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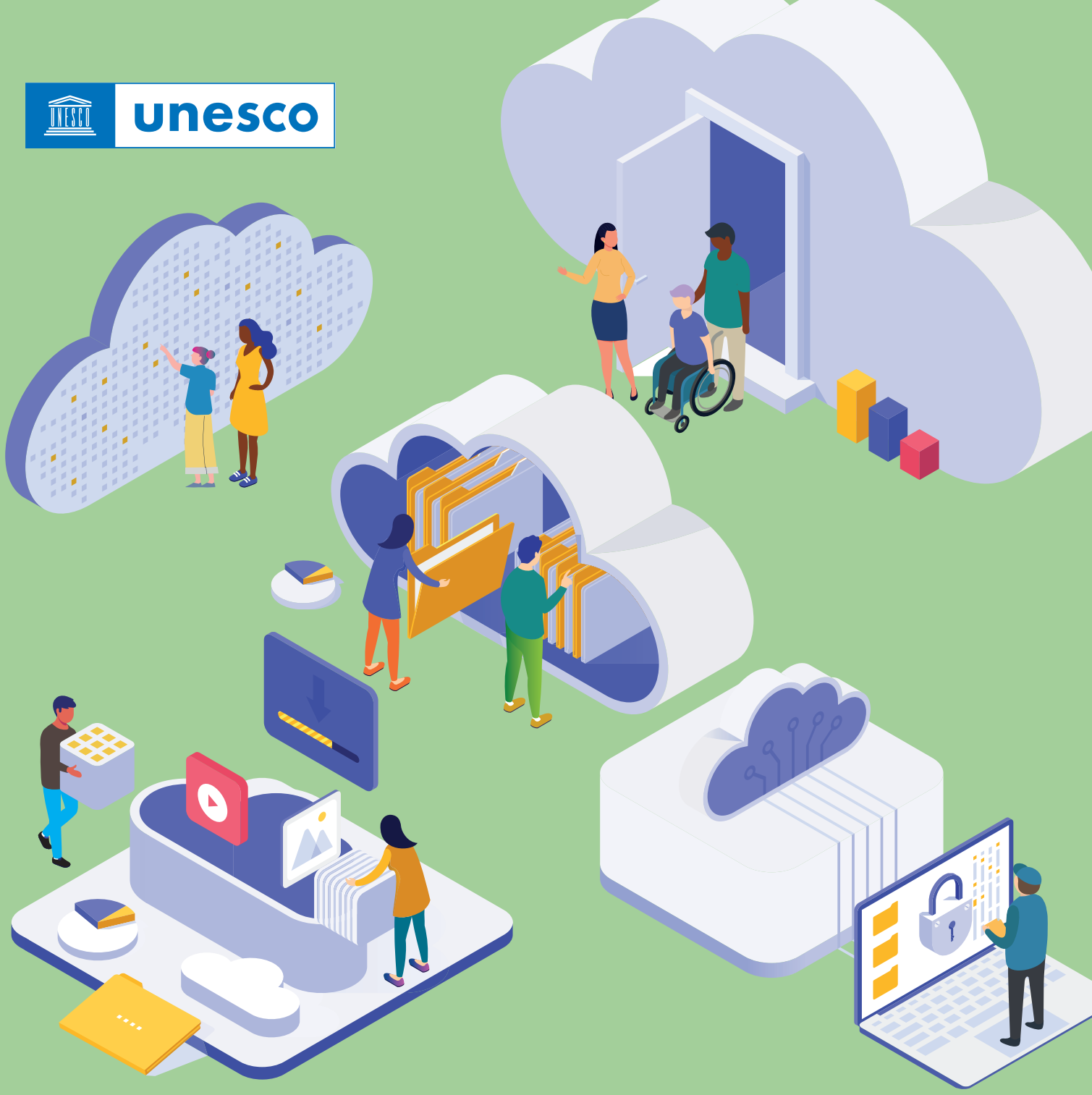


IFAP ISSUE BRIEF

Global Challenges for Information Accessibility

Key Principles and Good Practices in the Digital Age

IFAP Issue Briefs Series: *Within the framework of implementing the Information For All (IFAP) Strategic Plan 2023 -2029, the IFAP Secretariat launches this foresight-oriented Issue Briefs Series in order to sensitize and support Member States and other stakeholders in formulating information policies and sharing experiences and lessons learned, aimed at building inclusive, equitable and sustainable Knowledge Societies, including harnessing the opportunities offered by the frontier technologies and mitigating eventual risks.*

Executive Summary

The UNESCO Information for All Programme (IFAP), in line with its Strategic Plan 2023-2029, promotes policy standards and good practices to strengthen universal accessibility to information, advancing privacy protections, open access, and universal design approaches for the meaningful inclusion of women and girls, youth and children, the elderly, and persons with disabilities in information ecosystems[1].

In this spirit and following on from exchanges and discussions that took place within the UNESCO Information for All Programme (IFAP) Working Group on Information Accessibility, the authors of this Issue Brief present a set of challenges for Information Accessibility that champions the fundamental right to access information for all individuals, regardless of background or circumstance. By emphasizing the eight key principles of **Universal Design, Meaningful Connectivity, Inclusivity, Transparency, Information Integrity, Legal Conformity, Efficiency, and Flexibility**, as illustrated by a number of good practices at national and regional levels across five continents, this issue brief equips policymakers with key inputs necessary to navigate the complexities of the digital age while ensuring equitable access to information.

