1 Elements affecting all the pages

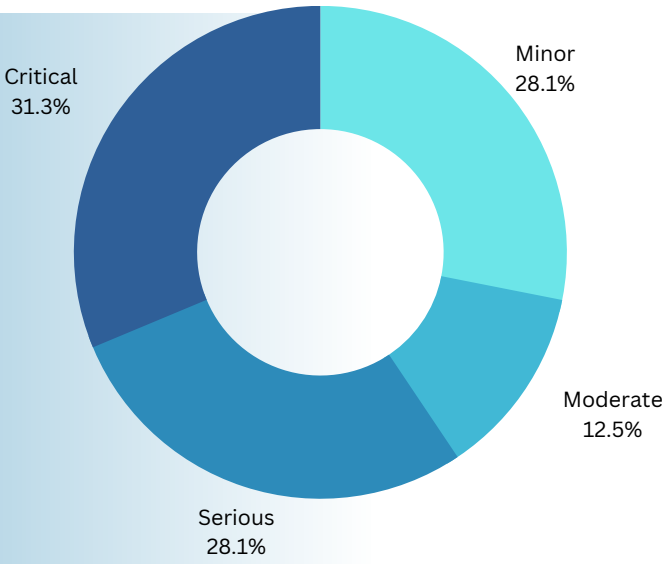
NATIONAL CAREER SERVICE (NCS)

OVERVIEW

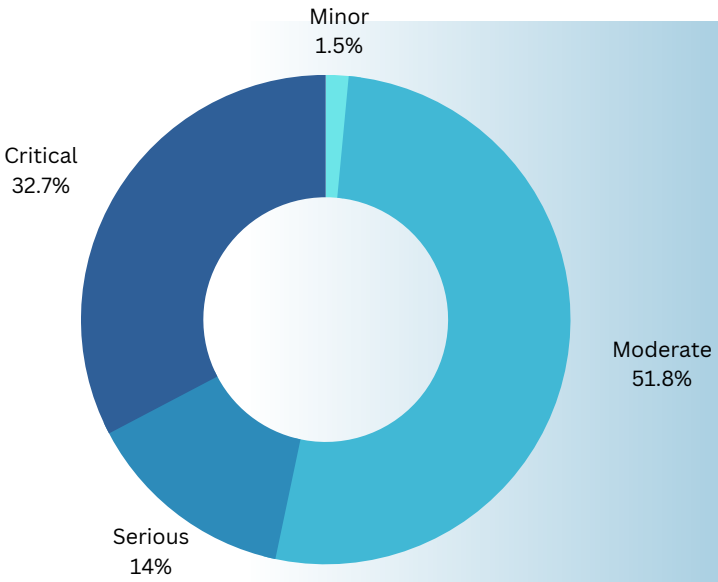
Website Base URL: https://www.ncs.gov.in/
Website Name: National Career Service
Number of pages tested: 254
Test Score: 71
Test Criteria Failure: 19%
Number of test criteria: 168
Number of Failed Test Criteria: 32

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **32** in total. The following chart shows the further breakdown by end user impact.



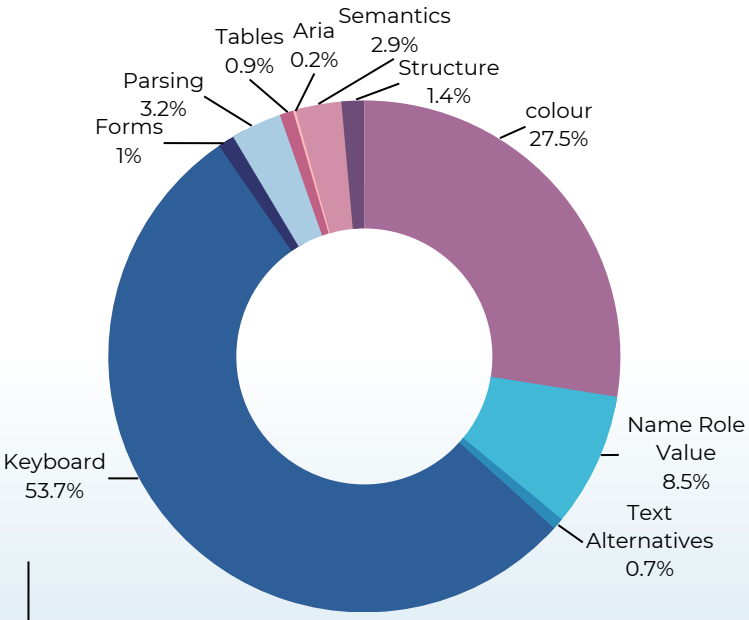
FAILED TEST CRITERIA BY IMPACT (NCS)



The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **18649** in total. The following chart shows the further breakdown by end user impact.

ISSUE BREAKDOWN BY IMPACT (NCS)

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 5132
1 Elements affecting all the pages
8 Elements affecting 31 pages
8 Elements affecting 10+ pages

2. Ensures every ID attribute value is unique
Impact: Critical
Total Failing Elements: 576
2 Elements affecting 151 pages
2 Elements affecting 104 pages
2 Elements affecting 13 pages

3. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 195
1 Elements affecting 32 pages
4 Elements affecting 6 pages

4. Table Has No TH
Impact: Critical
Total Failing Elements: 128
1 Elements affecting 32 pages
17 Elements affecting 2 pages

5. ARIA IDs are unique
Impact: Critical
Total Failing Elements: 19
1 Elements affecting 19 pages

6. `[aria-*]` attributes match their roles
Impact: Critical
Total Failing Elements: 16
1 Elements affecting 10 pages

7. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 14

ISSUES BY CATEGORY (NCS)

