



IFLA Section
Bibliography

Survey on Accessibility in National Bibliographies: Report of Results

Contents

Abstract.....	3
Executive Summary.....	3
Guiding Policies and Mandates.....	3
Current Accessibility Practices.....	4
Needs and Challenges in Accessibility Metadata.....	5
Metadata Collaboration and User Engagement Activities.....	5
Gaps and Obstacles in Accessible Format Production.....	6
Accessibility of National Bibliography Catalogues.....	6
Concluding Insights: Archetypes of Accessibility Efforts.....	7
Analysis.....	8
Introduction.....	8
Response rate and background information.....	8
What national or international mandates, standards or legal requirements inform the NBAs metadata accessibility policies?.....	11
Does the NBA have a formal accessibility metadata recording policy in place or in development?.....	12
What accessible formats are included in the National Bibliography?.....	12
Does the NBA record accessibility features in its bibliographic descriptions?.....	13
What workflows has the NBA implemented for recording accessibility metadata?.....	15
What controlled vocabulary is used for recording accessibility features?.....	16
Does the NBA have a framework for accessibility metadata exchange with other organizations or agencies?.....	17
Does the NBA collaborate with any other organizations or initiatives related to accessibility metadata in libraries?.....	18
What are the primary challenges the NBA faces regarding accessibility metadata?.....	19
Does your institution engage with users to understand their accessibility needs?.....	20
What information needs does the NBA have regarding accessibility metadata, or what kind of guidance do you hope for?.....	21
Does the NBA create accessible formats?.....	23
What are the main obstacles encountered by the NBA when creating and/or providing accessible formats?.....	24
Is the National Bibliography catalogue accessible to use for people with disabilities? ..	25
What are the accessibility features?.....	25
Other comments.....	26
Discussion: Cross-Analysis of Survey Findings.....	28

Concluding Remarks: The Necessity of International Standardization and Transitional Opportunities 29

 Standardization as Infrastructure 29

 Complementary Institutional Actions for NBAs 30

Conclusion 30

Abstract

This report presents the findings of a survey conducted by the IFLA Bibliography Section on the accessibility practices of National Bibliographic Agencies (NBAs). The survey, conducted from May to July 2025, gathered responses from 32 agencies across Europe, Asia, North America, and South America, revealing a landscape of varied practices, challenges, and opportunities in accessibility metadata management. Key findings indicate that while many agencies recognize the importance of accessibility, formal policies and standardized practices for recording accessibility metadata are still at very early stages. Only 19% of respondents reported having established formal accessibility metadata policies, with a significant portion lacking awareness and training. The survey highlighted the prevalence of accessible formats in national bibliographies, yet only 53% of agencies documented the specific accessibility features of these resources, indicating a gap in metadata coverage.

Executive Summary

Universal and equitable access to information is a core value of IFLA, with bibliographic metadata playing a crucial role in helping individuals find resources that suit their needs. Recent legislative changes in Europe, particularly the [European Accessibility Act](#), aim to improve resource discovery for e-book by users with print disabilities. However, there is still a lack of clear guidelines and standardized practices for recording accessibility metadata within the library domain. To explore this issue, the IFLA Bibliography Section conducted a survey on how National Bibliographic Agencies (NBAs) manage accessibility metadata and accessibility in library catalogues. The report presents the survey findings, highlighting current practices, challenges, and information needs related to accessibility within NBAs.

The survey, conducted from May to July 2025, aimed to gather insights on accessibility metadata, accessibility challenges and practices from NBAs and other relevant institutions. It received 32 responses, primarily from European countries, but also included participation from Asia, North America, and South America. The survey addressed various aspects of accessibility, including metadata, accessible formats, and library catalogues accessibility, covering both digital and printed materials. It explored how NBAs describe accessibility features, their collaboration with other producers of accessible resources, and how they consider user needs. Respondents represented a range of institutional types, reflecting diverse organizational contexts.

Guiding Policies and Mandates

Most of the participating agencies refer to a combination of international and national mandates, standards, and legal frameworks guiding their approach to accessibility. Among the most frequently mentioned are the [Web Content Accessibility Guidelines](#) (WCAG), the [European Accessibility Act](#), and the [Marrakesh Treaty](#), as well as specific national laws such as [Ley 7140/2023](#) in Paraguay. The majority of respondents indicate alignment with one or more of these reference frameworks, while a few report not having any formal accessibility requirements in place.

The responses offer an initial overview of a diverse and internationally distributed group of institutions, showing that, **while awareness of accessibility standards is widespread,**

formal policy development and implementation remain at an early stage. This establishes the contextual foundation for interpreting the subsequent survey responses and for identifying broader global trends in accessibility metadata practices.

Only 19% of respondents indicated having established formal accessibility metadata policies in national bibliographies, and often added that they were still adjusting and developing it. Existing policies are mostly documented online, and consist of statements of intent and descriptions of ongoing or upcoming projects which generally promote accessibility in general (websites, on-site access and interaction, interfaces etc.) rather than the recording of accessibility metadata specifically.

Current Accessibility Practices

The existence of a formalized recording policy seems to have little correlation with the variety of accessible formats that are represented in bibliographies. The most prevalent accessible formats are those for adapted print resources, such as **large print and braille**. This is likely because these formats are long-established and have been integrated into the cataloguing standards currently in use. Accessible e-books are also prominently represented, particularly due to the significant number of **born-accessible e-books** that come with inherent accessibility features, especially in regions where digital accessibility is mandated by legislation. Formats such **DAISY or other remediated audio resources** are not always within the scope of legal deposit requirements, which explains their low prevalence in bibliographies.

However, there appears to be a **significant gap between the inclusion of accessible formats in the bibliography and the description of their accessibility features**. While 81% of respondents indicated that they include accessible formats in their bibliography, only 53% reported that they currently record the accessibility features of these resources in their descriptions or plan to do so in the future. The most recorded features are Braille, large print and online accessibility features. In contrast, 47% either do not record accessibility features or are unsure about their agency's practices, showing a lack in accessibility metadata and a potential gap in awareness and communication. It should also be noted that the survey does not provide insights into the comprehensiveness or validity of the recorded accessibility features.

Respondents have implemented a variety of **workflows for recording accessibility metadata**, with a range of strategies and technologies. The most commonly adopted method is a combination of automated and manual cataloging, utilized by 46% of respondents. Manual cataloging only was reported by 31% of respondents whereas automated re-use of publisher metadata without additional manual processes is less common with only 15% of respondents. Additionally, 23% of respondents are **experimenting with AI** as part of their workflow for creating accessibility metadata, demonstrating willingness to explore new technologies to enhance their processes. However, the survey results do not clarify the specifics of these workflows, such as the extent of automation in publisher metadata reuse or how AI is being integrated, leaving a gap in understanding the effectiveness and efficiency of these approaches.

The most prominent accessibility vocabularies, [Schema.org](https://schema.org/) and [ONIX](https://onix.org/), are not widely adopted within libraries. The **majority of respondents indicated not using a controlled vocabulary** at all. There are several possible explanations for this. Some accessibility features, such as large print and braille have encoding available in MARC 21 fixed-length field 008, thus making it less necessary to use a controlled vocabulary. However, it may also indicate a lack of awareness of available controlled vocabularies for describing accessibility features or that the available options are not considered suitable or sufficient.

Needs and Challenges in Accessibility Metadata

When asked about the challenges related to accessibility metadata, 78% of institutions identified **limited awareness, training, and resources** as the main issues, further indicating that accessibility metadata policies are still under development. In addition, many organisations reported having multiple challenges. 47% of institutions cited **constraints within current systems or workflows** as their challenges. Furthermore, 44% of respondents recognised that they have some issues regarding **lack of standard vocabularies**. The open-ended responses also cited difficulties regarding consistent descriptions of accessibility-related elements due to **reliance on information provided by publishers** or that accessibility metadata is not explicitly provided by publishers. The **lack of international standards** and **limitations on available elements within search and display systems** were also indicated.

The information needs of NBAs span over four interconnected areas: **standards and vocabularies, institutional capacity, publisher data availability, and technical integration**.

The most frequently cited need is for **standardized vocabularies and implementation guidance**. NBAs seek internationally recognized controlled vocabularies for accessibility features, preferably **as Linked Data**, along with clear **guidance on applying existing cataloguing standards**, including mapping **RDA elements to MARC 21 (field 341)**. A second major need concerns **policy development and capacity building**. Many NBAs are still at an early stage of implementation and require training, practical guidance, and examples of international best practices to support the development of internal policies and workflows. **Limited accessibility metadata from publishers and distributors** continues to pose a significant challenge even with legislative changes on the horizon. This situation points to a need for building stronger relationships with publishers. NBAs also reported gaps in **technical and system integration**, which indicates a need for practical guidance on how to incorporate accessibility metadata into existing bibliographic systems and ensuring interoperability across platforms.

Metadata Collaboration and User Engagement Activities

Frameworks for accessibility metadata exchange prove to be popular. Respondents reported having **established frameworks with publishers, libraries and the book trade for exchanging accessibility metadata** to support bibliographic description, discoverability, and resource sharing opportunities. Collaborative methods are further reflected in results that show 44% of NBAs are collaborating with **other organisations and initiatives related to accessibility metadata in libraries**.

Almost half (47%) of respondents **engage with disabled users to understand their accessibility needs**, while 38% do not, and 16% are unsure. Those that affirmed engagement have implemented initiatives to enhance user interfaces for people with disabilities through direct feedback and surveys, an approach aligning with obligations stemming from international law, in particular the United Nations Convention on the Rights of Persons with Disabilities (2006, CRPD).

Public relations efforts are crucial for reaching underserved communities, especially those with visual or print disabilities, with social media playing a key role in informing the public about inclusion initiatives and new assistive technologies. **Training** is also emphasized, with some institutions involving **staff with disabilities to lead sessions on tools** like braille and assistive technology, ensuring that staff are equipped to support diverse user needs. Additionally, some organizations maintain personal contact with users for **tailored support** and appoint **Digital Accessibility Coordinators** to oversee long-term inclusion plans, reflecting a comprehensive commitment to accessibility as a core institutional value.

