Accessibility Under the Lens: A Comparative WCAG 2.2 and GIGW 3.0 Evaluation of IRCTC Against Indian and International Rail-Travel Platforms

Mahieka Jasrotia
National Institute of Fashion Technology, Kannur, Kerala, India

Taanya Ullal
National Institute of Fashion Technology, Kannur, Kerala, India

Abstract

The Indian Railway Catering and Tourism Corporation (IRCTC) is the sole governmentauthorised platform for booking train tickets online in India, serving over sixty-six million registered users, including many persons with disabilities (PwDs), older adults, and users with limited digital literacy. Despite this scale and its obligation under the RPwD Act, 2016 to serve PwD travellers, IRCTC currently publishes no accessibility statement and offers no dedicated accessibility mode. This paper audits IRCTC against WCAG 2.2 and GIGW 3.0, benchmarking it against RailYatri, Ixigo, MakeMyTrip, NTES, redBus, Goibibo, and the UK's Trainline, using automated testing, keyboard and screen-reader checks, and simulated low-vision, colour-blindness and dyslexia conditions. The study finds recurring failures on IRCTC in heading structure, alt text, contrast, focus order and zoom/reflow, against comparatively stronger native accessibility features on NTES and Trainline, and closes with concrete, benchmark-derived recommendations IRCTC could adopt to move closer to WCAG 2.2 AA and GIGW 3.0 conformance.

Keywords

Web Accessibility, WCAG 2.2, GIGW 3.0, IRCTC, Screen Reader Testing, Assistive Technology, Inclusive Design, E-Governance, Persons with Disabilities, Comparative Usability Benchmarking.