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A review and comparison of selected WCAG-based website digital accessibility assessment methodologies

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Abstract. A website accessibility assessment methodology provides a structured process that directs evaluators through a sequence of steps to determine whether a website conforms to established accessibility standards, such as the WCAG guidelines. This article presents a comparative examination of three major web accessibility evaluation frameworks: WCAG-EM (Website Accessibility Conformance Evaluation Methodology) developed by the W3C, RGAA (Référentiel Général d'Amélioration de l'Accessibilité), which is mandatory for public institutions in France, and the Polish Web Accessibility Evaluation Methodology created for use within the Polish public sector. Each of these approaches embodies a distinct perspective on evaluating digital accessibility, shaped by differing legal, technical, and organizational environments. The article contrasts these methodologies with respect to their scope, structural composition, integration with legal requirements, degree of detail, testing procedures, and practical usability. The findings underscore the strengths and weaknesses of each framework, offering insights into how evaluation practices may be adapted to national conditions while remaining consistent with international accessibility standards. The study concludes with a comparative analysis of selected characteristics across the examined methodologies.

Keywords: WCAG, WCAG-EM, RGAA, Polish Web Accessibility Evaluation Methodology

1 Introduction

1.1 Concept and Importance of Digital Accessibility

Digital accessibility refers to the design, implementation, and maintenance of websites, mobile applications, and other digital platforms in a way that ensures functionality and usability for individuals with diverse impairments, including visual, auditory, motor, and cognitive disabilities. Its purpose is to create digital environments that are perceivable, operable, understandable, and robust for the widest possible range of users, while remaining compatible with assistive technologies such as screen readers, magnifiers, voice interfaces, eye-tracking devices, or alternative input mechanisms.

Unlike traditional usability, digital accessibility encompasses all components of a digital product: functionality, source code, user interface architecture, content structure, and multimedia. Importantly, barriers encountered by users with disabilities typically arise not from their impairments but from inadequately implemented accessibility principles. While accessibility is essential for individuals with specific needs, it simultaneously offers benefits to all users. Features such as captions in noisy environments, increased contrast aiding older adults, or voice-based interfaces supporting hands-free operation illustrate the universality of accessible design.

1.2 Users and Usage Contexts of Accessible Solutions

Digital accessibility is relevant for every user, as it enhances clarity, operability, and readability across diverse contexts. However, for many individuals, it is a prerequisite for interacting with digital services altogether. People with low vision [1] may require magnification of up to 200%, high-contrast interfaces, larger interactive elements, and stable layouts. Blind users rely on screen readers [2, 3], consistent document structure, keyboard navigation, and alternative descriptions of graphical and multimedia content. Users with motor disabilities [4–7] may navigate using keyboards, voice commands, switches, eye-tracking systems, or other alternative input technologies. Individuals who are hard of hearing require intelligible content and textual equivalents for audio information. Deaf users often rely on sign-language communication and require simplified, highly comprehensible interfaces. These diverse requirements highlight that accessibility is not a fixed property but a dynamic quality responding to varied user capabilities and situational constraints.

It's worth noting that people with disabilities (e.g., the blind or wheelchair users) don't want to be digitally excluded and are capable of using digital technologies. Examples of services or applications designed specifically for people with disabilities include indoor navigation applications [8, 9] and others public services. The need for accessible communication arises from the diverse cognitive, linguistic, and situational limitations experienced by users when interacting with information. Individuals with intellectual disabilities, cognitive impairments, or learning difficulties such as dyslexia often encounter significant barriers in understanding complex texts. Similar challenges may affect older adults with age-related cognitive decline,

as well as non-native speakers and users operating under stress or time pressure. These factors highlight the importance of designing content that minimizes cognitive load and supports comprehension across diverse user groups. In response to these needs, the concept of Easy-to-Read (ETR) has been developed as a structured approach to simplifying written communication. ETR focuses on the use of clear vocabulary, short sentences, and logically organized content in order to enhance readability and understanding. As noted in [10], ETR has evolved into an interdisciplinary field that integrates insights from linguistics, accessibility studies, and cognitive science. Moreover, research such as [11] demonstrates that simplified language significantly improves usability and accessibility in digital environments. ETR is widely applied in contexts where clear communication is essential, including public administration, healthcare, legal information, and digital interfaces such as websites and mobile applications. Its implementation supports users in making informed decisions, particularly in situations involving complex or critical information. Consequently, ETR plays a crucial role in promoting inclusive communication and ensuring equitable access to information for all users.