In highlighting these key Principles, the authors recall that everyone has a right to freedom of expression that includes the freedom to seek, receive and impart information and ideas" (with ref. to para. 2 Art. 19 of the International Covenant on Civil and Political Rights - ICCPR). Exercise of this right is important to ensure sustainable development and the rule of law[2], as well as the public's participation in all spheres of life, including civic, social, political, and economic.

1 There is currently no single approach to defining the concept of an "information ecosystem", and the term is the subject of academic debate. For the purposes of this Issue Brief, the authors understand the concept of an "information ecosystem" as the interaction between stakeholders (government agencies, private institutions, public organisations, NGOs, individuals, etc.) to acquire, process, store and transmit the data.

2 The need to accelerate worldwide progress: UNESCO 2023 report on public access to information (SDG 16.10.2), https://unesdoc.unesco.org/ark:/48223/pf0000389214/PDF/389214eng.pdf.multi

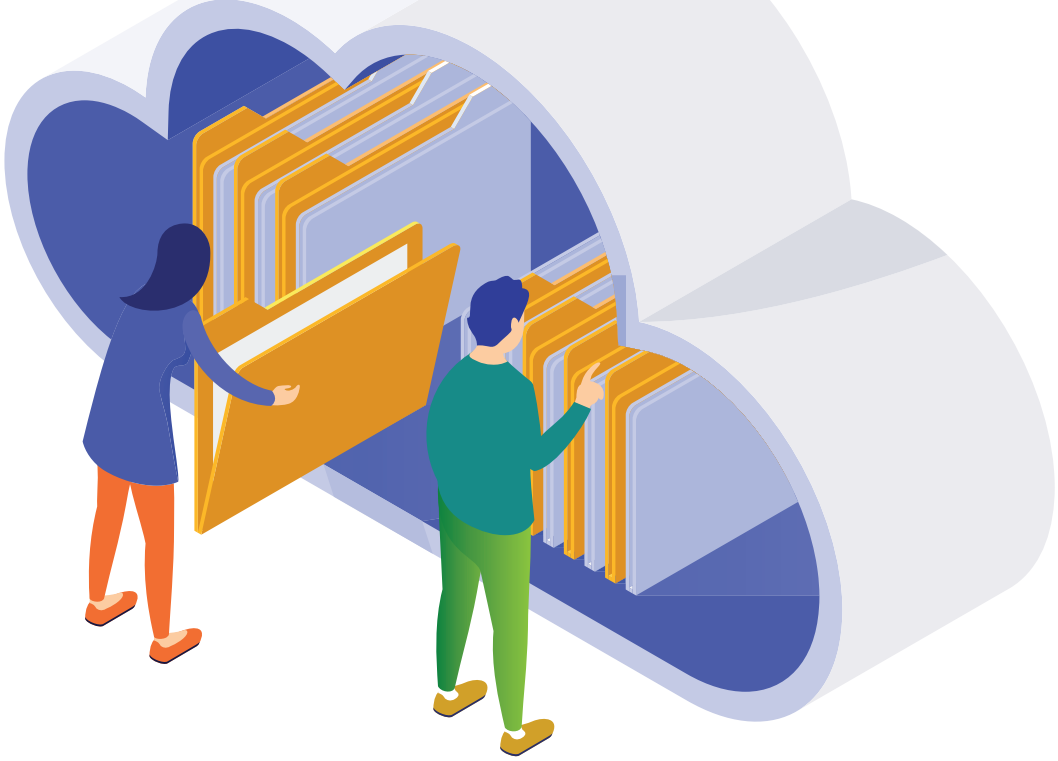
The key principles outlined in this issue brief are also rooted in UNESCO's Internet Universality ROAM Principles (**R**ights, **O**penness, **A**ccessible to all, **M**ulti-stakeholder Participation), as endorsed by UNESCO's 38th General Conference in 2015. As emphasized in the UNESCO publication "Steering AI and Advanced ICTs for Knowledge Societies[3]", the ROAM principles extend beyond Internet governance to serve as a foundation for the ethical, rights-based development and governance of AI and other emerging technologies—helping to mitigate risks and advance progress toward the Sustainable Development Goals (SDGs).

The COVID-19 pandemic most clearly illustrated the challenge of guaranteeing universal information accessibility and meaningful connectivity. It showed the necessity for policymakers/regulators to have clear direction and principles in this area. This issue brief was designed as a contribution to fill this gap, inter alia by reflecting the learnings from the pandemic as an example of an emergency.

Through this document, the authors are aiming towards policymakers such as governments, regulators, and NGOs, who can use it as a starting point for their own considerations. These initial insights should stimulate further knowledge sharing regarding good practices but also lessons learnt in advancing information accessibility in the digital age.