Gaps and Obstacles in Accessible Format Production

Most NBAs do not produce accessible formats or are unsure, with just 16% confirming they do. Among these, PDF, Word, ePub/ePub3, and DAISY are most common, while braille and large print are less frequent.

Responses reveal that NBAs face multiple, overlapping challenges in producing accessible formats. The most frequent obstacles are **limited staff, training, and resources**, and **technical or system limitations** that make conversions complex. Moderate challenges include **dependence on external sources**, such as publishers or authors who provide permissions or information inconsistently, and **gaps in policy and guidance**, with many NBAs lacking formal processes or standards. Less common are **access and delivery issues**, where specialized equipment or restricted systems limit end-user access.

Accessibility of National Bibliography Catalogues

With only 37% of respondents confirming **catalogue accessibility**, 63% either remain inaccessible or have not been evaluated, pointing both to a significant **accessibility gap and a widespread lack of awareness** of what catalogue accessibility entails. Accessibility **remains the exception rather than the rule**, highlighting a critical need for standardized accessibility audits across the sector.

Among the 37% of respondents who confirmed catalogue accessibility, responses reveal diverse and sometimes **overlapping understandings of what accessibility means in practice**. Screen reader compatibility and access to alternative or accessible formats were each cited by 42% of this group, while a smaller subset referenced compliance with recognized standards such as WCAG. One respondent noted that catalogue accessibility depends partly on external vendors and users' own devices and configurations, suggesting that even where features exist, the actual user experience may vary considerably.

Concluding Insights: Archetypes of Accessibility Efforts

The qualitative feedback from the survey identifies five distinct **Archetypes of Effort**, revealing a global landscape that ranges from the **Aspirational**, where agencies are in a conceptual phase prompted by international dialogue, to those hindered by **Legislative Constraints** that stall progress due to outdated legal deposit rules. **Transitional agencies** are overhauling their technology or infrastructure, expecting accessibility gains to follow from these systemic changes. **Specialized hubs** operate robust, functioning systems serving users with a range of reading difficulties but remain tied to specific databases or physical locations. Finally, **operationally fragmented agencies** are active contributors to international standardization efforts yet struggle to translate that engagement into consistent, system-wide accessibility metadata practices at the operational level.

Analysis

Introduction

Universal and equitable access to information is one of IFLA's core values, and bibliographic metadata is essential in this mission, enabling individuals to explore, discover, identify, and select resources that meet their specific needs. Recent legislative changes in Europe mainly, resulting from national implementations of the European Accessibility Act¹, aim to enhance the resource discovery experience for e-book users with disabilities. However, despite these advancements, there remains a significant lack of clear guidelines and standardized practices for recording accessibility metadata. The survey conducted by IFLA Bibliography Section set out to investigate how National Bibliographic Agencies (NBAs) are managing accessibility metadata. The resulting report offers insights into current practices, challenges, and information needs related to accessibility within NBAs.

The survey examined accessibility in a comprehensive manner. The questions addressed accessibility metadata, accessible formats, and the accessibility of library catalogues. In terms of material types, the survey included not only digital resources but also printed materials and alternate formats, along with their creation. Regarding metadata, the survey explored how and to what extent NBAs describe the accessibility features of resources, the nature of their collaboration with other metadata and accessible resource producers, and how user needs are taken into account.

Adoption of accessibility policies is by necessity a process divided into phases, often within the framework of national legislation setting out specific accessibility obligations. The CRPD describes accessibility in general terms. Measures taken to ensure equal access to persons with disabilities are introduced in succession and, in some jurisdictions, only a few years apart. Situated at the intersection of metadata and accessibility, accessibility metadata is analysed simultaneously with respect to the concept of accessibility and the concept of metadata. The survey reveals how the evolving perception of accessibility, as it is examined with reference to applicable laws and the evolving standards, colors the understanding of accessibility metadata elements. Also, certain national accessibility metadata obligations were predominantly addressed to e-book providers (publishers, distributors, etc.) while other accessibility requirements still concern NBAs directly. These background considerations may shed light on the possible circumstances behind different levels of accessibility readiness discovered by the survey.

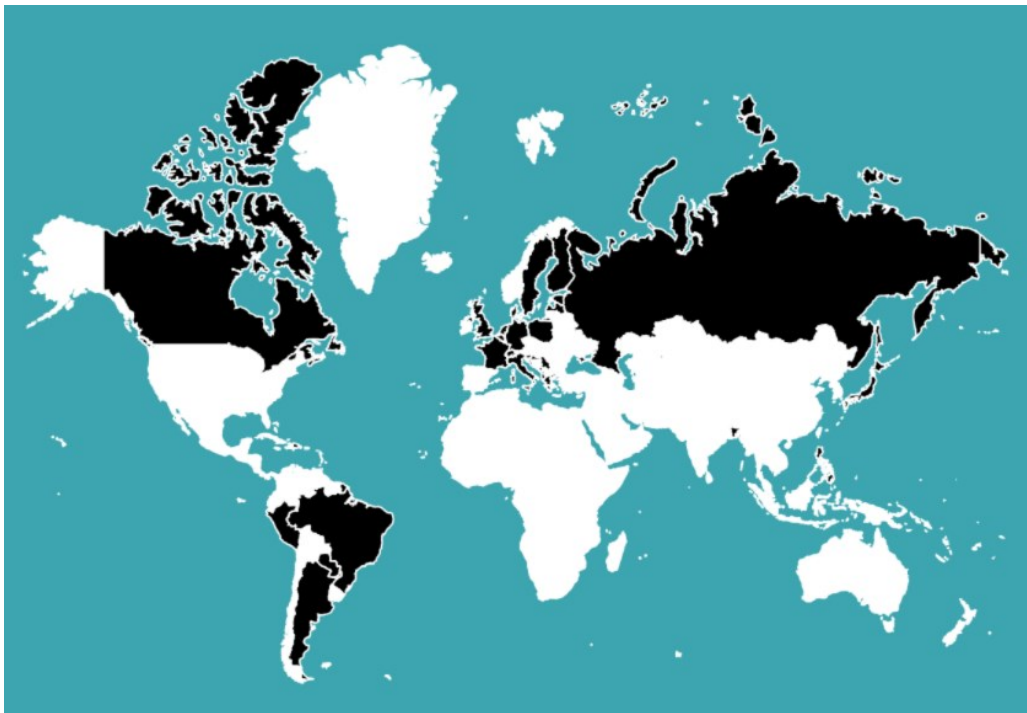
Response rate and background information

The survey was conducted between May and July 2025. NBAs were contacted via IFLA mailing lists, Bibliography Section's communication channels, and targeted emails to National Libraries. While the survey primarily aimed to gather responses from NBAs, it also welcomed input from National Libraries and institutions that operate a union catalogue or a shared cataloguing utility. For the purposes of analysis, responding institutions were classified

¹ Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services (OJ L 151, 7.6.2019, pp. 70-115)

into national bibliographic agencies, national libraries with bibliographic responsibilities, hybrid national and university libraries, governmental or public agencies, non-profit or specialized organizations, and commercial bibliographic or metadata service providers, based on their primary institutional role.

A total of 32 responses were received, predominantly from European countries, which account for the majority of participating institutions. Additional responses were received from Asia, North America (including the Caribbean), and South America.



Below is a detailed list of respondent countries, organized by continent.

Europe: Albania, Belgium, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Latvia, Montenegro, the Netherlands, Poland, Russia, Serbia, Slovenia, Sweden, Switzerland, United Kingdom

Asia: Bangladesh, Japan, Philippines, Singapore

North America (including the Caribbean): Canada, Dominican Republic, Trinidad and Tobago

South America: Argentina, Brazil, Paraguay, Peru

Detailed list of respondent organizations:

Europe

- Albania – National Library / National Bibliographic Unit
- Belgium – Bibliographic Information Agency (National Library context)
- Croatia – National and University Library / National Bibliography
- Cyprus – National Library
- Denmark – Government cultural agency with national library / bibliographic services
- Estonia – National Library
- Finland – National Bibliography Services (within National Library)
- France – National Bibliography (within National Library)
- Germany – National Library / National Bibliographic Agency (DNB)
- Greece – National Library
- Italy – Commercial bibliographic agency / metadata service provider
- Latvia – National Library / National Bibliography
- Montenegro – National Library – Bibliographic Department
- Netherlands (The) – National Library
- Poland – National Library / Official National Bibliography
- Russia – National bibliographic agency (within National Library)
- Serbia – National Library
- Slovenia – National and University Library / National Bibliography
- Sweden – National Library
- Switzerland – National Library
- UK – Metadata service provider

Asia

- Bangladesh – National Library / Archives Department
- Japan – National Diet Library
- Philippines - National Library
- Singapore – National Library Board

North America and Caribbean

- Canada – National Library and Archives
- Dominican Republic – National Library
- Trinidad and Tobago – National Library and Information System

South America

- Argentina – National Library / National Bibliography
- Brazil – National Library / National Bibliography
- Paraguay – National Library
- Peru – National Library

Website URLs and contact emails were provided for most, but not all, respondents.

What national or international mandates, standards or legal requirements inform the NBAs metadata accessibility policies?

Overall, the majority of respondents (over half) reported being informed by binding legal mandates, either alone or in combination with technical standards. However, a significant minority reported either the absence of a formal policy or an ongoing implementation process, demonstrating uneven levels of maturity in the adoption of accessibility-related metadata frameworks.

Based on the full set of responses, reported mandates, standards, and legal references can be grouped into analytical categories. This categorization helps clarify which frameworks are adopted by different respondent countries and supports a more comparative analysis.

Binding legislation or legal mandates: National or supranational laws, acts, treaties, or directives.