1.3 Legal and Standardization Frameworks

Over the past decade, numerous countries have implemented legal regulations requiring digital accessibility in public-sector services and, increasingly, in private-sector solutions. In Europe, the central legislative instrument is Directive (EU) 2016/2102 [12], mandating accessibility of public-sector websites and mobile applications. This directive covers a wide range of products and services, including websites and mobile applications, ATMs and payment terminals, e-commerce services, e-books and e-readers, and transport and communication services. Member states are required to implement these provisions by June 2025.

In Poland, this directive has been transposed through the Act of 19 July 2019 [13] on ensuring accessibility for persons with special needs, complemented by the Act of 26 April 2024 concerning accessibility requirements for selected products and services offered by business entities. This act imposes an obligation to ensure digital accessibility in accordance with the WCAG 2.1 standard at level AA for websites and mobile applications of public entities. The amendment to the act of March 9, 2023, which entered into force on April 17, 2023, introduced additional obligations, such as the need to publish an Accessibility Declaration and conduct regular digital accessibility reviews [14].

At the international level, the Web Content Accessibility Guidelines (WCAG) [15], published by the World Wide Web Consortium (W3C), provide the most widely adopted accessibility standard. WCAG - currently in version 2.2 - specifies technical and design requirements for ensuring that digital content is accessible. These guidelines inform the work of developers, designers, editors, and regulators, and constitute the foundation for most legal accessibility requirements worldwide.

In the United States, digital accessibility is primarily regulated by Section 508 and the Americans with Disabilities Act. Section 508 of the Rehabilitation Act of 1973, amended in 1998, requires all federal agencies to ensure their information and communication technologies are accessible to people with disabilities. This includes websites, applications, electronic documents, and multimedia. The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination against people with disabilities in various areas of public life, including access

to online services. Although the ADA does not provide specific technical guidelines for digital accessibility, the U.S. Department of Justice recommends using the WCAG 2.1 standard as a reference point.

In the UK, digital accessibility is regulated by the Equality Act 2010 [16], which prohibits discrimination against people with disabilities and imposes an obligation to provide "reasonable accommodations" in accessing services, including digital services. Another regulation is the Public Sector Bodies (Websites and Mobile Applications) Accessibility Regulations [17]. These regulations oblige public sector bodies to ensure their websites and mobile applications are accessible in accordance with the WCAG 2.2 level AA standard. These regulations also require the publication of accessibility statements and regular compliance audits.

As can be seen, digital accessibility is increasingly regulated at the national and international levels.

1.4 Accessibility as a Continuous Process

While compliance with WCAG or related regulations is necessary, it does not automatically guarantee that a digital product will be accessible in practice. Accessibility should instead be approached as a continuous institutional process that spans strategic planning, design, implementation, evaluation, monitoring, and reporting. Achieving and maintaining accessibility requires organizational commitment, cross-functional collaboration, and iterative refinement of both content and technology.

This process-oriented perspective recognizes that digital products evolve over time and that accessibility can degrade due to interface redesigns, content updates, or changes in underlying technologies. Consequently, reliable and systematic assessment methods are required to ensure long-term accessibility compliance.

1.5 Challenges in Evaluating Digital Accessibility

The evaluation of digital accessibility is commonly performed by trained auditors who verify content, functionality, and technical architecture against WCAG criteria or equivalent national standards. However, this evaluation process is inherently complex and time-consuming due to the dynamic and increasingly sophisticated structure of modern websites. Contemporary digital platforms may contain interactive elements, dynamic content loading, multifaceted layouts, multimedia, and personalized or context-dependent components.