8. Page Title Empty
Impact: Critical
Total Failing Elements: 11

9. Nested Label For Doesn't Match
Impact: Critical
Total Failing Elements: 2

10. `[id]` attributes on active, focusable elements are unique
Impact: Critical
Total Failing Elements: 2

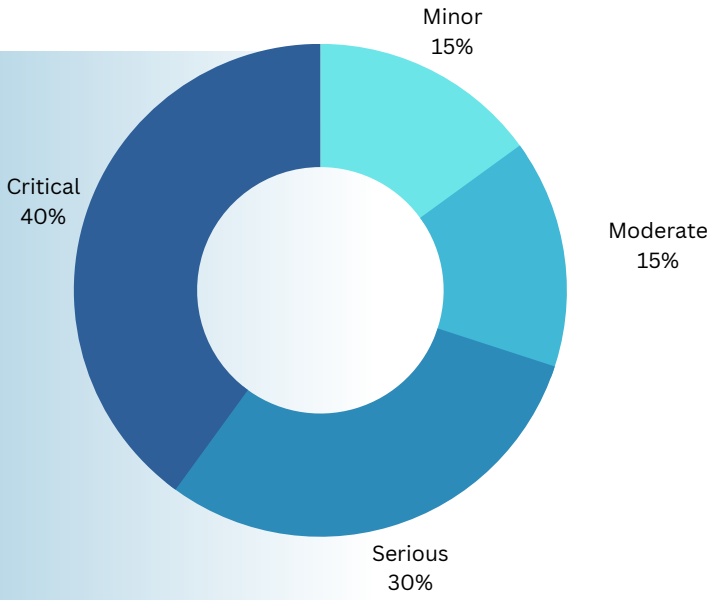
PRADHAN MANTRI KAUSHAL VIKAS YOJANA (PMKVY)

OVERVIEW

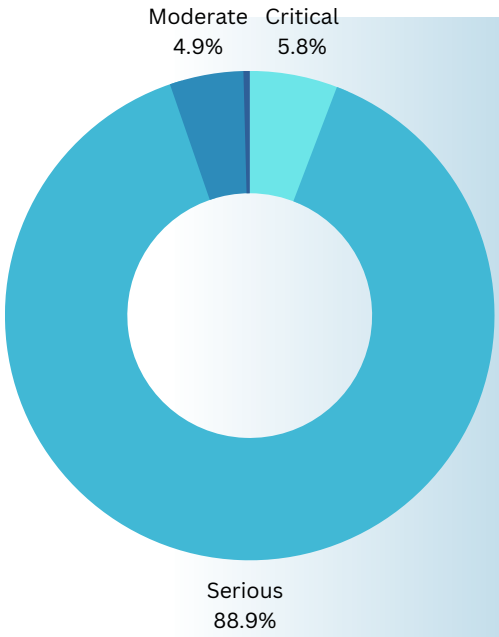
Website Base URL: https://www.pmkvyofficial.org/
Website Name: Pradhan Mantri Kaushal Vikas Yojana (PMKVY)
Number of pages tested: 51
Test Score: 75
Test Criteria Failure: 12%
Number of test criteria: 168
Number of Failed Test Criteria: 20

TEST RESULT STATS

The following pie chart displays the failed test criteria by impact. The total number of failed test criteria is **20** in total. The following chart shows the further breakdown by end user impact.



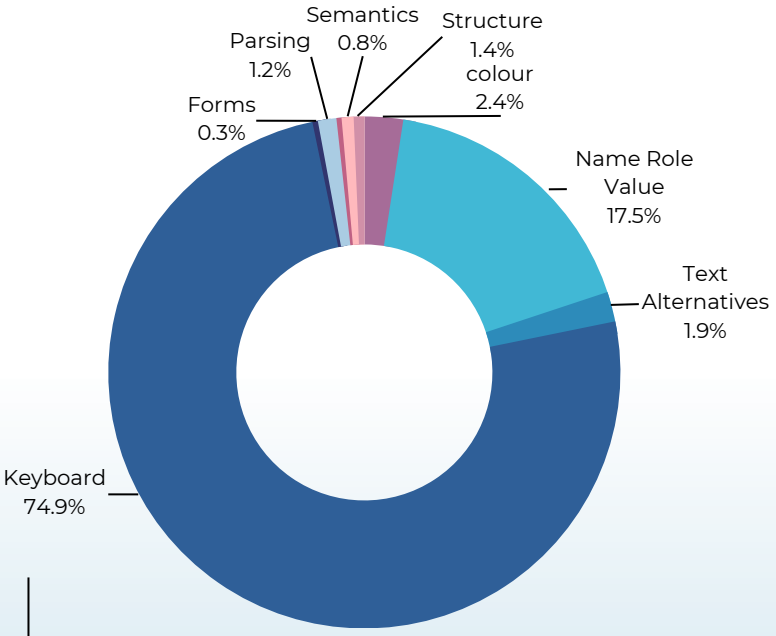
FAILED TEST CRITERIA BY IMPACT (PMKVY)



ISSUE BREAKDOWN BY IMPACT (PMKVY)

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **7794** in total. The following chart shows the further breakdown by end user impact.

The following pie chart displays the issue breakdown by categories.



TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Contrast ratio minimum requirement
Impact: Critical
Total Failing Elements: 188
1 Elements affecting all the pages
2 Elements affecting 23 pages
4 Elements affecting 2 pages

2. Ensures every id attribute value is unique
Impact: Critical
Total Failing Elements: 88
1 Elements affecting 31 pages
1 Elements affecting 28 pages
1 Elements affecting 23 pages

3. No Accessible Name (Image)
Impact: Critical
Total Failing Elements: 84

4. No Accessible Name (Iframe)
Impact: Critical
Total Failing Elements: 37
1 Elements affecting 32 pages
8 Elements affecting 3 pages

5. No Accessible Name (Form Element)
Impact: Critical
Total Failing Elements: 27

6. Table Has No TH
Impact: Critical
Total Failing Elements: 25
1 Elements affecting 3 pages

7. Marquee Found
Impact: Critical
Total Failing Elements: 2

ISSUES BY CATEGORY (PMKVY)

8. `[id]` attributes on active, focusable elements are unique
Impact: Critical
Total Failing Elements: 1

9. Link Click But No Keyboard Access
Impact: Serious
Total Failing Elements: 5511

10. Ambiguous Link
Impact: Serious
Total Failing Elements: 1337
22 Elements affecting all the pages (could be a template issue)

INDIVIDUAL TEST REPORTS – MOBILE APPS

The evaluation is performed on the mobile application on Android and iOS. The different screens in the mobile app are navigated and tested for accessibility readiness. The issues identified in the test report are classified based on the impact on users with disabilities.
Note that the testing can also be performed in a simulated network throttled environment to test the app behaviour in a low network quality environment. But those are out of scope for this report.

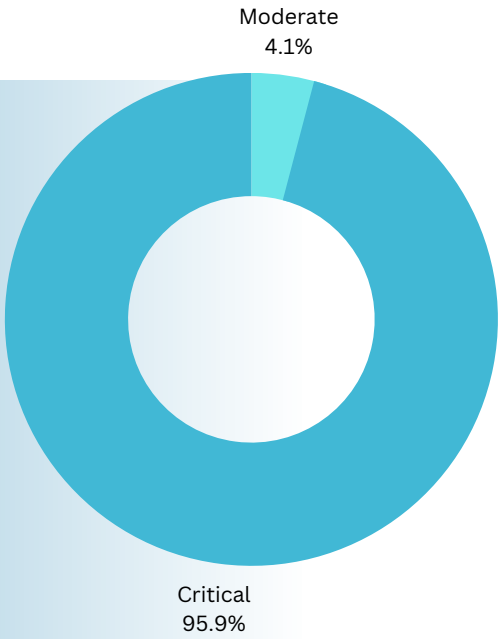
UMANG INDIA

OVERVIEW

Android Package ID: in.gov.umang.negd.g2c.international
App Name: UMANG India
Number of screens tested: 26
Test Score: 58
Number of test criteria: 12
Number of Failed Test Criteria: 4

TEST RESULT STATS

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is 271 in total. The following chart shows the further breakdown by end user impact.



ISSUE BREAKDOWN BY IMPACT (UMANG INDIA)

The following pie chart displays the issue breakdown by categories.

TOP ISSUES

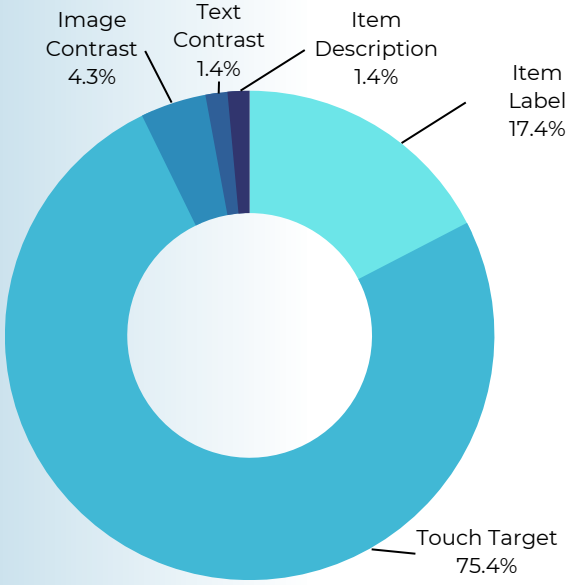
The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Touch target size
Impact: Critical
Total Failing Elements: 132

2. Image Contrast
Impact: Critical
Total Failing Elements: 68

3. Item Label issues
Impact: Critical
Total Failing Elements: 46

4. Text Contrast
Impact: Critical
Total Failing Elements: 14



ISSUES BY CATEGORY (UMANG INDIA)

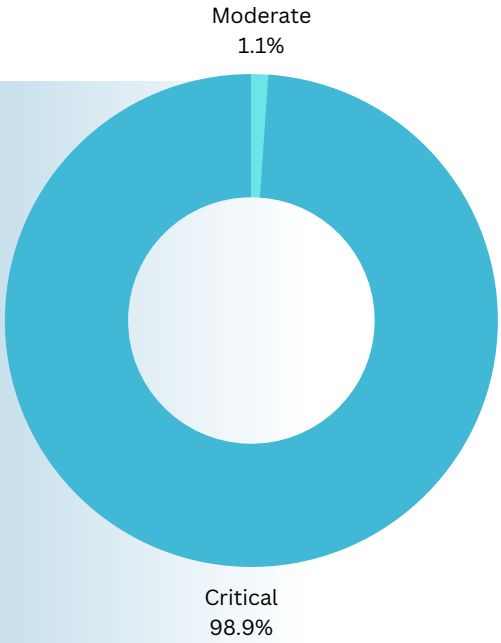
DIGILOCKER

OVERVIEW

Android Package ID: com.digilocker.android
App Name: Digilocker
Number of screens tested: 35
Test Score: 61
Number of test criteria: 12
Number of Failed Test Criteria: 4

TEST RESULT STATS

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **282** in total. The following chart shows the further breakdown by end user impact.



ISSUE BREAKDOWN BY IMPACT (DIGILOCKER)

The following pie chart displays the issue breakdown by categories.