Typical references include: European Accessibility Act, Marrakesh Treaty, National accessibility legislation, EU Directive (EU) 2019/882, National legal frameworks.

Countries: Argentina, Belgium, Brazil, Denmark, Finland, Italy, Montenegro, Paraguay, Philippines, Poland, Russia, Serbia, Slovenia, Sweden, Trinidad and Tobago.

Technical standards or guidelines: Standards and frameworks without explicit legal mandate or used independently.

Typical references include: WCAG (2.1, 2.2), EN 301 549, RGAA, ISBD (in accessibility-related contexts).

Countries: Canada, Estonia, France, Montenegro, Singapore, United Kingdom.

Combination of binding legislation and technical standards: This category includes explicit reference to both legal mandates and technical standards.

Typical combinations include: European Accessibility Act + WCAG, National legislation + WCAG, Marrakesh Treaty + WCAG.

Countries: Sweden, Trinidad and Tobago, Russia.

Work in progress, partial or emerging implementation: This category includes accessibility mandates acknowledged, implementation of metadata-related policies or standards still ongoing, often constrained by technical or organizational limitations.

Countries: Germany, the Netherlands.

No policy, no mandate, or no available information: This category includes explicit statements of no policy, no mandate identified, lack of available or consolidated information.

Countries: Albania, Bangladesh, Greece, Cyprus, Latvia, Switzerland.

Non-binding initiatives or general commitments: This category includes reference to participation in international initiatives, with no explicit legal mandate or technical standard cited

Countries: Japan

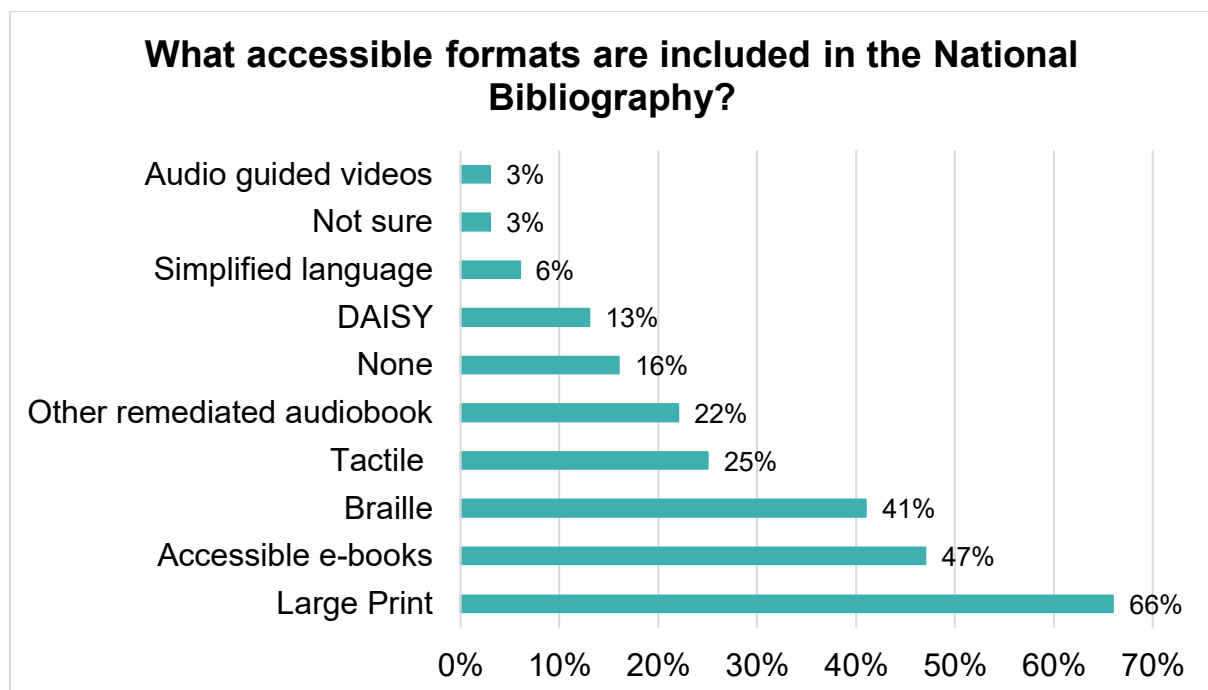
Does the NBA have a formal accessibility metadata recording policy in place or in development?

Formalized accessibility metadata policies in NBAs seem to be a work in progress at this point in time. Only 19% of respondents indicated that they had one, and often added that they were still adjusting and developing it. This suggests that many NBAs are still in the early stages of developing and implementing these policies, indicating a general lack of maturity in the approach to accessibility metadata within these institutions.

Existing recording policies are mostly documented online and consist of statements of intent and descriptions of ongoing or upcoming projects, which generally promote accessibility in general (websites, on-site access and interaction, interfaces, etc.) rather than the recording of accessibility metadata specifically. This indicates that while there is an awareness of the importance of accessibility, there is a gap in translating that awareness into concrete practices related to metadata.

The documentation of existing policies online reflects a commitment to transparency, but there is still the need for these documents to evolve into actionable and specific guidelines that focus on accessibility metadata. Overall, while there is some progress in recognizing the importance of accessibility, work remains to be done to develop comprehensive and effective policies specifically related to accessibility metadata.

What accessible formats are included in the National Bibliography?



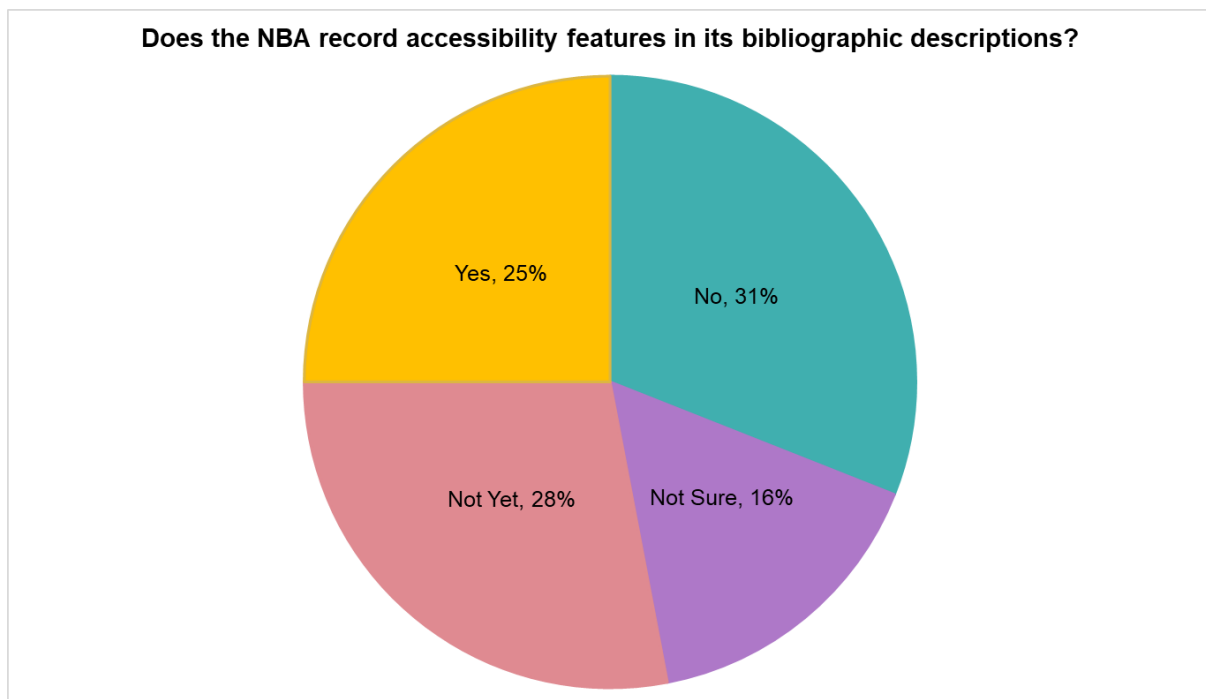
Prevalence of Accessible Formats: The analysis reveals that accessible formats most prevalent in National Bibliographies are those that have been established for some time, such as large print and braille. This is likely due to the fact that these formats have been

integrated into cataloguing standards for an extended period, making them an established part of bibliographic practice.

In contrast, accessible e-books are also widely included. In many regions, such as the EU, digital accessibility is mandated by legislation, ensuring that most e-books available on the market are born-accessible, with accessibility features inherently built into these formats.

Correlation with Legal Deposit Legislation: The results reflect the coverage of legal deposit legislation, which plays a significant role in determining the types of resources collected and included in the national bibliography. Many adapted resources, such as DAISY, fall outside the scope of legal deposit legislation, resulting in fewer accessible formats being included in the national bibliography. As one respondent noted, their published collection consists of what they receive through legal deposit, which includes braille, tactile documents, e-books, and audiobooks. However, they do not hold accessible formats created by two of the main producers of alternate formats, resulting in a relatively small collection of accessible resources.

Does the NBA record accessibility features in its bibliographic descriptions?



Fifty-three percent of respondents indicated that they either currently record or plan to record accessibility features in their records in the near future. The recorded features include:

- Online accessibility features (such as screen-reader compatibility, alternative texts, structural navigation, etc.) - 6 mentions
- Braille - 6 mentions
- Large print - 5 mentions
- DAISY format - 1 mention

- Dyslexia-friendly readability - 1 mention

Mixed Status of Accessibility Metadata: The survey results indicate a mixed status regarding the recording of accessibility features in bibliographic descriptions. While 25% of respondents confirm that they currently record such features, a slightly higher percentage (31%) do not, and 28% are not yet doing so but plan to in the future. This suggests that while there is some progress, a significant portion of agencies still lacks accessibility metadata in their records.