Furthermore, methodological inconsistencies across auditors can lead to divergent interpretations of the same WCAG criteria. As a result, a website may declare compliance while failing to meet essential requirements, especially when assessments lack standardized procedures or when automated tools are used without expert validation.

1.6 Role of Digital Accessibility Evaluation Methodologies

To address these challenges, several organizations have developed formalized digital accessibility evaluation methodologies. These frameworks aim to standardize evaluation processes and improve the comparability, reliability, and transparency of assessment results. Methodologies typically define:

- a structured sequence of evaluation steps;
- the required WCAG conformance level (A, AA, or AAA);
- procedures for selecting representative pages and functionalities;
- guidelines for conducting automated and manual tests;
- best practices for documenting findings and issuing accessibility statements;
- recommendations for involving users with disabilities in the evaluation process.

Prominent examples include the Website Accessibility Conformance Evaluation Methodology (WCAG-EM), the French Référentiel Général d'Amélioration de l'Accessibilité (RGAA), and the Polish Web Accessibility Evaluation Methodology. These frameworks support auditors in conducting consistent assessments and help organizations establish repeatable and verifiable accessibility assurance processes.

2 Methodologies for assessing the digital accessibility of websites

The following section presents three significant methodologies for evaluating website accessibility: WCAG-EM, RGAA, and the Polish Web Accessibility Evaluation Methodology.

2.1 WCAG-EM

One of the most significant methodologies for evaluating the digital accessibility of websites is the Website Accessibility Conformance Evaluation Methodology (WCAG-EM) [18]. This methodology was developed by the World Wide Web Consortium (W3C) as part of the Web Accessibility Initiative (WAI) [19]. WCAG-EM represents the official approach to assessing the conformance of websites with the WCAG.

Purpose and Scope. WCAG-EM was designed to provide consistent and structured guidance for evaluating the accessibility of entire websites, rather than individual pages [20]. Its main objective is to define the structure and procedures by which accessibility evaluations should be conducted. Importantly, WCAG-EM does not prescribe specific auditors or automated tools for conducting evaluations.

This methodology is particularly relevant for: organizations required to report the accessibility level of their digital services, accessibility auditors, designers and IT teams preparing conformance documentation, public institutions subject to legal regulations (e.g., the European Accessibility Act or the Web Accessibility Directive).

WCAG-EM allows for flexible adaptation of the scope and depth of evaluations depending on the goal of the assessment. It can be applied in the context of full certification audits, internal quality control, comparative studies, or evaluations of pilot projects.

Methodological Structure. The WCAG-EM methodology consists of five main phases:

1. *Define the Evaluation Goal.* At this stage, the purpose of the evaluation is specified, such as confirming conformance for an audit, identifying barriers from the end-user perspective, or monitoring changes over time.

2. *Define the Evaluation Scope.* This involves delineating the boundaries of the website or application under review, including the set of URLs, sections, functions, or resources to be included. All relevant components of the user interface, navigation elements, forms, and embedded resources must be considered.
3. *Explore the Website and Identify Components.* The evaluator explores the website to understand its structure, navigation logic, functionalities, and the technologies used in its construction. This phase also involves identifying different types of pages (e.g., forms, search interfaces, galleries, login pages, etc.).
4. *Select a Representative Sample of Web Pages.* Due to the complexity of modern websites, it is not feasible to analyze every single page. WCAG-EM recommends selecting a representative sample that reflects the typical functions, content types, and layouts of the website. This sample should include main pages, subpages, forms, various templates, and dynamic content.
5. *Evaluate Conformance and Report the Findings.* The final stage involves both manual and automated assessments of the selected components in relation to WCAG standards. WCAG-EM does not mandate the use of specific tools but encourages a hybrid approach combining automated methods with expert evaluation. The results are then aggregated and presented in a conformance report, which may include: level of conformance (A, AA, or AAA), specific errors and warnings, recommendations, scope of limitations.