This brief delineates key principles for enhancing information accessibility and meaningful access within digital realms and addressing diverse facets such as multilingualism, metadata, and interoperability. Emphasizing the critical role of transparent, trustworthy information ecosystems, the Issue Brief advocates for inclusive design, transparency, data integrity, legal conformity, efficiency, and flexibility. Through sharing good practices ranging from Canada's accessibility tools to Chile's initiatives in open justice and AI policy, the document articulates actionable principles for policymakers to foster equitable access to information, thereby fortifying societal resilience and informed decision-making.

3 UNESCO Publication Steering AI and Advanced ICTs for Knowledge Societies https://unesdoc.unesco.org/ark:/48223/pf0000372132/PDF/372132eng.pdf.multi



1. Motivation and Purpose

The right to access information allows everyone to participate in different spheres of life, including civic, social, political, and economic. A healthy information ecosystem is transparent, trustworthy, inclusive, and among other characteristics, requires the efforts of private and public sector entities as well as the participation of well-informed users.

This is true, regardless of the mode of information delivery. However, this document concentrates on information accessibility within a digital framework, as defined by the IFAP: *Information accessibility encompasses the many issues surrounding the availability, accessibility, and affordability of information, such as multilingualism, metadata, interoperability, opensource software, open content, Creative Commons licences as well as addressing the special needs of people with disabilities*[4].

Within this definition of accessibility is a recognition of the importance of sharing information to benefit society: *The new economic and technological environment raises concerns about the erosion of access to certain information and knowledge that has been freely shared in the past, for example, to facilitate scientific research and education*[5]. Likewise, access to accurate and reliable information must increasingly be championed in the face of disinformation and misinformation, which can have life-threatening consequences, as shown by the COVID-19 pandemic. Moreover, quality information is critical as AI/machine learning systems are increasingly relied upon for the automated distribution of news and information content.

Information sharing can ensure a greater level of transparency between members of the public who provide data and the organizations and governments who use it. For both public and private organizations, it can lead to greater efficiency and informed decision-making without the need to provide the same information to multiple agencies.

It is crucial to ensure accessibility of accurate and reliable information in order to mitigate the challenges of enhancing information integrity, and content moderation driven by AI algorithms[6], following UNESCO Guidelines for the Governance of Digital Platforms. Information sources should be reliable and could be identified by the authority, accuracy, coverage, and currency of the information[7] and multiple source comparisons.

4 https://www.unesco.org/en/ifap/information-accessibility
5 Ibid.
6 https://www.unesco.org/en/internet-trust/guidelines
7 https://www.stevenson.edu/online/about-us/news/how-to-identify-reliable-information/

Information sharing can inspire trust and confidence by demonstrating that organizations are committed to being transparent about the information they collect and use. According to the ROAM principles, trust and security are key to the effective functioning of the Internet for the benefit of all. These, in turn, are related to the degree of openness and transparency of the Internet[8]. Those sharing their data should also be in control of the information shared, and a system of informed consent – based on being fully informed about the use of their data which can be revoked by the user – must be considered.

When developing national frameworks, policymakers are encouraged to take into account the principles and recommendations, set out in the following documents:

- The FAIR Principles (Findable, Accessible, Interoperable, and Reusable) that set out a structure for data reuse ensuring that data can be standardized and replicated, while offering protection for sensitive data[9];
- UNESCO's Principles on Personal Data Protection and Privacy[10];
- UNESCO's Recommendation on the Ethics of Artificial Intelligence, Policy Area 3 which provides recommendations on '*appropriate safeguards to be put in place to protect the right to privacy in accordance with international law*'[11];
- UNESCO's Policy Brief on data-invisible groups and data minimization in the deployment of AI solutions[12].
- UNESCO Guidelines for the Governance of Digital Platforms[13]
- UNESCO's Policy Brief on Data sharing to foster information as a public good: the case of media viability and safety of journalists in the digital ecosystem[14]
- UNESCO's Policy Brief on Letting the sun shine in: transparency and accountability in the digital age[15]
- UNESCO IFAP Issue Brief on Human Rights Centred Global Governance of Quantum Technology[16].

The application of principles and recommendations, set out in the above documents may help competent authorities to collect the same information from individuals without violating their right to privacy while providing consistency of information across different services, and enhanced protection for people in situation of vulnerability. These efficiencies would also reduce barriers to information access based on costs for the user (always recognizing barriers placed by physical access or through social or cultural differences, see also the CARE Principles for Indigenous Data Governance – refers to Collective Benefit. Authority of Control, Responsibility and Ethics - which complement the FAIR Principles, referred to above[17]).

Accordingly, this Issue Brief presents these key Principles that acknowledge the need to build trust among users and address their legitimate concerns, while remaining sufficiently high level to allow freedom of implementation according to national strategies in both the public and private sectors[18].