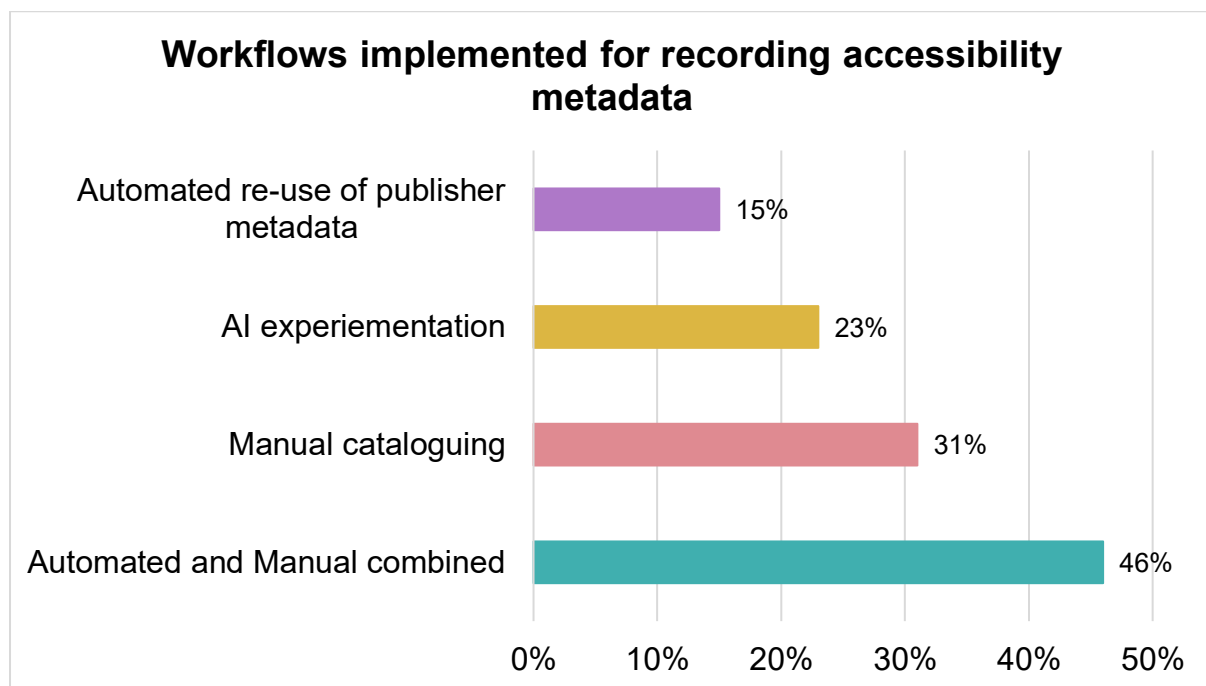
Positive Outlook for Future Improvements: The fact that 28% of respondents plan to record accessibility features in the near future is a positive indicator of a growing awareness and commitment to accessibility within the bibliographic community.

Uncertainty and Lack of Awareness: The 16% of respondents who are unsure about whether accessibility features are recorded suggests a potential gap in awareness or communication within agencies.

Barriers to Implementation: The reasons provided for not recording accessibility features—such as lack of technological tools, guidance, financial resources, trained staff, expertise, and legal issues—point to systemic challenges that NBAs face.

Need for Comprehensive Standards: The survey results do not provide insights into the comprehensiveness or validity of the accessibility metadata being recorded. This indicates a need for standardized guidelines and best practices to ensure that all relevant accessibility features are documented consistently across different material types and formats.

What workflows has the NBA implemented for recording accessibility metadata?



This question explored the accessibility metadata practices among respondents who have indicated in a previous question that they record accessibility metadata in their bibliographies or plan to do so in the future (a total of 17 NBAs). Percentages reflect the distribution of different approaches among these 17 respondents.

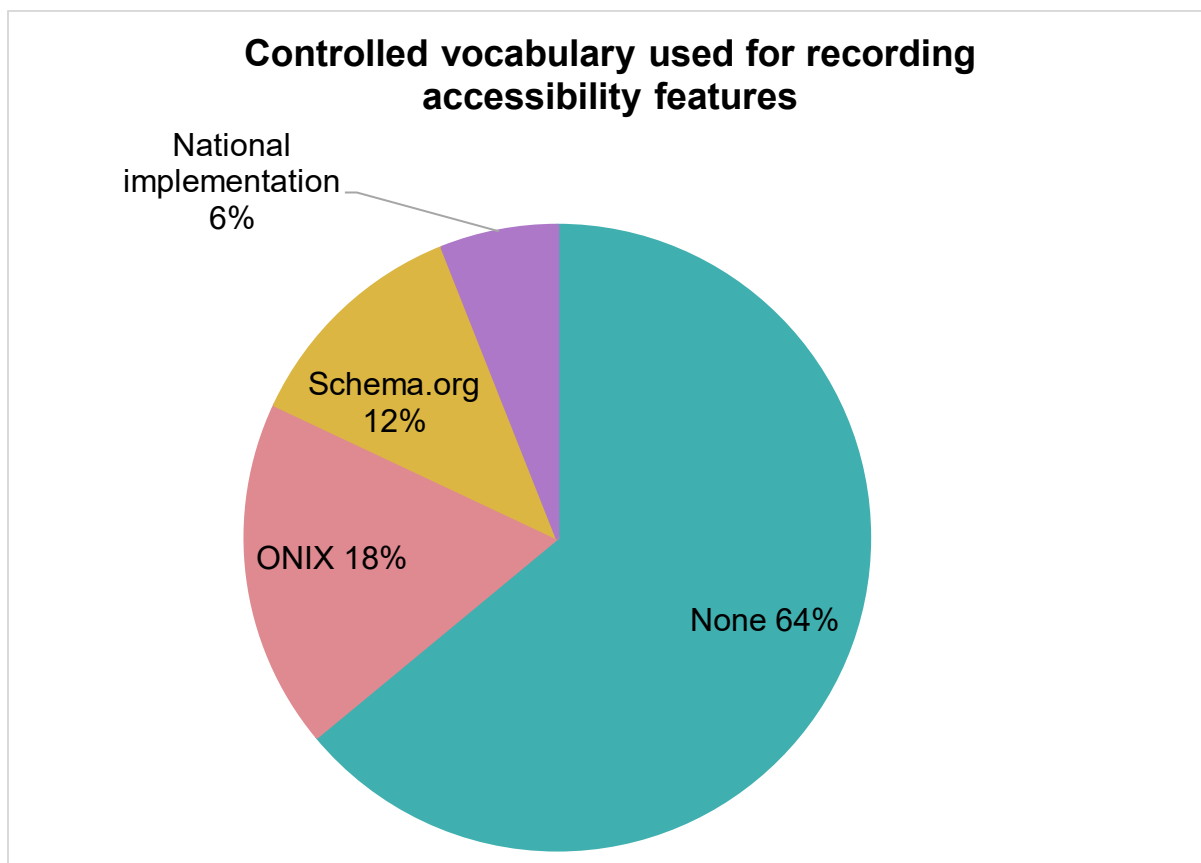
Diverse Workflows: NBAs have implemented a variety of workflows for recording accessibility metadata, reflecting a range of strategies and technologies in use. The most commonly adopted workflow is a combination of automated and manual cataloguing, used by 46% of respondents. However, the results do not provide a clear understanding of how these approaches are specifically implemented and what their level of automation is.

Manual over automatic: A considerable portion of respondents (31%) still rely only on manual, book-in-hand cataloguing whereas only 15% of respondents indicated relying solely on automatic publisher metadata reuse. This could reflect difficulties in accessing or implementing the information provided by publishers, or that the metadata does not encompass essential accessibility features.

AI Experimentation: A notable 23% of respondents are experimenting with AI as part of their workflow for creating accessibility metadata, reflecting a willingness to adopt innovative technologies to enhance metadata practices.

Need for Clarity and Best Practices: The survey results do not provide detailed insights into how these workflows are specifically implemented or the extent of automation involved, leaving a gap in understanding their effectiveness and operational efficiency. The ambiguity surrounding the workflows suggests that NBAs could benefit from sharing best practices and experiences.

What controlled vocabulary is used for recording accessibility features?