Principles of Evaluation. WCAG-EM emphasizes the importance of transparency and reproducibility in the evaluation process. Each phase should be fully documented, from the justification of the chosen scope and page sample to the detailed description of applied methods and tools. For each evaluated unit, success criteria should be clearly identified, along with the reported conformance level and any limitations.

A distinctive feature of WCAG-EM is its flexibility. It can be scaled according to the needs, resources, and organizational context of the auditing team.

Significance in Practice and Policy. WCAG-EM is currently the recommended methodology by W3C and is widely used by accessibility auditors worldwide. In Europe, it has become the foundation for implementing requirements under the Web Accessibility Directive for public sector websites and mobile applications.

Numerous institutions also adopt WCAG-EM as a reference for developing their own digital accessibility policies. The methodology serves as a basis for designing automated evaluation solutions and hybrid approaches that combine automation with user testing.

Limitations. Despite its many strengths, WCAG-EM is not without limitations. A key challenge lies in the subjectivity of interpreting certain WCAG success criteria, which can lead to discrepancies between different evaluators. Additionally, the methodology relies heavily on manual analysis, which can be time-consuming and resource-intensive, especially for large-scale websites.

Another significant limitation is that WCAG-EM does not explicitly incorporate user experience (UX) or testing with users with disabilities, both of which are crucial complements to traditional conformance audits.

Conclusion. WCAG-EM is a comprehensive, flexible, and highly recommended methodology for digital accessibility evaluation, establishing a robust framework for assessing conformance with WCAG 2.x standards. While it does not replace automated tools or usability testing, it provides the foundation for a systematic, well-documented, and comparable evaluation process. Its importance is expected to grow in parallel with increasing legal and societal demands for digital inclusion.

2.2 RGAA

One of the most advanced and institutionally supported approaches to web accessibility evaluation in Europe is the French *Référentiel Général d'Amélioration de l'Accessibilité* (RGAA) [21,22]. This framework serves as the official digital accessibility standard in France and was developed to align national digital infrastructure with the international WCAG. Beyond being a practical auditing tool, RGAA functions as a legally binding document, distinguishing it from many internationally adopted but non-enforceable methodologies.

Legal and Institutional Context. RGAA was developed in response to France's 2005 Law on Equal Access to the Information Society, with its first version published by the Ministry for Digital Transformation and the Civil Service in 2009. Since its inception, RGAA has undergone several revisions to stay aligned with newer iterations of the WCAG. The current version is based on WCAG 2.1, corresponding to the AA conformance level.

The standard is mandatory for all public sector entities and organizations performing public missions in France. Its enforcement is overseen by regulatory bodies such as DINSIC and CNIL, and compliance reports are required to be publicly accessible. Thus, RGAA integrates both technical and regulatory dimensions within a unified framework.

Structure and Characteristics of RGAA. RGAA is characterized by precisely formulated and unambiguous test criteria, enabling replicable and measurable evaluation of user interface components. The framework consists of:

- a thematically organized list of accessibility criteria (e.g., images, tables, forms, multimedia),
- descriptions of test conditions, including specific questions and test cases,
- code examples and result interpretations, which help clarify ambiguous scenarios,
- mappings to WCAG, facilitating comparison with international guidelines.

In total, RGAA defines over 100 detailed test criteria, each mapped to corresponding WCAG success criteria and accompanied by a standardized testing procedure. This structured format significantly enhances its usability in real-world audits.

Evaluation Methodology. The RGAA audit process is divided into three key stages:

1. *Website Exploration and Functional Component Identification.* The audit team analyzes the site's structure, front-end technologies, and the variety of user interface elements.

2. *Conformance Testing Against RGAA Criteria.* Conducted by certified auditors, using a combination of automated tools and manual verification. The well-defined test scenarios are central to ensuring consistency and reliability of results.
3. *Reporting and Documentation.* Each audit concludes with a compliance report that includes error listings, percentage of conformance, and recommendations for remediation. French public institutions are required to publish an accessibility statement based on RGAA findings.