TOP ISSUES

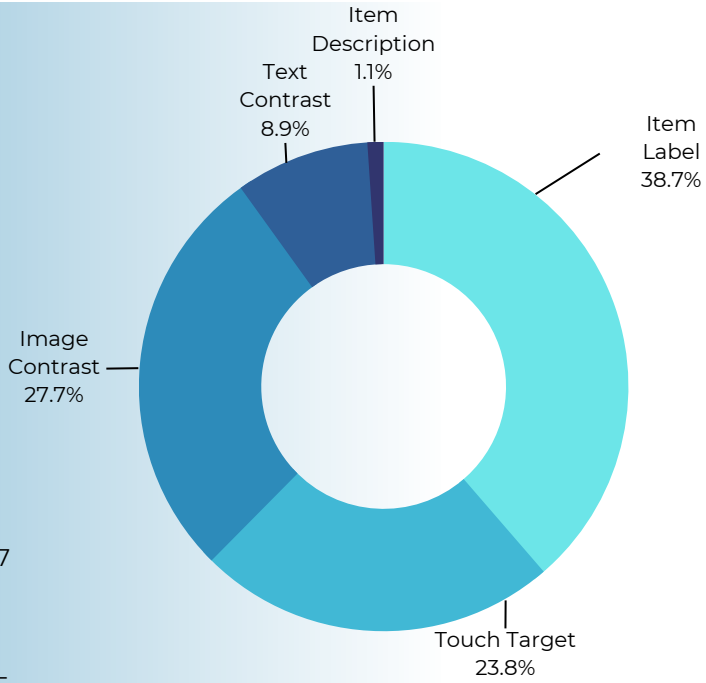
The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Item Label issues
Impact: Critical
Total Failing Elements: 109

2. Image Contrast
Impact: Critical
Total Failing Elements: 78

3. Touch target size
Impact: Critical
Total Failing Elements: 67

4. Text Contrast
Impact: Critical
Total Failing Elements: 25



ISSUES BY CATEGORY (DIGILOCKER)

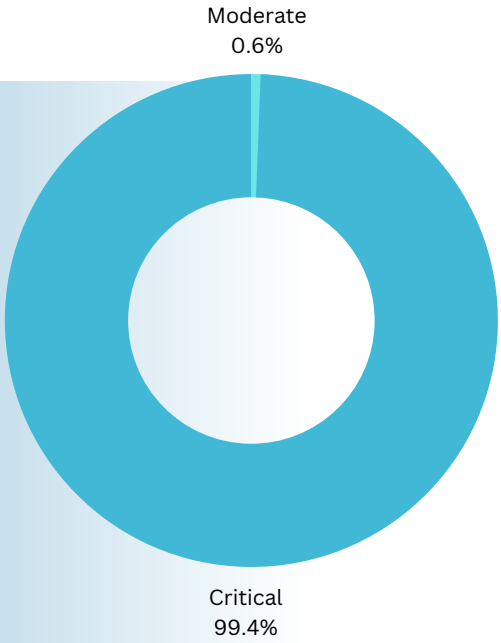
MERA RATION

OVERVIEW

Android Package ID: com.nic.onenationonecard
App Name: Mera Ration
Number of screens tested: 30
Test Score: 62
Number of test criteria: 12
Number of Failed Test Criteria: 4

TEST RESULT STATS

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **158** in total. The following chart shows the further breakdown by end user impact.



ISSUE BREAKDOWN BY IMPACT (MERA RATION)

The following pie chart displays the issue breakdown by categories.

TOP ISSUES

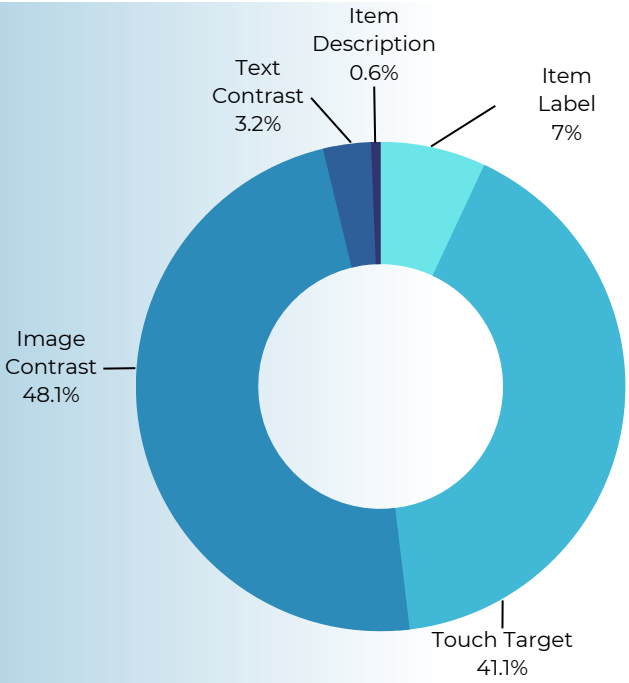
The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Image Contrast
Impact: Critical
Total Failing Elements: 76

2. Touch target size
Impact: Critical
Total Failing Elements: 65

3. Item Label issues
Impact: Critical
Total Failing Elements: 11

4. Text Contrast
Impact: Critical
Total Failing Elements: 5



ISSUES BY CATEGORY (MERA RATION)

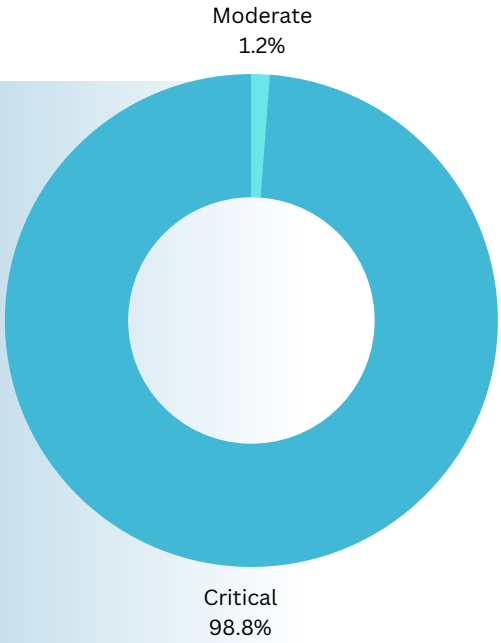
AAROGYA SETU

OVERVIEW

Android Package ID: nic.goi.aarogyasetu
App Name: Aarogya Setu
Number of screens tested: 18
Test Score: 62
Number of test criteria: 12
Number of Failed Test Criteria: 4

TEST RESULT STATS

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **163** in total. The following chart shows the further breakdown by end user impact.