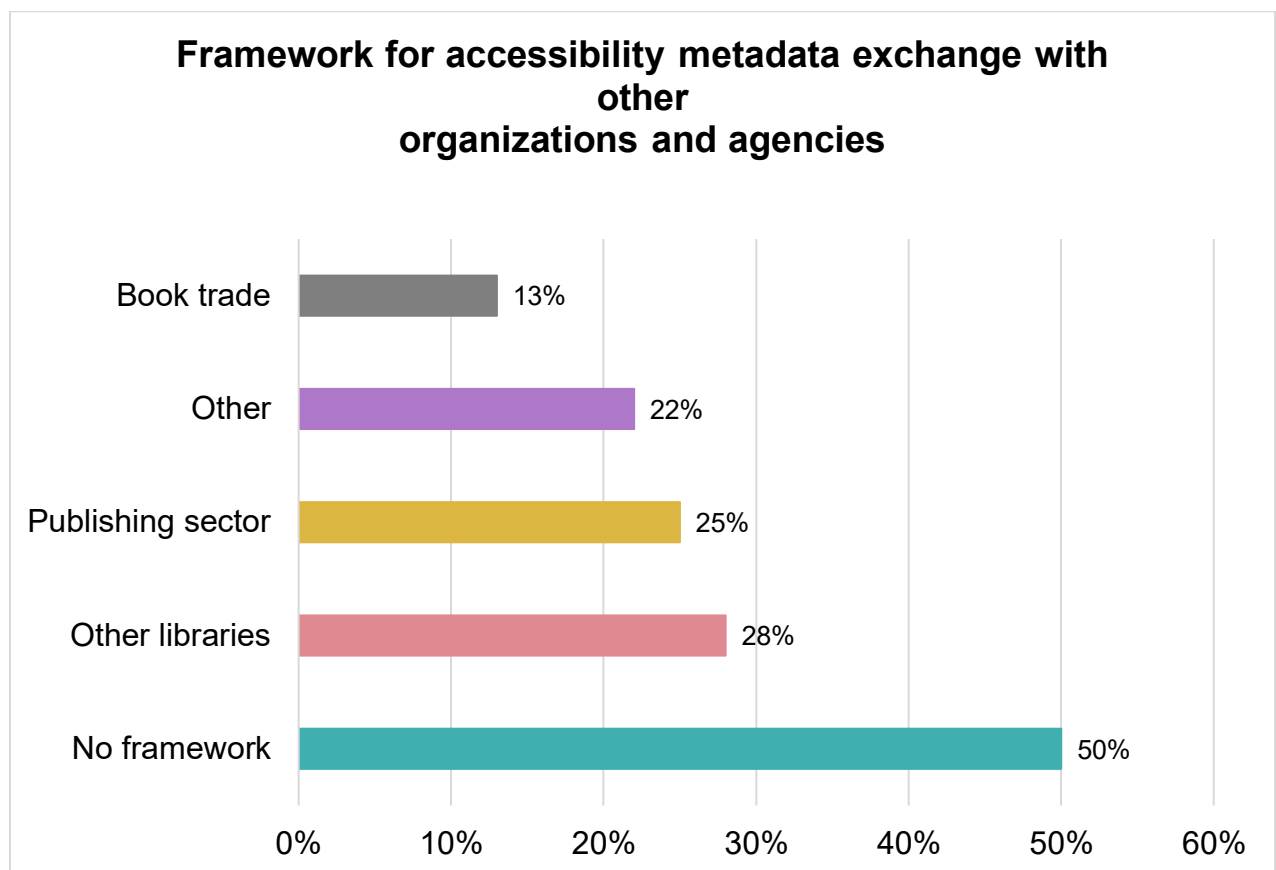


This question examined the prevalence of using controlled vocabularies in recording accessibility features among respondents who have indicated in a previous question that they record accessibility metadata in their bibliographies or plan to do so in the future (a total of 17 NBAs). Percentages reflect the distribution of different approaches among these 17 respondents.

Limited Adoption of Comprehensive Vocabularies: The responses indicate that widely recognized accessibility vocabularies, such as Schema.org and ONIX, are not commonly adopted for recording accessibility features. 64% of respondents reported using no controlled vocabulary for recording accessibility features, while only 18% use ONIX, 12% use Schema.org, and 6% have a national implementation.

Possible Explanations for Limited Use: Some accessibility features, like large print and braille, have encoding available in MARC 21 fixed-length field 008, reducing the need for a controlled vocabulary. There may be a lack of awareness regarding available controlled vocabularies or a perception that existing options are unsuitable.

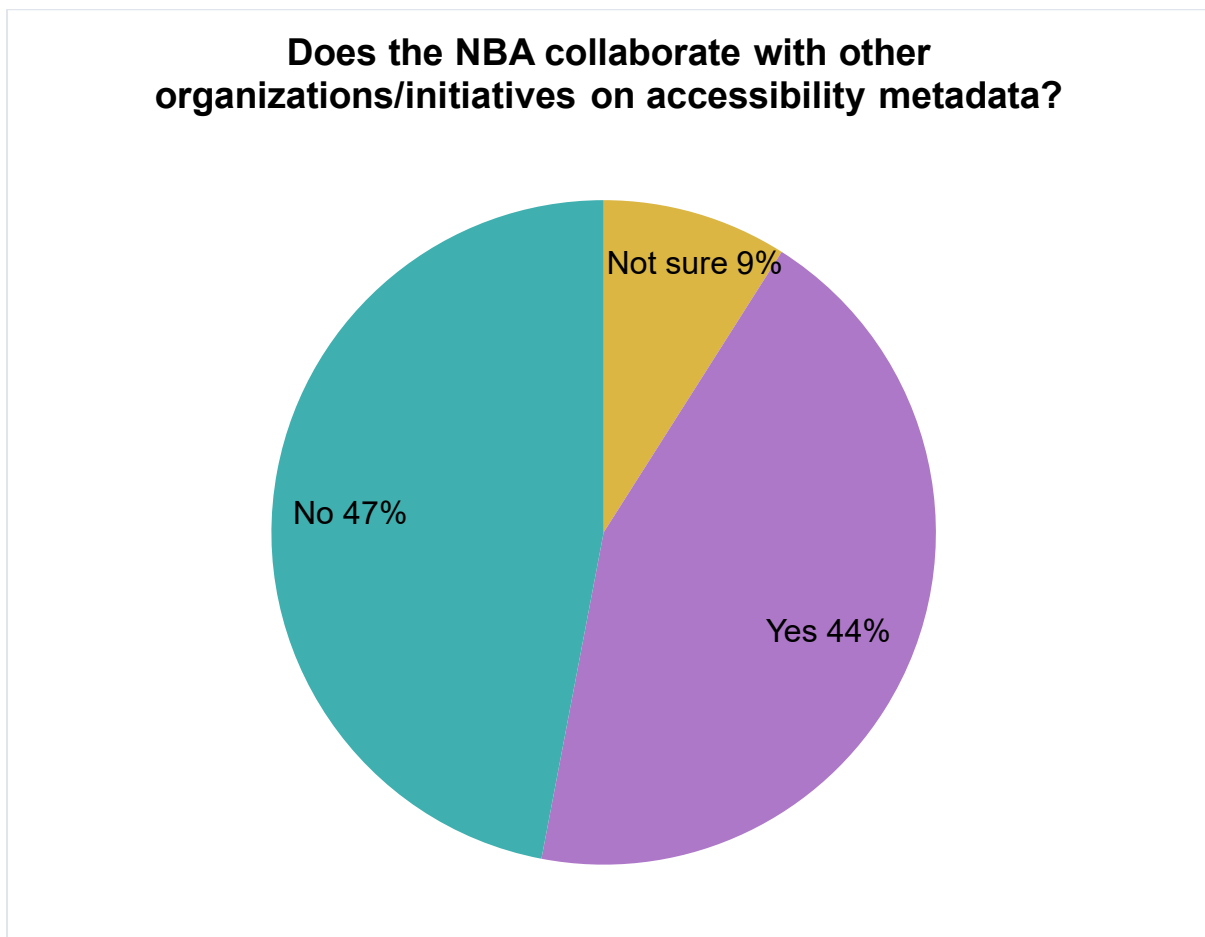
Does the NBA have a framework for accessibility metadata exchange with other organizations or agencies?



50% of NBAs reported having implemented a framework for accessibility metadata exchange proving such collaboration to be popular. Moreover, 22% of respondents reported having exchange frameworks in place with multiple sectors, including publishers, libraries and the book trade. This shows a variety of exchange options in use to support the exchange of accessibility metadata to support bibliographic description, discoverability, and resource sharing opportunities.

Survey responses indicate that 28% of NBAs exchange accessibility metadata with other libraries, 25% with the publishing sector, and 13% with the book trade. 22% selected *other*, five of which referred to organizations promoting accessible information and reading, such as the Singapore Association of the Visually Handicapped Library, the Accessible Books Consortium, and Fondazione LIA. Individual mentions included institutional repositories, information agencies, vendors and suppliers, researchers, and members of the public. Some respondents clarified that metadata is shared indirectly—for example, through national catalogues or union catalogues with special filters for accessible materials, through downloadable bibliographic data platforms, or via one-time metadata transfers—rather than through a dedicated framework. Notably, 50% reported having no framework for accessibility metadata exchange.

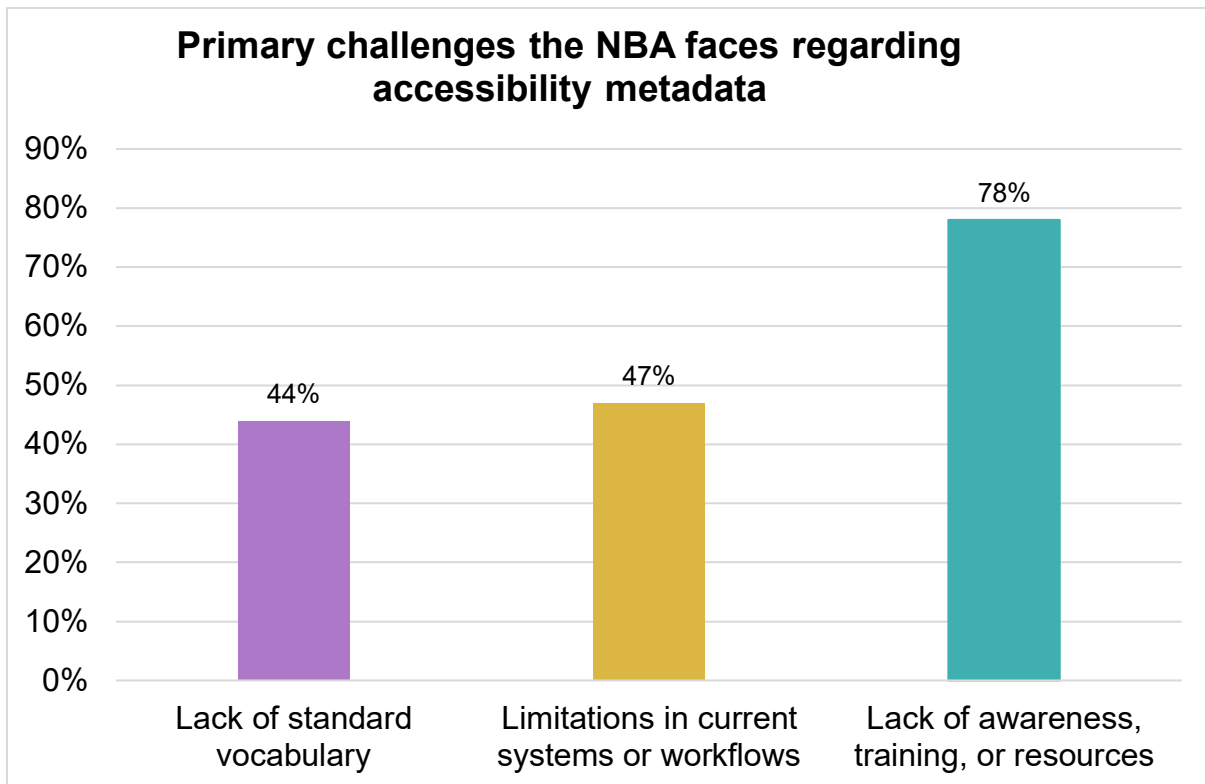
Does the NBA collaborate with any other organizations or initiatives related to accessibility metadata in libraries?