Unlike methodologies such as WCAG-EM, RGAA mandates full coverage of the evaluated application or website rather than relying on a representative sample. While this ensures a higher degree of accuracy, it also entails greater resource investment.

Integration with Digital Policy and Practice. RGAA plays a central role in shaping and implementing digital accessibility policy in France. Major public and private-sector organizations - such as SNCF, Orange, and EDF - regularly conduct audits using this standard. It serves as the foundation for certification, public project evaluation, and IT procurement processes. The strength of RGAA also lies in its robust implementation ecosystem, which includes: official documentation templates, dedicated testing tools (e.g., Tanaguru, Asqatasun), auditor certification programs and community platforms for sharing best practices. These support mechanisms facilitate widespread adoption and continuous professional development.

Strengths and Limitations. RGAA is distinguished by its high level of precision and formalization. Its standardized testing scenarios significantly reduce subjectivity and ensure high audit consistency across different evaluators - offering a clear advantage over more interpretive methodologies such as WCAG-EM.

However, this formalization can also be a barrier for smaller organizations or development teams lacking dedicated accessibility resources. Moreover, RGAA focuses primarily on technical conformance, with limited attention to usability or the real-world experiences of users with disabilities.

Conclusion. RGAA represents an advanced national standard for digital accessibility evaluation, integrating technical, organizational, and legal requirements into a cohesive conformance framework based on WCAG. It is one of the most comprehensive accessibility assessment tools in Europe and offers a valuable model for the development of similar standards in other countries. Its success is rooted in both the clarity and measurability of its criteria and its institutional embedding within the French legislative system. As legal obligations and expectations regarding digital inclusion continue to grow across Europe, RGAA serves as a benchmark example of how accessibility policy and practice can be effectively aligned.

2.3 The Polish Web Accessibility Evaluation Methodology

Among national initiatives aimed at the systematic assessment of digital accessibility, a notable contribution is the Polish web accessibility evaluation methodology, developed by the “Widzialni” Foundation [23] in collaboration with the University of Silesia. This is one

of the most mature and comprehensive Polish frameworks, integrating normative (WCAG 2.1-based), practical (audit-focused), and educational components. It serves as the foundation for evaluating the accessibility of websites across the public and private sectors, as well as supporting academic research and comparative studies.

Development Context The methodology was developed in response to growing legal requirements following the implementation of Directive (EU) 2016/2102 and the Polish Act on the Digital Accessibility of Public Sector Websites and Mobile Applications (April 4, 2019). The “Widzialni” Foundation, a national leader in digital accessibility, has long been involved in expert, educational, and implementation efforts. The methodology was created in partnership with researchers from the University of Silesia in Katowice.

Purpose and Scope. The methodology aims to adapt international WCAG standards to the realities of Polish public administration websites -especially those of municipalities, schools, cultural institutions, and other local entities. It takes into account the specifics of the Polish language, cultural context, the technological landscape of the public sector, and the organizational limitations of local governments.

Methodological Foundations and Evaluation Scope. The framework is based on WCAG 2.1 Level AA criteria, in line with legal requirements, but it goes further by providing detailed testing scenarios and contextual interpretations tailored to Polish websites. The audit structure employs a mixed-methods approach, combining:

- automated analysis using tools such as Axe, WAVE, TAW, and SortSite,
- manual expert audits conducted by certified auditors from the “Widzialni” Foundation,
- functionality and interface usability testing,
- in some cases, user testing involving individuals with disabilities.

The audit encompasses technical elements (HTML structure, ARIA attributes, contrast ratios, semantic markup) and functional components (forms, navigation menus, multimedia, keyboard focus, screen reader compatibility, etc.).