ISSUE BREAKDOWN BY IMPACT (AAROGYA SETU)

The following pie chart displays the issue breakdown by categories.

TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

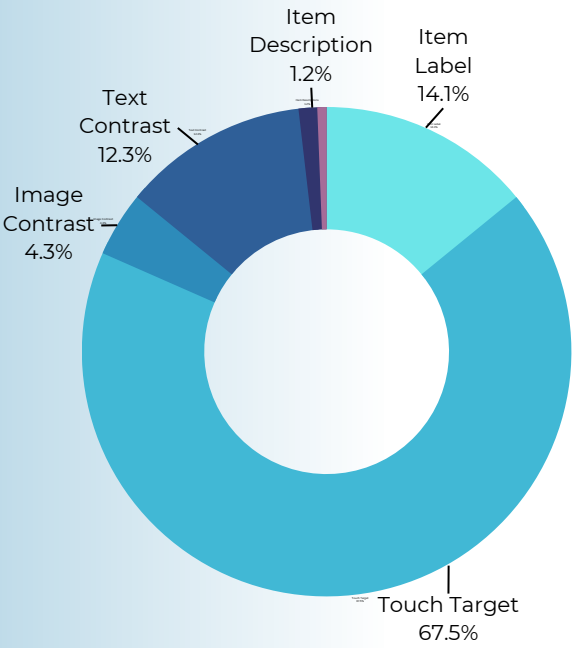
1. Image Contrast
Impact: Critical
Total Failing Elements: 76

2. Touch target size
Impact: Critical
Total Failing Elements: 65

3. Text Contrast
Impact: Critical
Total Failing Elements: 20

4. Image Contrast
Impact: Critical
Total Failing Elements: 7

5. Unsupported Item Type
Impact: Critical
Total Failing Elements: 1



ISSUES BY CATEGORY (AAROGYA SETU)

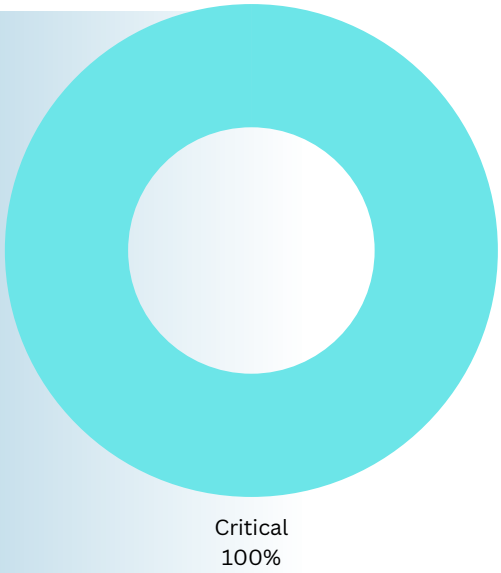
DIKSHA - FOR SCHOOL EDUCATION

OVERVIEW

Android Package ID: in.gov.diksha.app
App Name: DIKSHA - for School Education
Number of screens tested: 30
Test Score: 80
Number of test criteria: 12
Number of Failed Test Criteria: 4

TEST RESULT STATS

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **149** in total. The following chart shows the further breakdown by end user impact.



ISSUE BREAKDOWN BY IMPACT (DIKSHA)

The following pie chart displays the issue breakdown by categories.

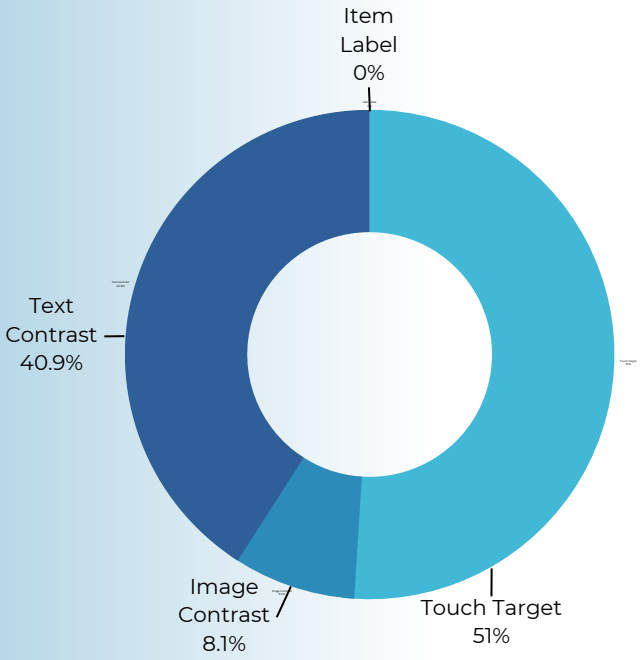
TOP ISSUES

The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Touch target size
Impact: Critical
Total Failing Elements: 76

2. Text Contrast
Impact: Critical
Total Failing Elements: 61

3. Image Contrast
Impact: Critical
Total Failing Elements: 12



ISSUES BY CATEGORY (DIKSHA)

