UNESCO’s Internet Universality R.O.A.M Framework
Marielza Oliveira & Xianhong Hu
A humanistic definition of Internet Universality

UNESCO’s mandate: “free flow of ideas”

Internet = network of socioeconomic interactions & relationships

- **Inclusiveness** is central to Internet discourse ("digital divides") => Must be ACCESSIBLE to everyone => DIVERSITY
- Internet must be universal not only in “connecting everyone”, but in being grounded in universal values => HUMAN RIGHTS framework
- Internet development must contribute to the SDGs => need evidence to identify achievements and gaps => 303 quantitative and qualitative indicators, in 5 ROAM-X categories + context

R | Rights
---|---
O | Openness
A | Access to All
M | Multistakeholder participation
X | Cross-Cutting Issues

UNESCO Internet Universality Indicators
Indicateurs de l’UNESCO sur l’Universalité d’Internet

2019
A Human Rights-based assessment

Are digital rights in line with international legal frameworks?

• Universal Declaration of Human Rights
• International Covenant on Civil and Political Rights (ICCPR)
• International Covenant on Economic, Social and Cultural Rights (ICESCR)
• Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)
• Convention on the Rights of the Child (CRC)
• Convention on the Rights of Persons with Disabilities (CRPD)
• Resolutions of UNHRC, UNGA: “online = offline”

Full range of rights: FOE, ATI, privacy, cultural participation, gender equality, security, education, employment, welfare...
How ROAM-X could contribute and complement?

- **Unique strength of ROAM-X:** as an endorsed position and holistic framework

- An overarching measurement on **legal, policy** and **regulatory framework**
- Unique strength in **measuring human rights** and **Multi-stakeholder** approach
- A clear focus on **digital inclusion** dimensions (gender, youth, people with disabilities, language, local content)
- **Methodological innovation** of a multi-stakeholder implementation to empower national actors
- **Different approach/perspective** to those shared indicators
A participatory (inclusive!) Framework development process
303 Indicators in 5 categories + context and 31 different themes (109 core ones)

- (21) Contextual indicators
- (55) Human Rights
- (57) Openness
- (70) Inclusive Access
- (21) Multi-stakeholder approach
- (79) Cross-cutting Issues

Full publication and Summary Leaflets
- English
- French
- Spanish
- Chinese
- Russian (coming soon)
- Arabic (coming soon)

https://en.unesco.org/internet-universality-indicators
21 CONTEXTUAL INDICATORS

- Background information important for interpreting findings derived from indicators in the ROAM-X categories.
- All are derived from data sets or indices compiled by international organisations.
- All are readily available from those organisations’ websites and publications.

**ECONOMIC INDICATORS**
- Proportion of GDP attributable to services

**EQUALITY INDICATORS**
- Gini Coefficient, Gender Inequality Index

**DEMOGRAPHIC INDICATORS**
- Degree of urbanization, Linguistic diversity

**GOVERNANCE INDICATORS**
- World Governance Indicators

**DEVELOPMENT INDICATORS**
- UNDP Human Development Index (HDI)

**ICT DEVELOPMENT INDICATORS**
- ICT Development Index
### UNESCO Internet Universality Indicators

#### 5 Categories, each with Themes

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<td><strong>O</strong> Openness</td>
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55 RIGHTS INDICATORS

**POLICY, LEGAL AND REGULATORY FRAMEWORK**
- Evidence that the principle of online/offline equivalence is accepted and implemented in law and practice.

**FREEDOM OF ASSOCIATION**
- Evidence of online organization, and absence of undue interference with such organization.

**FREEDOM OF EXPRESSION**
- Legal framework for intermediary liability and content regulation is consistent with international and regional rights agreements, laws and standards, and evidence concerning proportionality of implementation.

**THE RIGHT TO PRIVACY**
- Legal framework for data protection, including monitoring mechanisms and means of redress, and evidence that it is respected and enforced by government and other competent authorities.

**RIGHT OF ACCESS TO INFORMATION**
- Legal framework for blocking or filtering internet access, including transparency and oversight arrangements.

**SOCIAL, ECONOMIC AND CULTURAL RIGHTS**
- Evidence of inclusion of a) the Internet, and b)ICESCR rights, in sector strategies for employment, health and education.
Examples: R indicators related to ICANN

**Theme B - Right of Freedom of Expression (A19 ICCPR)**

RB5: What proportion of the population generates online content?

**Theme C - Right of Access to Information (A19 ICCPR)**

RC2: Does the government block or filter access to the Internet as a whole or to specific online services, applications or websites, and on what grounds and with what degree of transparency is this exercised?

RC3: Numbers and trend of content access restrictions, takedowns of domain names and other interventions during the past three years

**Theme E - Right to Privacy (A17 ICCPR + A16 CRC + UNGA)**

RE4: Are any requirements for identification and registration, including telephone and internet subscription reg, necessary, proportionate & consistent with internat & reg rights agreements, laws and standards?
57 Openness Indicators

Policy, Legal and Regulatory Framework

Evidence concerning the conduciveness of the legal and regulatory framework towards the establishment of new business ventures and innovation by academia and civil society.