Audit Procedure. The audit process, as defined by the “Widzialni” Foundation and the University of Silesia, follows a clearly structured sequence:

1. *Website Exploration and Functional Component Identification.* This involves analyzing front-end technologies, CMS platforms, navigation structures, and content organization.
2. *Sample Selection.* Representative subpages are selected for testing—typically 10 to 15 key pages featuring forms, multimedia, tables, document structures, and interactive elements.
3. *Automated and Manual Testing.* Each test is documented using a standardized audit form including error descriptions, location, user impact, and repair recommendations.
4. *Reporting.* A detailed accessibility report is generated, presenting: a percentage-based conformance score, classification of errors (critical, major, moderate, minor), recommendations for both developers and content editors and a summary suitable for publication as a formal accessibility statement.

Unlike WCAG-EM, this methodology often includes user testing, offering a more comprehensive, user-centered evaluation.

Practical Implementation. The methodology has been widely adopted in practice, most notably in the Digital Accessibility Ranking of Local Government Units, which evaluates hundreds of websites from municipalities, counties, and regional authorities in Poland. This enables nationwide monitoring of digital accessibility, identification of common barriers, and the formulation of systemic recommendations.

Moreover, the methodology is used as a foundation for auditor training and certification, and as educational material in fields such as UX, interface design, social informatics, and e-government.

Contribution to National Accessibility Policy. The Polish methodology is interdisciplinary, pragmatic, and educational in nature. It combines international best practices with local technological and institutional realities, serving as a valuable complement to global approaches such as WCAG-EM or ACT Rules. Its design is especially suited to the needs of local public sector entities, many of which lack dedicated accessibility teams.

As such, the methodology has played a key role in building awareness and competencies in digital accessibility across Poland.

Strengths and Limitations. Key strengths of the methodology include: adaptation to the Polish legal and technological context, practicality and measurability, inclusion of user testing, setting it apart from many other approaches, promotion of transparency and reproducibility. Limitations include: focus on WCAG Level AA, without native support for Level AAA, limited testing for documents and mobile applications, the cost and complexity of expert and user-involved audits may pose challenges for smaller institutions

Conclusion. The Polish web accessibility methodology represents a mature and pragmatic approach to evaluating digital accessibility in Poland. It combines the rigor of WCAG 2.1 AA with user testing, training, and nationwide monitoring. Compared to WCAG-EM and RGAA, it is distinguished by its strong alignment with the operational realities of Polish public institutions and its emphasis on the participation of people with disabilities in the audit process.

3 Comparative of Digital Accessibility Evaluation Methodologies

Table 1 summarizes the key characteristics of the methodologies discussed in this study. Among them, WCAG-EM provides the most universal and flexible methodological framework, although it does not include specific test procedures. It requires expert knowledge and must be integrated with appropriate tools to be effectively applied. RGAA and the Polish accessibility methodology represent national implementations of WCAG. The RGAA offers a comprehensive set of test procedures and is deeply embedded in legal regulations, making it a robust reference standard in the French context. The Polish methodology, in contrast, is a

simplified, practice-oriented model, adapted to the specific needs and constraints of the local context. It proves particularly effective in accessibility audits and training programs, offering a pragmatic approach suitable for institutions seeking to improve accessibility with limited resources.