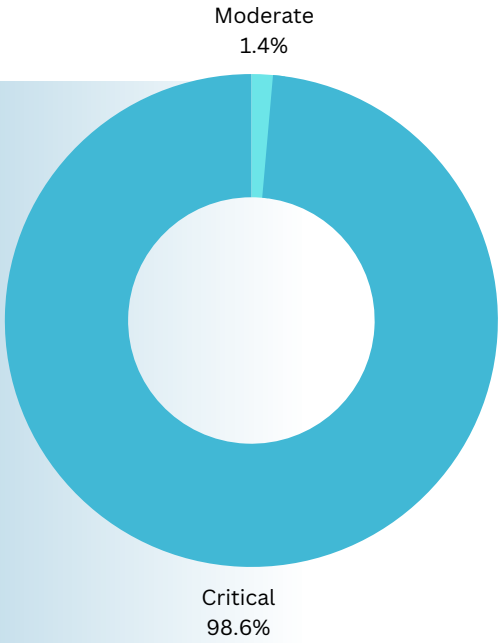
E-SHRAM

OVERVIEW

Android Package ID: in.gov.umang.negd.g2c
App Name: UMANG
Number of screens tested: 13
Test Score: 80
Number of test criteria: 12
Number of Failed Test Criteria: 4

TEST RESULT STATS

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **69** in total. The following chart shows the further breakdown by end user impact.



ISSUE BREAKDOWN BY IMPACT (E-SHRAM)

The following pie chart displays the issue breakdown by categories.

TOP ISSUES

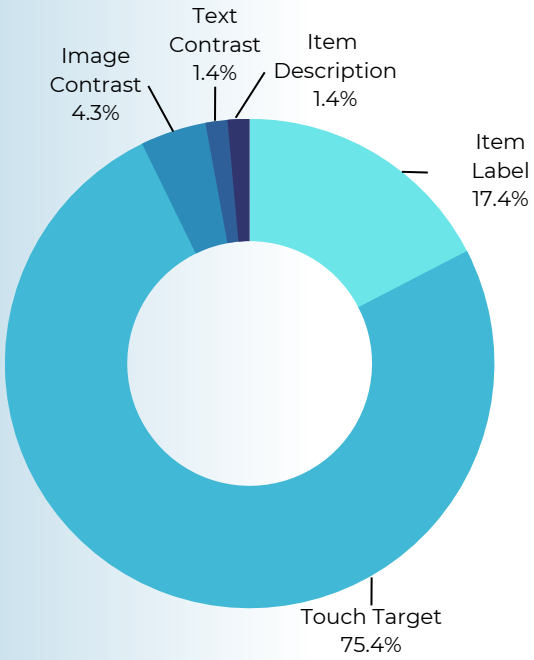
The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Touch target size
Impact: Critical
Total Failing Elements: 52

2. Item Label Issues
Impact: Critical
Total Failing Elements: 12

3. Image Contrast
Impact: Critical
Total Failing Elements: 3

4. Text Contrast
Impact: Critical
Total Failing Elements: 1



ISSUES BY CATEGORY (E-SHRAM)

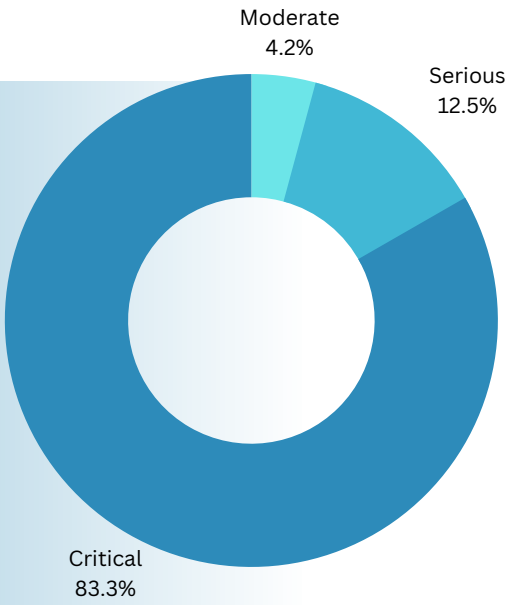
M-AADHAAR

OVERVIEW

Android Package ID: in.gov.uidai.mAadhaarPlus
App Name: mAadhaar
Number of screens tested: 9
Test Score: 55
Number of test criteria: 12
Number of Failed Test Criteria: 5

TEST RESULT STATS

The following pie chart displays the issue breakdown by impact. Each web element causing the test failure is called an issue. The total number of such failing elements is **24** in total. The following chart shows the further breakdown by end user impact.



ISSUE BREAKDOWN BY IMPACT (M-AADHAAR)

The following pie chart displays the issue breakdown by categories.

TOP ISSUES

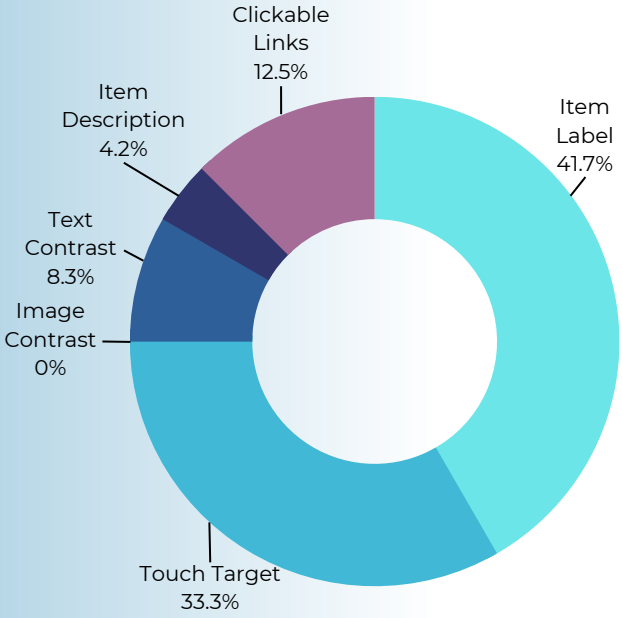
The following top issues are identified from the failed test criteria, classified as causing critical or serious user impact and are seen more often in multiple pages in the website. The repeated occurrence of the issue in multiple issues generally indicates that the template could itself be flawed. For example, this could be in the header, footer or logo element.