8 https://unesdoc.unesco.org/ark:/48223/pf0000367617
9 https://www.go-fair.org/fair-principles/.
10 https://www.unesco.org/en/privacy-policy
11 https://www.unesco.org/en/articles/recommendation-ethics-artificial-intelligence
12 https://unesdoc.unesco.org/ark:/48223/pf0000388089
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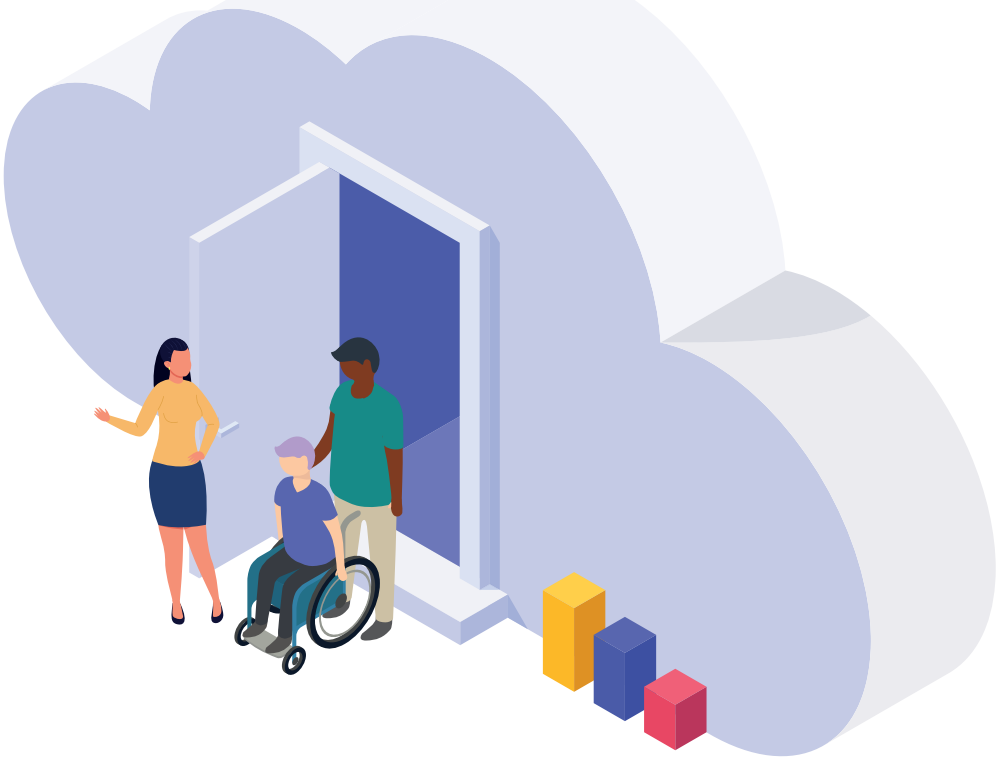
15 https://unesdoc.unesco.org/ark:/48223/pf0000377231
16 https://unesdoc.unesco.org/ark:/48223/pf0000393402
17 https://www.gida-global.org/care
18 Information accessibility encompasses the many issues surrounding availability, accessibility and affordability of information, such as multilingualism, metadata, interoperability, open source software, open content, Creative Commons licences as well as addressing the special needs of people with disabilities." That is, qualities of the information itself, and the channels it flows through. Devices, literacy, while important, are broader considerations for the digital ecosystem, for which we'll have to look at many other elements, far beyond our ambit (see: https://www.usaid.gov/sites/default/files/2022-05/Digital_Strategy_Digital_Ecosystem_Final.pdf)

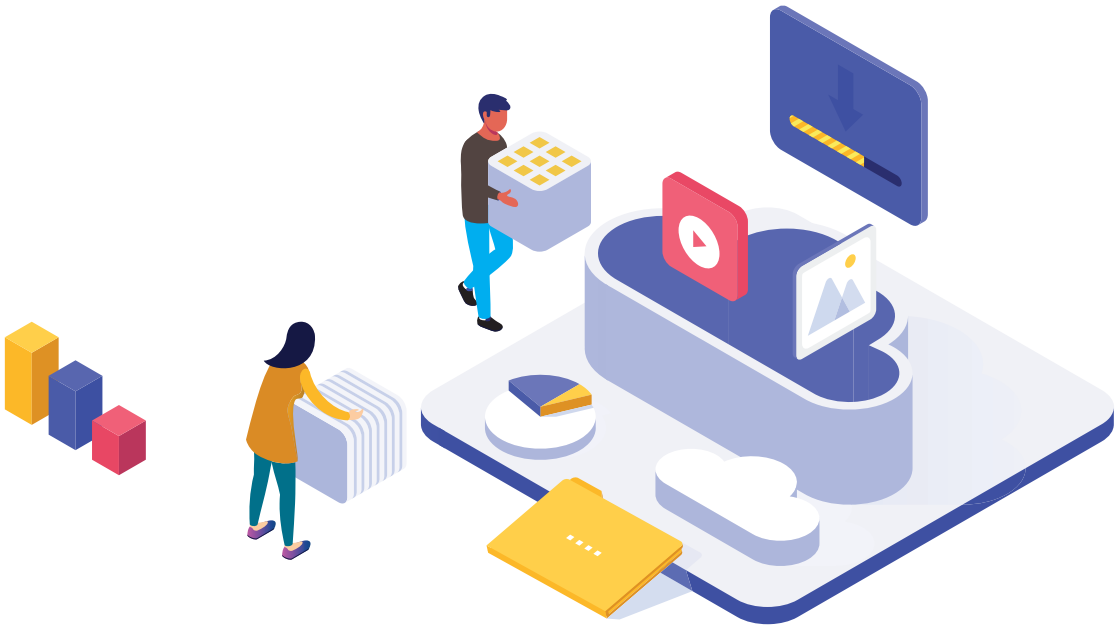


2. Target Stakeholders

This Issue Brief, as stated, is intended for a diverse array of stakeholders engaged in promoting information accessibility and transparency. It is designed to provide guidance and actionable insights for government policymakers, regulators, non-governmental organizations, private sector entities, academic institutions, and civil society organizations.