Table 1: Comparative of Digital Accessibility Evaluation Methodologies

Criterion ↓	WCAG-EM (W3C)	RGAA (France)	Polish Methodology
Institution	W3C/WAI	French government (DINUM, formerly DIN-SIC)	“Widzialni” Foundation and University of Silesia
Year of Development (Version)	2014 (WCAG-EM 1.0)	2009 (currently RGAA 4.1, updated in 2023)	2013 (with updates in 2020 and 2023)
Normative Basis	WCAG 2.0 / 2.1 / 2.2	WCAG 2.1 (partially 2.2)	WCAG 2.1, levels A and AA
Structure	Methodological framework without specific test cases	106 technical tests + glossary + appendices	21 accessibility tests with definitions and scoring sheets
Test Coverage	Methodological structure supporting any WCAG-based test	13 main accessibility areas covered via specific tests	Focus on 21 essential accessibility criteria relevant for Polish websites
Test Type	Manual + supported by automated tools	Manual, semi-automated, expert-based	Mostly manual expert audits, supported by automated tools
Sampling Procedure	Defined procedure: selection of representative pages and user paths	Not specified – tests are applied to individual pages or applications	No strict procedure, test scope depends on website type
Reporting Format	Report structure recommended, flexible output format	Predefined forms (Excel/HTML) required for legal compliance	Audit sheets (PDF or Excel) + summary table + technical explanation
Practical Use	Adopted across many EU countries, used for audits and conformity assessments	Mandatory for French public sector institutions (by law)	Widely used by public institutions, NGOs, universities in Poland
Legal Status	Non-binding but influential reference model	Legally binding for French public digital services	Non-binding, recommended in context of the Polish Digital Accessibility Act (2019)
Documentation Availability	Official W3C site (EN)	Official RGAA site (FR), selected translations available	Free documentation (PL) by “Widzialni” Foundation
User Involvement	Optional user testing, encouraged but not required	Purely technical focus; no user involvement	User testing not mandatory, but possible for advanced audits
Update Frequency	No regular update schedule; latest in 2014	Frequent updates (latest in 2023)	Irregular updates, latest major update in 2023
Complexity Level	High – designed for accessibility professionals	High – requires technical expertise in HTML, ARIA, WCAG	Medium – suitable for trained staff and institutions
Target Users	Accessibility experts, auditors, consultants	Public sector auditors, developers, accessibility professionals	Public institutions, NGOs, educators, certified trainers
Tool Integration	Compatible with tools like Axe, WAVE, TAW	Integrated with specific tools like Tanaguru, Asqatasun	Works with support tools (e.g., WAVE, ANDI, Axe)

4 Summary

The purpose of this article was to analyze and compare three selected methodologies for evaluating the digital accessibility of websites: WCAG-EM (developed by W3C), RGAA (the French governmental methodology), and the Polish methodology developed by “Widzialni” Foundation in collaboration with the University of Silesia. Each of these methodologies constitutes a distinct response to the challenges of implementing digital accessibility standards, all drawing upon the Web Content Accessibility Guidelines (WCAG), yet operationalizing them through differing technical, organizational, and legal frameworks.

WCAG-EM provides a flexible methodological framework that supports systematic evaluation through the selection of representative samples and the combination of manual and semi-automated techniques. While internationally recognized and highly adaptable, it lacks a predefined set of tests and requires a high level of expertise, which may limit its accessibility to less experienced organizations or evaluators.

In contrast, RGAA offers a nationally standardized model mandated by law for the French public sector. Its strengths lie in the comprehensive and detailed list of technical tests, clarity of interpretation, and official backing. The methodology is further reinforced by supporting tools such as Tanaguru and Asqatasun, which facilitate its integration into institutional workflows and audits.

The Polish methodology, developed by “Widzialni” Foundation and the University of Silesia, is a practical tool tailored to the local administrative and educational context. It stands out for its relative simplicity, accessibility to non-specialists, and the provision of ready-to-use audit forms and scoring sheets. Although it does not hold legal authority, the methodology has been widely adopted in practice across public institutions, NGOs, and higher education institutions in Poland.

The comparative analysis reveals not only technical differences but also contrasts in functional design and institutional integration. While WCAG-EM serves as a universal, framework-oriented approach, RGAA and the Polish model are more localized and operationally focused. Despite these differences, all three methodologies share a common objective: enhancing the accessibility of digital content for people with disabilities through structured evaluation processes.

The analysis indicates that each of the methodologies presented in the article has been developed to suit its specific context, evaluation purpose, the competence level of auditors, and the expectations of end users. This suggests that future research should consider emphasizing the development of hybrid approaches - combining standardized testing procedures with user-centered perspectives - while also adapting tools to the diverse needs of both public and private sector institutions.

It’s worth noting that methodologies suggest the use of tools that automate the process of assessing the digital accessibility of websites. In an era of rapid development of AI tools, it seems appropriate to consider the possibility of applying AI in this regard as well.

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