1. Item Label Issues
Impact: Critical
Total Failing Elements: 10

2. Touch target size
Impact: Critical
Total Failing Elements: 8

3. Text Contrast
Impact: Critical
Total Failing Elements: 2

4. Clickable Links
Impact: Serious
Total Failing Elements: 3



ISSUES BY CATEGORY (M-AADHAAR)

XIII. ANNEXURE II
USER SURVEY FINDINGS

The survey was taken using Google forms and covered the following questions –

Survey on Gap Assessment of ICT Accessibility standards compliance on digital platforms under Digital India Initiative

Government of India has taken several path breaking initiatives to promote Information, Communication & Technology (ICT) Accessibility and inclusivity, with Accessible India Campaign and Rights of Persons with Disabilities Act, 2016. However, the data points to measure the adoption levels have not been able to keep pace with changing digital ecosystem. On this background, in an effort to promote inclusion of persons with disabilities in the digital economy, we are undertaking a project that will study the implementation and impact of the Government of India's guidelines on ICT accessibility and assistive devices on websites and applications.

This survey is being carried out by Chase India in collaboration with the National Association for the Blind, Delhi (NAB Delhi) to understand the difficulties faced by persons with disabilities in using digital platforms. The result of this survey will be used to prepare a report and engage with all stakeholders with the objective of improving compliance with accessibility standards and ensure a better experience for persons with disabilities.

1. How old are you? (Optional)

2. What is your profession or occupation? (Optional)

3. Are you a Person with Disability? If yes, please indicate your category.
a. Blindness
b. Low Vision
c. Locomotor Disability
d. Muscular Dystrophy
e. Acid Attack Survivors
f. Dwarfism
g. Leprosy Cured Person
h. Hearing Impairment
i. Speech and Language Disability
j. Psychosocial Disability or Mental Illness
k. Intellectual Disability
l. Specific Learning Disability
m. Autism Spectrum Disorder
n. Disability caused due to Chronic Neurological Conditions
o. Disability caused due to Blood Disorder
p. Multiple Disability
q. Others
r. Choose not to disclose

4. Do you use Government websites or apps for accessing services? *
a. Yes
b. No

5. Which websites/apps are the major ones you access and what is the frequency. Please select all that apply.

The frequency of use of website such as Umang, DigiLocker, Co-Win, mAadhaar, Swayam, passport seva, IRCTC, RTI, CPGRAMS, Income Tax, EPFO, UPSC, SSC, National Career Service, Jeevan Praman, PMAY, e-pathshala, MyGov, Aarogya Setu or any other website that the stakeholders wanted to specify was sought in the user survey. The metrics for frequency was Daily/ Weekly/Monthly/Rarely or never used.

6. Are you aware of any accessibility standards/guidelines that the Government has put in place for its websites and apps? *

7. Please indicate to what extent do the above selected websites/apps cater to your accessibility needs. Please rate your experience in accessing information from each of the websites/apps that you have used on a scale of 1 to 5, where 1 means no accessibility and 5 is good accessibility.

The stakeholders were asked to rate the accessibility of websites and apps such as Umang, DigiLocker, Co-Win, mAadhaar, Swayam, passport seva, IRCTC, RTI, CPGRAMS, Income Tax, EPFO, UPSC, SSC, National Career Service, Jeevan Praman, PMAY, e-pathshala, MyGov, Aarogya Setu or any other website that the stakeholders wanted to specify on a scale of 1 to 5 with 1 meaning no accessibility and 5 meaning good accessibility.

8. What are your suggestions to enhance accessibility of these websites/apps? *

9. Any other suggestions that you would like to make for ensuring accessibility of Government websites and applications? *

The findings from the above data is summarised in the tables below –

Sl. No.	Name of the App/Website	Rating 1 (No Access)	Rating 2	Rating 3	Rating 4	Rating 5 (Good Access)
1	Umang	26	11	10	5	1
2	Digilocker	18	12	14	5	4
3	Co-Win	18	12	14	5	4
4	m-Aadhaar	23	13	10	2	5
5	Swayam	21	9	17	4	2
6	Passport Seva	20	14	13	3	3
7	IRCTC	20	10	12	8	3
8	RTI	19	16	12	4	2
9	CPGRAMS	23	11	13	4	2
10	Income Tax	19	9	16	4	5
11	EFPO	20	12	12	4	5
12	UPSC/SSC	21	14	11	3	4
13	National Career Service	23	13	9	6	2
14	Jeevan Praman	25	14	8	5	1
15	PMAY	20	15	12	4	2
16	e-Pathshala	20	14	13	3	3
17	MyGov	17	13	17	2	4
18	Aarogya Setu	19	12	13	4	5
19	NHFDC	24	9	12	6	1
20	PMKVY	21	11	14	3	3
21	State Police website	23	11	13	2	2
22	Local Municipal Website	24	9	16	4	1

XIV. ANNEXURE III
REVIEW OF TENDER DOCUMENTS

The table below contains the information of tender documents for all the 25 websites and apps that we assessed for ICT accessibility.