Policymakers and regulators can leverage the framework outlined herein to shape inclusive policies and regulations that foster equitable access to information. Non-governmental organizations and civil society groups advocating for information accessibility will find valuable strategies and examples to inform their advocacy efforts.

Private sector entities involved in digital platforms and information dissemination can utilize the principles and recommendations to enhance the accessibility and integrity of their services. Likewise, academic and research institutions studying information access and digital governance can benefit from the insights provided to advance scholarly discourse and research agendas in this field.



3. Key Principles and Good Practices

The Brief is developed in line with the key principles and indicators of UNESCO's Internet Universality ROAM-X Framework[19], to measure Internet and digital development through **R**ights, **O**penness, **A**ccessible to all, **M**ulti-stakeholder Participation, and Cross-cutting issues such as gender equality.

The Working Group on Information Accessibility proposes that the following key principles underpin the governance of information by policymakers. Organizations are encouraged to use these principles to design their own frameworks for information accessibility while ensuring that their design take into consideration the needs of persons with disabilities, the elderly, children, persons with low levels of digital literacy, and those disadvantaged by other measures (e.g. local and Indigenous factors, such as language).

3.1 Universal Design

Access to information is widely recognized as an enabler of a broad range of human rights, especially for marginalized communities, including persons with disabilities.[20] In addition, any platform or portal for accessing information should enable users using different technologies and with varying capabilities and skill levels to have access on equitable terms, preferably at no more than the marginal cost of dissemination or for free. This means incorporating accessibility principles during the design process and making use of accessibility tools, formats, and technologies.

19 UNESCO's Internet universality indicators: a framework for assessing Internet development https://unesdoc.unesco.org/ark:/48223/pf0000367617
20 https://www.unesco.org/en/articles/oxford-statement-importance-access-information-and-digital-connectivity

National Good Practices

The Canadian Digital Service (CDS) has been developed '*to advance the goals of the Digital Ambition and improve service experiences in [the departments of] the Government of Canada*'. It has been used by hundreds of public servants in the fields of immigration, employment, treasury board, royal mounted police and health in Canada.

Another example is found in these key considerations for designing and building accessible US government websites and digital services are to be found here: https://designsystem.digital.gov/design-principles/

3.2 Meaningful Connectivity

Connectivity – especially meaningful connectivity - remains the principal barrier to access to information. Meaningful connectivity goes beyond infrastructure; it incorporates reliable and high-speed connections, accessible digital devices, and the skills necessary to navigate the online environment safely and productively.

Fostering meaningful connectivity ensures more of the population has access to information and essential services, including healthcare, education, and the ability to work, especially in rural and remote areas, thus promoting social inclusion and reducing the digital gap.

Meaningful connectivity must be seen as a foundational enabler of digital inclusion, empowering individuals not only to consume information but also to participate actively in the digital economy, civic life, and cultural expression, ensuring that no one is left behind in an increasingly digital society.

National Good Practices

In **Colombia**, the government's "Computadores para Educar" programme distributed over 2.6 million computers to rural schools since 2010, enhancing digital learning. The programme also includes the training of teachers and the servicing and recycling of the equipment. It has benefited more than 14 million students.

In **Australia**, the Australian Public Service Academy has developed the Four Principles of Web Content Accessibility Guidelines which are perceivable, operable, understandable, and robust. (https://www.digital.gov.au/policy/digital-experience/digital-inclusion-standard/dis-criterion-4-make-it-accessible)

In **India**, the Common Service Centres (CSCs) aim to provide essential government and non-government services to citizens, particularly in rural and remote areas, through digital means. They provide access to telemedicine, passport services, e-payments, and other e-government services. The network is operated by "village-level entrepreneurs", who are usually local and can therefore understand and support their communities in their local language. https://csc.gov.in/

In **Brazil**, Cetic.br | NIC.br published in 2024 the publication "Meaningful Connectivity: Measurement Proposals and a Portrait of the Brazilian Population," introducing a new framework that assesses not just Internet access, but also quality, affordability and context

of use. The study found that in 2023, only 22% of Brazilians were meaningfully connected, despite 84% being Internet users. It has become a regional reference through a partnership with UN-ECLAC, providing methodological support to other Latin American countries. The findings also contributed to the development of the Guidelines on Indicators and Metrics for Universal and Meaningful Connectivity, prepared in collaboration with the International Telecommunication Union (ITU) and Brazil's Ministry of Communications, and endorsed by all G20 members under Brazil's Presidency. (https://cetic.br/pt/publicacao/meaningful-connectivity-measurement-proposals-and-the-portrait-of-the-population-in-brazil/).