The results indicate a mixed picture regarding whether NBAs collaborate with other organisations or initiatives related to accessibility metadata in libraries. Of the 32 respondents, 44% reported that they do collaborate, while 47% said they do not, and 9% were unsure. This suggests that although collaborative engagement is present among a significant proportion of NBAs, it is not yet a universal practice.

The nearly equal split between “yes” and “no” responses highlights variability in institutional approaches, resources, or strategic priorities. At the same time, the fact that almost half of respondents report active collaboration reflects a growing recognition of the importance of partnerships in advancing accessibility metadata practices. The small percentage of respondents who were unsure may also point to a lack of internal communication or clarity about collaborative activities within some organisations. Overall, the findings suggest meaningful progress in collaborative efforts, but also considerable room for broader and more consistent engagement across the sector.

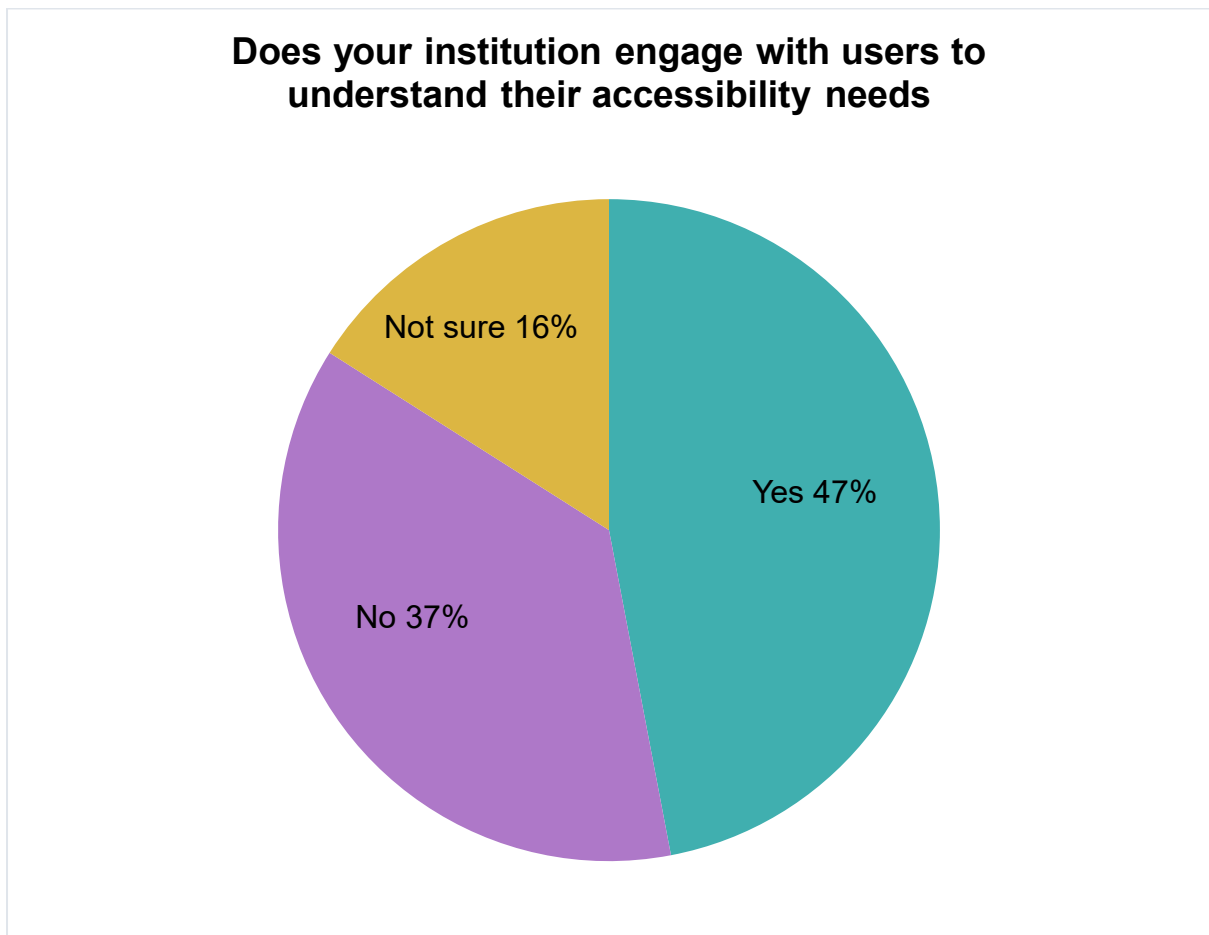
What are the primary challenges the NBA faces regarding accessibility metadata?



As previously noted, establishing formalized accessibility metadata policies within national bibliographies remains an ongoing challenge. When asked about the challenges related to accessibility metadata, many institutions identified limited awareness, training, and resources as the main issues, further indicating that accessibility metadata policies are still under development.

The open-ended responses under *Other* cited difficulties regarding consistent descriptions of accessibility-related elements due to reliance on information provided by publishers or that accessibility metadata is not explicitly provided by publishers. The lack of international standards and limitations on available elements within search and display systems were also indicated.

Does your institution engage with users to understand their accessibility needs?



Nearly half of the surveyed institutions were found to engage directly with users from this target audience to understand their needs. Furthermore, many respondents collaborating with other organisations and initiatives concerning accessibility metadata in libraries were also found to engage directly with users. All institutions that answered yes to this question described various initiatives undertaken to understand accessibility needs.

Provision and Improvement of Interfaces for People with Disabilities: Several institutions provide accessibility metadata and prioritize enhancing accessibility through direct feedback or surveys. Others emphasize the importance of embedding accessibility metadata and maintaining interoperability to uphold the Universal Declaration of Human Rights. These efforts demonstrate a proactive commitment to refining user interfaces by integrating user-centered design and systematic feedback loops.

Public Relations for People with Disabilities: Public relations activities are crucial for reaching underserved communities, particularly those with visual or print disabilities. Social media also plays a significant role in informing the public about inclusion initiatives and the development of new assistive apps. By leveraging both community outreach and digital communication channels, these organizations ensure that information about inclusive resources effectively reaches the individuals and organizations that need them most.

Training: Capacity building through training is a recurring theme in the responses. Several institutions involve staff with disabilities to lead training sessions or participate in specialized working groups. For example, some libraries employ visually impaired para-professionals to provide expert instruction on braille and assistive technology software. Additionally, ongoing staff training is being conducted to prepare special activities. These training initiatives help to sensitize staff to the diverse needs of users and ensure they are technically equipped to support various accessibility requirements.

Others: Some organizations maintain personal contact with users whenever needed to provide tailored support. There is also a focus on long-term planning, such as appointing Digital Accessibility Coordinators to monitor multi-year inclusion plans. These miscellaneous activities reflect a holistic approach that combines individual, high-touch support with strategic, long-term organizational commitments to ensure that accessibility remains a central part of their institutional mission.

What information needs does the NBA have regarding accessibility metadata, or what kind of guidance do you hope for?

Standardization and Vocabulary are Top Priorities: The most urgent requirement is for internationally recognized technical tools to describe accessibility features. This encompasses:

- **Controlled Vocabularies:** NBAs need a standard vocabulary for accessibility features, ideally published as Linked Data (e.g., a Linked Data version of Schema.org) to support persistent identifiers and national-language labels.
- **RDA and MARC Guidance:** There is a demand for a missing RDA elements list for accessibility terms and clear guidance with examples for MARC 21, particularly field 341.
- **Interoperable Schema:** Guidance on adopting standardized schemas is needed to ensure interoperability, facilitate record sharing between systems, and address preservation of accessible formats.

Policy and Capacity Building: NBAs seek guidance and training to implement accessibility practices internally, particularly:

- **Best Practice Models:** Analysis of successful international examples can inform internal processes and policy adoption.
- **Policy Development:** Agencies need guidance on planning and creating accessibility policies.
- **Training:** Staff require specialized training on accessibility metadata to improve user services and on making the national bibliography itself accessible.

Data Acquisition and Publisher Engagement: A significant barrier is the availability and quality of data from external partners, described as follows:

- **Missing Source Data:** External organizations (publishers, alternate format creators) often do not provide explicit information on accessibility features or hazards.

- **Publisher Engagement:** NBAs need to strengthen dialogue with publishers, especially small or specialized organizations, to encourage consistent provision of accessibility metadata.
- **Market Reality:** Observations indicate that local distributors' online accessibility fields frequently contain "no information," despite upcoming national legislation, leading NBAs to include accessibility metadata only when provided by creators, publishers, or distributors.