ICT Accessibility in tender documents				
S.No.	Website/App	Tender Document	Accessibility Included	Description
1	MyGov	https://static.mygov.in/rest/s3fs-public/mygov_167783681497519711.pdf	No	No criteria for games to be accessible or inclusive for PwDs
2	RTI	https://rti.gov.in/rfp1.pdf	No	Recognises that information should be accessible to all but does not provide for accessibility criteria. Further it only recognizes inaccessibility due to illiteracy but not on account of disability.
3	UP COP	https://uppolice.gov.in/site/writereaddata/siteContent/112UP/20220805164313 9067UP112_NexGen_RFP_05_08_2022 _UPLOAD.pdf	No	No mention of GIGW 2.0
4	Unique Disability ID	https://disabilityaffairs.gov.in/upload/uploadfiles/files/TenderprintingUDIDcard.pdf	Yes	This tender is for printing QR codes
5	DEPwD	https://disabilityaffairs.gov.in/upload/uploadfiles/files/RfP%20for%20MIS%20under%20AIC.pdf	Yes	Also talks about integration of AI & ML. Compliance with the Guidelines for Indian Government Websites (GIGW) and WCAG 2.0 (AA) Guidelines. Regular interactions and meetings shall be carried out by DEPwD.
6	Aaple Sarkar of Maharashtra	https://mahait.org/websitecontent/MahaIT%20GR/MHUCDH%20FINAL_RFP_21st_March_2023.pdf	Yes	The portal should comply to GIGW standard

7	Umang	https://www.meity.gov.in/writereaddata/files/tender_upload/UMANG_RFP_QAP_Draft%20v15_03May21.pdf	No	No mention of accessibility compliance.
8	DigiLocker	https://dic.gov.in/images/career/RFP-31-March.pdf (RFP for Selection of Agency for Accessibility Audit)	Yes	Includes Testing for Accessibility and Security on its Web portal and mobile Applications (Android and iOS). Has mention of GIGW/ISO 40500 i.e. based on WCAG 2.1 (A & AA) Guidelines for web and mobile applications
9	mAadhar	Tender document not available		
10	CPGRAMS	Tender document not available		
11	Mera Ration	Tender document not available		
13	e-Pathshala	Tender document not available		
14	EPFO	Tender document not available		
15	UPSC	https://www.upsc.gov.in/sites/default/files/Tender_for_Revamping_of_IT_System_in_UPSC.pdf	Yes	Recognises that information should be accessible to all but does not provide for accessibility criteria.
16	Staff Selection Commission	https://ssc.nic.in/SSCFileServer/PortalManagement/UploadedFiles/Tendernotice_1_26122022.pdf	Yes	Mentions requirement of compliance of GIGW guidelines by Service Provider for Portal.
17	National Career Service	https://labour.gov.in/sites/default/files/CETRegistrationSystem_TenderNotice_RFP.pdf Common Eligibility Test Registration System on NCS Portal	Yes	Recognises that information should be accessible to all with respect to WCAG 2.0 guidelines.
18	Aarogya Setu	Tender document not available		
19	DIKSHA- for school education	https://dic.gov.in/images/career/RFPTech-DIKSHA.pdf Technical Administration of DIKSHA Platform	Yes	Recognises that information should be accessible to all but does not provide for accessibility criteria.
20	e-SHRAM	Tender document not available		

21	Office of Chief Commissioner for Persons with Disabilities	Tender document not available		
22	Delhi Police	Tender document not available		
23	Rajasthan Grievance Portal	Tender document not available		
24	National Handicapped Finance & Development Corporation	Tender document not available		
25	Pradhan Mantri Kaushal Vikas Yojana (PMKVY)	Tender document not available		

Table 6:Tender Documents for Websites and apps, Source: Self-assessment

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ABOUT CHASE INDIA

Founded in 2011, Chase India is a leading public policy research and advisory firm with growing practices in Technology & FinTech, Transport & Infrastructure, Healthcare & Life Sciences, Development and Sustainability. Chase provides consultancy services to organisations for mitigating business risks through insight-based policy advocacy. Over the years, Chase India has collaboratively worked with multiple stakeholders such as government, parliamentarians, civil society organisations, academia, and corporates on several policy issues of critical importance. Chase India is committed to using its knowledge, high ethical standards, and result-oriented approach to drive positive action for its partners. Chase India has pan India presence with of offices in New Delhi, Mumbai, Pune, Hyderabad, Chennai, and Bengaluru and is a part of the WE Communications Group worldwide.

For more information, please visit www.chase-india.com.

ABOUT NATIONAL ASSOCIATION FOR THE BLIND DELHI

The National Association for the Blind, Delhi is a nationally and internationally awarded NGO striving to implement innovative solutions for complete independence of blind persons. Since its inception in 1979, it has undertaken various projects, which have immensely benefited the visually impaired and also successfully integrated them into the mainstream of life. Apart from rendering free and quality computer education, NAB-Delhi also provides a Preparatory school, Quality Education through Integration in the Mainstream Schools, Hostel for blind children, Pre-vocational Guidance centre, Multi-disability training centre for blind children with additional disabilities, Home for the aged blind, Talking book library, Computerised Braille press, Recreation facilities, Home Science Training Unit, Braille book library, Cell for the Empowerment of the blind women and undertakes various other supportive steps for the visually impaired.

ABOUT **SUMATAK TECHNOLOGIES LLP**

A software development startup specializing in creating innovative products within the Environmental, Social, and Governance (ESG) domains. Our cutting-edge solutions encompass vital areas like accessibility, cybersecurity powered by AI and ML, and harnessing the potential of Big Data. By leveraging modern technologies, we address real-life challenges and have a direct impact on improving day-to-day activities in people's lives. Our focus areas are carefully selected based on their potential for positive change and how they intersect with the everyday experiences of individuals.

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