Regional Good Practices

The Interoperable Europe Act seeks to '*establish an interoperability governance structure with a view to creating an ecosystem of shared interoperability solutions for the EU public sector… This way, public administrations in the EU can contribute to and re-use such solutions, innovate together, and create added value.*'

3.3 Inclusivity

Based on the "Accessibility to All" indicators of the ROAM-X framework, there should not be barriers to the retrieval or use of information and the tools should be designed to enable inclusivity for all, intentionally making provision for women and girls, those from Indigenous populations, and persons in situation of vulnerability such as those with disabilities (e.g., use of written, visual, and auditory formats) and multilingualism, especially for underrepresented languages. Additionally, these might include paywalls or onerous identification and other requirements.

Inclusivity is not only concerned with the delivery of information but also with information governance. According to the "multi-stakeholder participation" indicator, which has been a central principle of the Internet Governance Forum (IGF) and was then widely adopted across national, regional, and international platforms concerned with Internet governance. This principle emphasizes that the governance process should fully involve the "Policy, Legal and Regulatory Framework", "National Internet Governance" and "International and Regional Internet Governance"[21].

As recommended by UNESCO publication "What if we all governed by the Internet? [22]", special provisions should be made for stakeholders that tend to be underfunded and underrepresented, such as marginalized communities, women, small business entities, and/or civil society participants from developing and/or Global South regions.

National Good Practices

A policy paper by the UK government International Women and Girls Strategy 2023 to 2030 looks at the UK's role in enabling greater inclusion of women in all forms, including education and health. The paper argues that '*It is critical also to address the challenge of women being excluded from the increasingly digital world due to an access gap, caused by the absence of affordable connectivity and digital literacy, and by social norms discouraging women's online engagement*'.

21 UNESCO's Internet universality indicators: a framework for assessing Internet development https://unesdoc.unesco.org/ark:/48223/pf0000367617?posInSet=8&queryId=3b06050e-8e8d-425d-ad53-8535d6f3a228

22 https://unesdoc.unesco.org/ark:/48223/pf0000259717

In Australia, The First Nations Digital Inclusion Plan (FNDIP) has been developed by the National Indigenous Australians Agency (NIAA) with support from the Department of Infrastructure, Transport, Regional Development and Communications. The FNDIP recognizes that governments have a key role to play but that collaboration with communities, non-government organizations, businesses, and industry is required to develop a secure, sustainable, and inclusive digital future for First Nations people. (https://www.niaa.gov.au/resource-centre/first-nations-digital-inclusion-plan-2023-26)

The Australian Government's Disability Gateway has developed Good Practice Guidelines for Engaging with People with Disability (https://www.disabilitygateway.gov.au/good-practice-guidelines).

Regional Good Practices

The African Union's Strategy for Gender Equality and Empowerment (2018-2028) calls for actions to ensure women and girls are active within the '*technological space and gender enabling E- solutions* ' (Pillar 1) and that '*women and girls are more visible and portrayed as equal contributors to society in the media, literature and cultural resources*' (Pillar 4).

Latin America has public policies and legislation on community and indigenous media so as to foster plurality, inclusivity, and freedom of expression. A series of booklets produced by the observatory, OBSERVACOM, addresses the regulatory environment and the sustainability of community and proximity media in 12 countries in the region (https://www.observacom.org/proyectopidc/).

3.4 Transparency

Transparency, as a part of the openness of the Internet, involves making available information about data-producing organizations, documentation on the data they generate, and the conditions for making this data available and accessible digitally.

As highlighted by UNESCO Policy Brief: "Letting the Sun Shine in: Transparency and Accountability in the Digital Age[23]", improved transparency by the companies would provide more information to users as well as help to give an evidence base to the wider public debate about the impact of the companies on democracy, free expression and privacy.

The UNESCO Recommendation on the Ethics of Artificial Intelligence has both a set of Principles and Policy Areas. A key Principle refers to transparency and explainability, noting that these are, in AI systems, "*essential preconditions to ensure the respect, protection, and promotion of human rights, fundamental freedoms, and ethical principles*"[24]. Moreover, information and policy transparency interact. The open data have enabled the scrutiny of Government policies leading to improved transparency and accountability[25].

23 https://unesdoc.unesco.org/ark:/48223/pf0000377231/PDF/377231eng.pdf.multi
24 https://unesdoc.unesco.org/ark:/48223/pf0000381137
25 https://unesdoc.unesco.org/ark:/48223/pf0000385841

National Good Practices

The Canadian university-based project HealthyDesign.City provides users with information about how user data is collected and used, who is analysing the data, and how that data is protected.

In the UK, the regulator, Ofcom consulted on draft statutory transparency reporting guidance applying to regulated services[26] in 2024. This is part of the requirement of the Online Safety Act which makes platforms legally responsible for keeping people, especially children, safe online.

Monitoring Transparency Initiatives

The Action Coalition on Meaningful Transparency is an initiative launched under the auspices of the Danish Tech for Democracy Initiative and the corresponding year of action. It was created and funded by the Global Network Initiative. It is governed by a Steering Group of civil society organizations around the world, engaging with an Advisory Group of public and private sector representatives, and aims to foster a broad set of participants in a multi-stakeholder advisory coalition.