Technical and System Integration: Technical implementation remains an area where additional guidance and practical examples are needed, particularly:

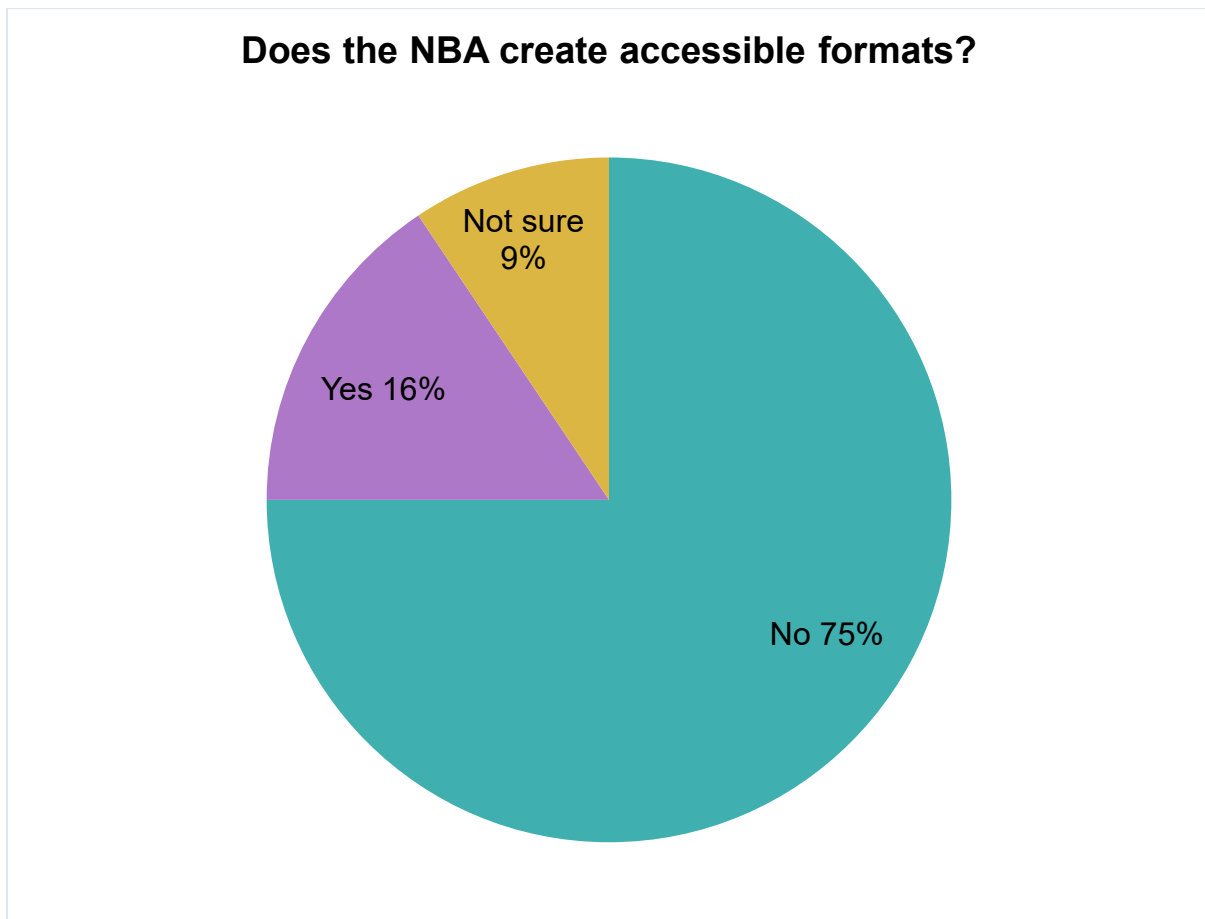
- NBAs require guidance on integrating accessibility metadata into existing bibliographic systems and ensuring interoperability across platforms.
- Existing tools (e.g., W3C accessibility crosswalks) are helpful but contain gaps; additional practical examples and structured implementation guidance are needed.

Key Insight:

NBAs face challenges in implementing accessibility metadata due to a combination of factors: lack of standards and standardized vocabularies, incomplete integration of content standards elements (e.g., RDA) into MARC formats, limited system support for structured accessibility data, inconsistent information from publishers and distributors, and insufficient practical guidance and training.

Addressing these challenges requires **standardized vocabularies**, **clear implementation guidance**, and **stronger collaboration with external partners** to ensure metadata is complete, consistent, and interoperable across bibliographic systems.

Does the NBA create accessible formats?



Among the 5 respondents who indicated Yes to creating accessible formats, the types produced include:

1. Word, PDF/OCR, EPUB 3, DAISY
2. EPUB; DAISY; Plain texts; Searchable PDF documents
3. Braille Ready Files; EPUB; Synthetic DAISY; DAISY Textbooks; Large Print; Embossed braille
4. PDF, word, Thorium Reader

Based on the frequency of responses, PDF, Word, EPUB/EPUB 3, and DAISY are the most commonly produced formats, while braille and large print are less frequently generated. Overall, it appears that the creation of accessible formats is rarely included in the responsibilities of NBAs, making it more of an exception than a core function.

What are the main obstacles encountered by the NBA when creating and/or providing accessible formats?

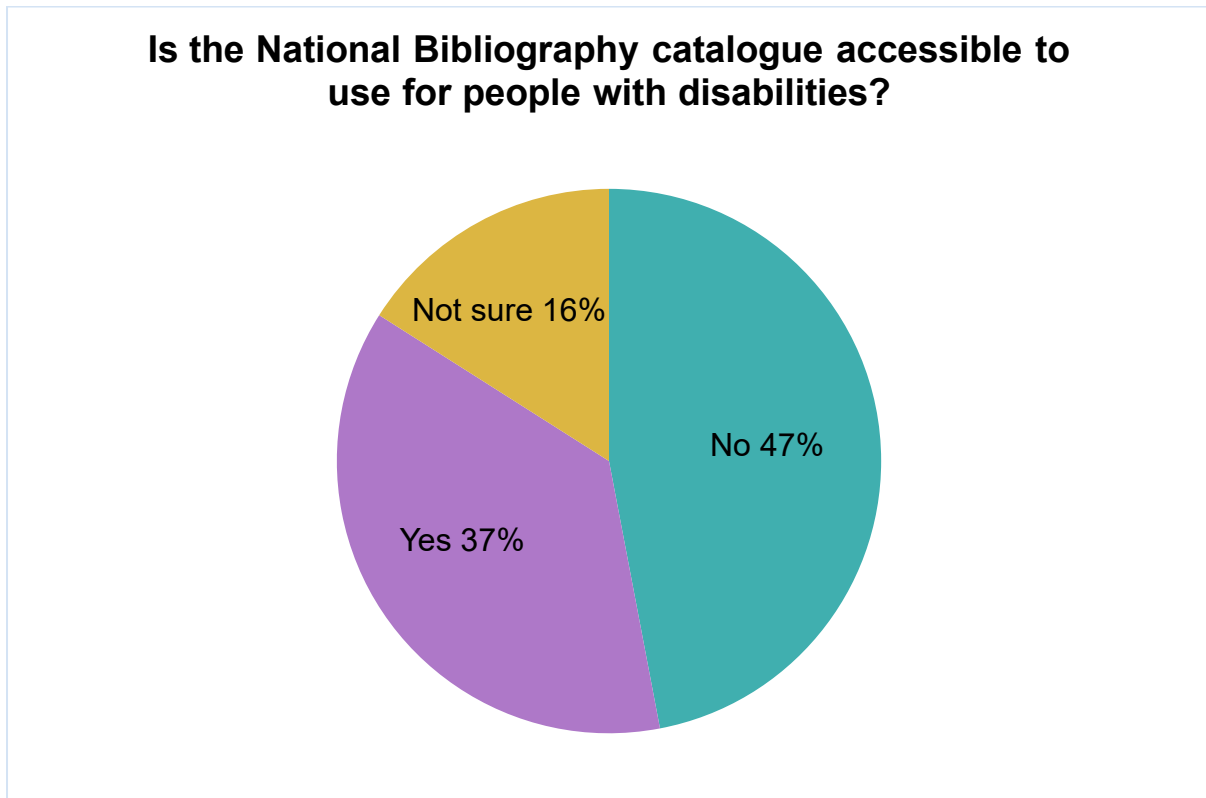
Survey responses indicate that NBAs face multiple, often overlapping, challenges in creating and providing accessible formats. The reported obstacles can be grouped according to how frequently they were mentioned by respondents:

- **Most frequently mentioned obstacles:**
 - limited staff, training, and resources, hindering sustainable production of multiple accessible formats
 - technical or system limitations, making conversions complex or time-consuming.

- **Moderately frequent challenges:**
 - dependence on external sources, such as publishers and authors who do not consistently provide permissions or sufficient information
 - gaps in policy and guidance, with many NBAs lacking formal processes, clear standards, or workflow guidance.

- **Less frequently cited issues:**
 - access and delivery challenges, where specialized equipment or restricted access systems limit end users' ability to use the formats.

Is the National Bibliography catalogue accessible to use for people with disabilities?



While 37% of respondents reported that their national bibliographies have achieved accessibility, a clear majority (63%) either indicated that they are inaccessible or were unable to confirm their accessibility status, as they lack the necessary evaluation to do so, which demonstrates a critical need for standardized accessibility audits across national catalogues. Clearly, the findings point not only to limited accessibility in many National Bibliography catalogues, but also to a notable lack of awareness or assessment of accessibility compliance among respondents.

Accessibility therefore remains the exception rather than the rule, with nearly two-thirds of surveyed national bibliographies fail to provide or verify an inclusive user experience for people with disabilities.

What are the accessibility features?

The open-ended responses reveal a **diversity of understandings of accessibility** in National Bibliography catalogues, ranging from interface features to service provision and adherence to accessibility standards.

Of the 37% of respondents who indicated that their catalogue is accessible, their descriptions of accessibility features reveal a diversity of approaches and understandings.

Interface accessibility: Five respondents (42% of the “Yes” group) highlighted functional interface features, most commonly screen reader compatibility.

Resource accessibility: Another five respondents (42%) focused on accessible or alternative formats of the resources themselves.

Standards and interface-level features: A smaller subset of respondents referred to compliance with recognized accessibility standards, specifically WCAG criteria. These responses indicate that some catalogues are designed with formal accessibility principles in mind, ensuring that the system meets minimum usability requirements for people with disabilities. One respondent highlighted specific interface-level accessibility features, including **text alternatives for images, structured headings, and sufficient colour contrast**, mentioning concrete UI elements, which aligns closely with WCAG principles and are strong indicators of intentional accessible design.