On 7 March 2024, the Action Coalition on Meaningful Transparency formally launched the Transparency Initiatives Portal, as a global repository of information about what's happening in the digital transparency space, in order to inform research and policy, and help drive better practices.

3.5 Information Integrity

In the implementation of ROAM-X indicators, the integrity and security of the Internet and Internet services are essential to the effective functioning of the Internet and the preservation of the interests of all[27]. The value and utility of information depend, to a large extent, on the quality of the data itself. Users should be confident about how their data are collected, stored, and shared, and recommendations and guidance have been described in earlier parts of this Issue Brief. Users should also be confident that their data cannot be tampered with. Data managers and data collection organizations should follow explicit quality standards and ensure that adequate protections (including cybersecurity and privacy laws) are in place.

Therefore, information integrity should not be compromised – and this refers to the quality of the information being provided and accessed, in particular with the challenges posed by misinformation and disinformation. UNESCO's Guidelines for the Governance of Digital Platforms offers a comprehensive framework for addressing the overall challenges of information integrity following a human rights-based approach. The UN has developed Global Principles for Information Integrity which "present a vision of a future in which power imbalances are redressed... envision(s) an information ecosystem that delivers choice, freedom, privacy and safety for all, in which people everywhere can express themselves freely and make informed and independent decisions". During the Brazilian presidency of the G20, Brazil, the UN and UNESCO jointly launched the Global Initiative for Information Integrity on Climate Change, which is a concrete proposal to tackle these complex issues.

26 https://www.ofcom.org.uk/online-safety
27 UNESCO's Internet universality indicators: a framework for assessing Internet development

National Good Practices

In **Chile**, a recent national policy from the Sciences Ministry on AI, aiming at empowering people in the use and development of AI tools, and participating in the debate about their legal, ethical, social, and economic consequences has been issued: https://minciencia.gob.cl/areas-de-trabajo/inteligencia-artificial/politica-nacional-de-inteligencia-artificial/

In **Australia**, the national Digital Inclusion Standard Criterion 3 – Protect Users requires that agencies:

Establish and maintain a safe digital environment for users: for example, to create psychological safety: Hate speech and online abuse impact the participation and inclusion of all those targeted by it. Establish clear community guidelines on acceptable behaviour and proactively moderate digital content. Where appropriate, leverage technology to identify instances of malicious behaviour and align with best practices outlined by the eSafety Commission.

Counter scams and misinformation: for example, to 'build trust in design' by supporting the work of the National Anti-Scams Centre and mitigate misinformation by supporting the work of the Australian Communications and Media Authority.

Provide transparency and feedback loops - communicate safeguards: Communicate the safety measures that are in place to safeguard users against potential threats. Set up clear communication channels to report safety concerns and commit to resolving issues promptly.

In **Ukraine** the Law on Access to Public Information provides that access to information is ensured, inter alia, through the systematic and timely publication of information on a Unified State Web portal of Open Data.

3.6 Legal conformity

Policy, Legal and Regulatory Frameworks are included in all indicators of the ROAM-X framework to safeguard human rights for every individual. Access to information is an integral part of the fundamental right of freedom of expression, as recognized by Article 19 of the Universal Declaration of Human Rights (1948), which states that the fundamental right of freedom of expression encompasses the freedom to "seek, receive and impart information and ideas through any media and regardless of frontiers"[28]. Arrangements for access to information should respect the legal rights and legitimate interests and rights of all stakeholders, such as freedom of expression, right of access to information, freedom of association and the right to take part in the conduct of public affairs, right to privacy and social, economic and cultural rights.

National Good Practices

The Political Constitution of the Republic of Chile states that (19.1) "*scientific and technological development will be at the service of people and will be carried out with respect for life and physical and mental integrity. The law will regulate the requirements, conditions, and restrictions for technologies' use in people, including the protection of brain activity*".

28 https://www.unesco.org/en/access-information-laws?hub=370

Regional Good Practices

The European Union's Artificial Intelligence (AI) Act (which came into effect on 1 August 2024) seeks to regulate the development, market placement, and utilization of Artificial Intelligence (AI) systems in the Union. These are based on a variety of measures such as the level of risk posed to people, requiring certain compliance processes (including risk management strategies and information offered in a clear and transparent way to users). In addition, there is a list of Prohibited Practices that might encourage or manipulate harmful behaviours. It is a requirement that National Competent Authorities are set up to enforce the AI Act.

UNESCO Survey of SDG 16.10.2: the adoption and implementation of Access to Information (ATI) laws

As the United Nations custodian agency for Sustainable Development Goal (SDG) indicator 16.10.2, which tracks the "number of countries that adopt and implement constitutional, statutory, and/or policy guarantees for public access to information," UNESCO continues to report annually on global progress towards this target. Additionally, UNESCO highlights national efforts to monitor and report on access to information as part of achieving the SDGs.

Based on data collected in 202429, several countries and territories have updated their status regarding the adoption and implementation of access to information (ATI) laws. Notably, Namibia (2022), Qatar (2022), Cabo Verde (2022), and Zambia (2023) have enacted national legislation on access to information. As a result, in 2024, 139 United Nations Member States now have statutory guarantees for public access to information.

To ensure the effective implementation of access to information laws, UNESCO recommends governments to establish and protect the independence of oversight institutions. Data collected since the start of monitoring in 2019 demonstrates that access to information laws are most effective in countries with dedicated institutions overseeing their implementation. Independent bodies, such as Information Commissions, are crucial for carrying out impartial and effective oversight, fostering transparency, and enhancing accountability within the public sector.

In countries lacking oversight institutions, establishing such bodies is essential for advancing ATI governance and ensuring compliance. Furthermore, monitoring data suggests that governments should leverage ICT tools to improve the accessibility, management, and transparency of information across sectors. These technologies can streamline ATI implementation in public systems by promoting digital connectivity and facilitating the free flow of information, particularly through the Internet. To ensure inclusivity, the adoption of the Web Content Accessibility Guidelines (WCAG) is vital, as it enhances web accessibility for individuals with disabilities and supports the design of ICT solutions that leave no one behind, while promoting universal access to information.

29 https://unesdoc.unesco.org/ark:/48223/pf0000393238

3.7 Efficiency

One of the goals of promoting information access and sharing is to improve the efficiency of disseminating critical information. The "Openness indicators" of ROAM-X framework and FAIR Principles offer recommendations about how this might be achieved. Open markets for networks and communications services, as emphasized in ROAM Principles, always seek an efficient, affordable, and innovative environment, facilitating consumer choice and improving the quality of service for end-users[30].

Regional Good Practices

For example, the EU managed an open COVID-19 data platform that allowed researchers and organizations to share and download data from different sources rapidly.

The Interoperable Europe Act offers, as one of its main elements, 'the possibility to share and reuse interoperability solutions, powered by a one-stop-shop for solutions and community cooperation ('Interoperable Europe portal') and supported by measures to promote innovation, and enhance skills and knowledge exchange'.

3.8 Flexibility

Flexibility requires considering the rapid and often unpredictable changes in information technologies. Transparency, flexibility in licensing, and allocation of key resources are important assessment criteria for "open markets" in the ROAM-X "Openness" indicator, in addition to technology and service neutrality, non-restrictiveness, and non-discrimination[31].

The UNESCO Recommendation on the Ethics of Artificial Intelligence document refers to the importance of '*the adoption of open standards and interoperability (that) facilitate collaboration*'. Importantly it states, '*measures should be adopted to take into account shifts in technologies, the emergence of new groups of stakeholders, and to allow for meaningful participation by marginalized groups, communities and individuals and, where relevant, in the case of Indigenous Peoples, respect for the self-governance of their data*'.

National Good Practices

During the COVID-19 pandemic, the Estonian government was able to transition some of its social services onto its existing e-governance platform to continue serving the public when in-person procedures were not possible.

In Australia, the New South Wales (NSW) state government has developed the Services Australia CX Standard that helps NSW agencies design and deliver solutions that meet the unique needs and expectations of the people and communities of NSW (https://www.nsw.gov.au/departments-and-agencies/customer-experience-unit/cx-hub).

30 UNESCO's Internet universality indicators: a framework for assessing Internet development
31 Ibid.

4. Conclusion

The authors of the Issue Brief aim that these key Principles are perceived as an acknowledgement of the need to build trust among users and as concrete inputs to address their legitimate concerns, while remaining sufficiently high level to allow freedom of implementation according to national strategies in both the public and private sectors. The Brief is thus developed to foster knowledge sharing on other good practices developed and implemented by different stakeholders as well as lessons learned from policies that have failed.

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Acknowledgments

Acknowledgments are extended to **Mr. Alexandre Barbosa**, Head of CETIC - Regional Center for the Development of Information Society; **Mr. Jaco Du Toit**, Head of UNESCO office in Kathmandu and Representative of UNESCO to Nepal; **Ms. Zeynep Varoglu**, Senior Programme Specialist, Communication and Information Sector of UNESCO; **Mr. Bhanu Neupane**, Senior Programme Specialist/ Process Coordinator, World Water Assessment Programme, Natural Sciences Sector of UNESCO; **Mr. Marius Lukosiunas**, Advisor for Communication and Information, Communication and Information Sector of UNESCO; **Ms. Yichen Liu**, Consultant of Information for All Program Secretariat of UNESCO; and **Mr. Louie Lu**, Intern at Division of Digital Policy, Inclusion and Transformation and IFAP Secretariat for their valuable contributions.

UNESCO Information for All Programme (IFAP) thanks the financial support of Scientific and Technical Documentation Press (STDP) of China for enabling the layout, printing and translation of the IFAP Issue Briefs Series.

科学技术文献出版社
SCIENTIFIC AND TECHNICAL DOCUMENTATION PRESS

Published in 2025 by the United Nations Educational, Scientific and Cultural Organization, 7, place de Fontenoy, 75352 Paris 07 SP, France

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UNESCO Information for All Programme (IFAP) thanks the financial support of Scientific and Technical Documentation Press (STDP) of China for enabling the layout, printing and translation of the IFAP Issue Briefs Series.

IFAP-2024/IssueBrief.2/IA

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