Dependency on external systems or configurations: One respondent noted that the accessibility of their catalogue depends on both external providers and the user’s device or assistive technologies. They explained that accessibility may vary depending on the catalogue vendor, the type of screen reader or operating system a user employs, and how accessibility settings are configured on personal devices or library computers. This response highlights that even when accessibility features exist, the **actual user experience can differ widely**, making catalogue accessibility contingent on external and contextual factors rather than entirely under the control of the library or the National Bibliography itself.

Interface and resource accessibility: Several responses mentioned resource accessibility, whether combined with interface features or cited alone, suggesting that respondents may not distinguish between catalogue interface accessibility and the accessibility of resources.

Overall insight: Overall, the responses reveal that accessibility is implemented and understood in diverse ways across National Bibliography catalogues. With some respondents focusing on catalogue interface features and others on the accessibility of resources, these answers suggest that respondents may have difficulty distinguishing between the two. In practice, catalogue interface accessibility and resource accessibility are often intertwined, and both contribute to the overall user experience, reflecting varied approaches, understandings, and priorities among National Bibliography catalogues.

Other comments

As the final question of the survey, this open-ended section provided respondents with an opportunity to highlight issues, perspectives, and experiences not captured elsewhere in the questionnaire. Analysis of these responses and offered insights revealed five distinct archetypes of institutions representing the varying levels of engagement and implementation of accessibility practices across NBAs. These archetypes reflect the operational realities, challenges, and aspirations of NBAs in relation to accessibility.

1. Aspirational/Reflective Model

- Agencies in this category are currently in the conceptual phase, often prompted by international dialogue or a general commitment to user-oriented philosophies. While

they recognize the importance of accessibility, their efforts are limited to high-level principles without concrete workflows or initiatives in place. The discussion around a shift to a more user-oriented approach is still in its preliminary stages but external catalysts (such as this survey and others alike) can serve as prompts to inspire action.

- **Strategic gaps:** No operational metadata production; accessibility remains a theoretical goal, an aspiration, or a mandate/necessity reminded by external mobilizations.

2. Legislative Constraints

- These agencies are hindered by existing legal barriers. Their efforts are stalled due to existing legal deposit legislation that does not mandate the collection of specialized formats (braille, DAISY) or digital publications.
- **Strategic gaps:** This category shows the significant impact of dated legislative environments. The NB is currently incomplete due to a lack of legal authority/framework to collect accessible works.

3. Transitional/Infrastructure-Led Model

- Agencies categorized here are in the process of overhauling their systems and infrastructure with the notion that improvements in technology and infrastructure will lead to better accessibility outcomes. This archetype demonstrates dynamic accessibility efforts, where agencies are actively seeking to modernize their operations. It also points to the importance of strategic planning and investment in technology as a means to achieve accessibility goals.
- **Strategic gaps:** While the *container* is being modernized, the specific *metadata* (how the records are tagged) is often still in development.

4. Specialized Hubs:

- This category includes agencies that have developed effective systems but remain confined to specific databases or physical locations. Unlike some of the more fragmented metadata approaches, these services are centralized and located in a dedicated physical destination. The services can be designed to support a wide range of accessibility needs, addressing not only the needs of individuals with visual impairments but also those with various reading difficulties, such as dyslexia. This approach demonstrates a broad interpretation of accessibility that recognizes the diverse challenges faced by all users in accessing information and resources.
- **Strategic gaps:** While very high-effort, it remains a destination-based service rather than a "born-accessible" universal metadata standard within the national bibliography itself.

5. Operationally fragmented

- Agencies in this category are engaged in high-level discussions and international standardization efforts but struggle with consistency in their operational practices. The survey results pointed to a disconnection between strategic engagement at the policy level and the implementation of accessibility measures on the ground. This fragmentation can lead to inefficiencies and gaps in service delivery, where deep accessibility is provided in some areas (specialized rooms or partner libraries) but not cohesively across the entire National Bibliography.
- **Strategic Gaps:** Lack of consistent accessibility metadata in the general catalogue; reliance on external partners or specialized databases.

Discussion: Cross-Analysis of Survey Findings

Accessibility is fundamentally about ensuring that all individuals, regardless of their abilities, can access and benefit from information resources. The survey results indicate a growing awareness among NBAs regarding the importance of accessibility, yet they also highlight a significant gap between this awareness and the implementation of effective practices.

The free responses highlighted a significant disconnect between what can be considered awareness of accessibility matters, high-level policy participation at collective and global levels, and the operational reality that these institutions face at various levels and with varying degrees of maturity. The factors are complex and intertwined, making the ground realities equally complex and requiring a holistic approach, the foundations of which depend on global standardization efforts and collaborative frameworks. This creates a scattered and uneven landscape of efforts that is still far from achieving global accessibility targets.

A direct first, yet major, result of this disconnect is the gap between “standard-setting” maturity and limited “operational” maturity. Institutions could help shape global accessibility rules, or engage in international initiatives, while simultaneously struggling to integrate accessibility metadata practices into their workflows. Operational practice remains largely ad-hoc or reactive, particularly at the level of technical metadata and in the collecting and provision of accessible formats.

Additionally, the following observations add further layers of complexity to the NBA–accessibility landscape:

- **The Metadata Ingestion Gap:** Institutions may occasionally receive digital content with accessibility features through their systems, but these features are not consistently captured or described in metadata. Notably, EPUBs often do not receive traditional cataloguing, further limiting their visibility within standard discovery and management workflows.
- **The Policy Gap:** Reproduction in alternate formats is currently handled on a **case-by-case basis**, guided by informal internal guidelines that are rarely applied.
- **The Commercial and Copyright Barrier:** There is a rigid adherence to copyright/commercial availability. If a resource is commercially available in an

accessible format, the NBA could step back, acting as a **Referral Service** rather than a Provider. Their reproduction policy is restricted by copyright and commercial availability; they act as a **referral service** to other organizations rather than a primary creator of accessible content.

- **Legacy Copy Services:** Their Copy Services remain focused on OCR'd PDFs, TIFFs, or JPEGs, and the institution acknowledges that formal policies to even handle born-digital resources like eBooks are needed or **still under development**.
- **The Legal Deposit/Legislation Barrier:** Legal deposit frameworks lag behind emerging developments, including new digital formats and recent national and regional accessibility legislation. This misalignment not only constrains the mandate for acquiring accessible formats but also affects the handling of emerging formats more broadly. It underscores the urgent need to revise legal deposit legislation to enable these institutions to fully fulfil their role in collecting and preserving accessible content for service and all resources for posterity.

Concluding Remarks: The Necessity of International Standardization and Transitional Opportunities

Standardization as Infrastructure

The gap observed between high-awareness and engagement and operational realities suggests that accessibility cannot be solved by any single organization in isolation. The sheer volume of digital content makes manual, case-by-case cataloguing and processing impossible to scale. To ensure National Bibliographies and library catalogues remain relevant while global standards are being developed, a transitional perspective is required.

In the interim, while global standards are being developed, several practical entry points can help bridge the gap between standard-setting ambitions and operational implementation. To support this transition toward a truly inclusive bibliographic ecosystem, the focus must therefore shift toward standardization as infrastructure:

1. **Upstream Metadata:** Collaborating with publishers so accessibility metadata is embedded at the point of creation (using ONIX or Schema.org), so it can be harvested automatically, removing the burden of manual description from the library.
2. **Unified Descriptive Standards:** Adopting standardized metadata fields (such as MARC 341 and 532) to replace informal local guidelines, could help ensure a predictable and accessible search experience for all users worldwide.
3. **Legal and Regulatory Alignment:** Modernizing legal deposit and related legislative frameworks to support the collecting mission of NBAs and keep pace with emerging digital formats and evolving accessibility legislation would help ensure that accessible formats can be systematically collected, processed, and made discoverable.

Complementary Institutional Actions for NBAs

The following actions are proposed as indicative suggestions rather than requirements, based on observed practices and reported needs.

Strengthening Collaborative and Sectoral Networks

- NBAs may benefit from strengthening collaborative networks and metadata exchange initiatives, particularly with actors in the publishing sector. Such collaboration can support the sharing of resources, best practices, and knowledge, thereby improving accessibility implementation across the ecosystem.
- Participation in relevant national and international forums where accessibility and accessibility metadata are developed and discussed may also be valuable. Engagement in both professional communities and standards-related initiatives can help enhance institutional awareness and alignment with evolving practices.

User Engagement to Understand their Needs and Preferences

- Maintaining an ongoing dialogue and engaging more systematically with users to better understand their information needs and preferences regarding both accessibility metadata and accessibility of catalogues. Continuous dialogue with users can support more responsive adaptation of services to diverse requirements.

Conclusion

In summary, while the survey results indicate a growing awareness of the importance of accessibility among National Bibliographic Agencies, significant gaps remain in the implementation of effective practices, and the reasons are varied and complex.

The variability in current practices and the needs expressed by respondents reinforce the urgency of developing internationally harmonized standards, shared best practices, and practical implementation guidance to support the consistent creation, exchange, and reuse of accessibility metadata. The findings also highlight the importance of improving the availability of accessibility metadata from publishers and other metadata providers, as the ability of National Bibliographic Agencies to create, enrich, and disseminate accessibility metadata depends on the quality and completeness of the data they receive.

Addressing these challenges requires concerted efforts by individual agencies, together with sustained collaboration across the library, publishing, and standards communities. The survey also highlights questions requiring further investigation, particularly the unexpectedly limited adoption of internationally recognized accessibility vocabularies such as ONIX and Schema.org. Better understanding the reasons behind this finding could help inform future international standardization efforts and the development of more widely applicable accessibility metadata practices.

Ultimately, meaningful progress depends on continued international cooperation and the development of a common framework that supports accessibility across the bibliographic

ecosystem. At the same time, the recommendations presented in this report provide practical transitional opportunities to enable incremental progress while the international standardization framework continues to mature.