Open Content

Regulatory arrangements and practice concerning net neutrality and competition for online and network services.

Open Standards

Government policy towards free and open-source software and other licensing options.

Open Data and Open Government

Evidence concerning the extent to which open data resources are available and used online.

Open Markets

Existence of an independent regulatory authority for communications markets.
**Theme A – Policy, Legal & Regulatory Framework**

OA2: Existence of legal and regulatory frameworks to enable e-commerce, digital signatures, cybersecurity data protection and consumer protection.

**Theme B – Open Standards**

OB4: Does the gov promote & adopt standards to facilitate accessibility to the internet and e-gov services for persons with disabilities?

OB5: Data concerning the extent of DNSSEC deployment

**Theme C – Open Markets**

OC1: Is there independent regulation of communications markets, undertaken in accordance with international norms and standards?

Indicators: ▶ Existence of an independent regulatory authority or authorities

C2: Are licensing and allocation of critical resources (including spectrum) transparent, flexible, technology- and service-neutral, non-restrictive and non-discriminatory?

Indicators: ▶ Legal and regulatory arrangements for spectrum, including affordability of access to spectrum ▶ Perceptions of the quality of arrangements for licensing and allocation of critical resources among relevant stakeholders

OC3: Is there independent management of the domain name system?

Indicators: ▶ Independence of the domain name registrar and legal arrangements concerning domain name registration ▶ Proportion of domain registrations from the country which are registered as ccTLDs

Examples: O indicators related to ICANN
Theme C – Open Markets

OC5: Can Internet users choose between diverse Internet service providers, including domain name registrars, ISPs and online services?
Indicators: Number of domain name registrars and distribution of market shares

Theme E – Open Data and Open Government

OE2: Do government departments and local government agencies have websites which are available in all official languages and through all major browsers?
Indicators:
- Government policy to ensure provision of websites with appropriate language and browser access, and evidence concerning effective implementation
- Quality of government websites (extent of language availability, range of content, availability of mobile version)

Examples: 0 indicators related to ICANN
70 ACCESSIBILITY TO ALL INDICATORS

POLICY, LEGAL AND REGULATORY FRAMEWORK
- Availability of independent household surveys and other evidence concerning aggregate Internet access and use.

CONNECTIVITY AND USAGE
- Perceptions (by user and non-users) of barriers to Internet access and use, aggregate and disaggregated, from household surveys and/or other sources.

AFFORDABILITY
- Availability or otherwise of zero-rated or low-cost access.

EQUITABLE ACCESS
- Geographical coverage of broadband networks in urban and rural areas, by level of bandwidth.

LOCAL CONTENT AND LANGUAGE
- Proportion of population whose principal language and script are available on leading online service.

CAPABILITIES/COMPETENCIES
- Proportion of Internet population with particular Internet skills, by skill level (basic, intermediate, advanced), aggregate and disaggregated.
Theme A • Policy, Legal and Regulatory Framework

AA2: Are there constitutional or legal provisions concerning access to the internet and online services?

AA5: Are public access facilities available that provide access to the internet for those who cannot afford or obtain personal access to the internet?

Theme B • Connectivity and Usage

AB1: What proportion of the population uses the internet, with what frequency, and is this proportion growing?

Indicators:
- Proportion of individuals who have ever accessed the internet
- Proportion of households with internet access

AB2: Are broadband networks available in all districts of the country?

Indicators: % pop covered by fixed broadband networks (disaggregated)

AB3: What proportion of the pop subscribes to communications/broadband services, and is this growing?
**Theme C • Affordability**

AC2: Is broadband access and use affordable to all sections of the population?

AC3: Are universal access/service arrangements in place that seek to reduce the cost of access and usage for poor and marginalized groups?

**Theme D • Equitable Access**

AD1: Are there significant differences in broadband access and use between regions and between urban and rural areas?
*Indicators: Geographical coverage of broadband networks*

AD2: Are there significant differences in broadband access and use between different ethnic communities within the population, including indigenous peoples?

AD4: Is there a gender digital divide in internet access and use and if so, is it growing, stable or diminishing?

AD5: Are people with disabilities able to make effective use of the internet?

**Examples: A indicators related to ICANN**
Theme E • Local Content and Language

AE1: How many Internet domains and servers are there within the country?
Indicators: ▶ Number of registered domains (including ccTLDs, gTLDs, and IDNccTLDs) per thousand population, and trend where available.

AE2: Is a substantial and growing volume of content about the country available online, including locally-generated content?
Indicator: ▶ Number of articles/words concerning the country in Wikipedia or an equivalent source, compared with other countries, including source (proportion generated in-country).

AE3: Are domains and online services available which enable individuals to access and use local and indigenous scripts and languages online?
Indicators: ▶ Availability of Internet domains and websites in local scripts ▶ Availability of local languages on major online platforms ▶ Availability of mobile apps in local languages ▶ Availability of content on government websites in all languages with significant user groups within the population.

AE4: Is there a substantial and growing volume of Internet content in diverse local and indigenous languages, including locally-generated content?
Indicators: ▶ Proportion of population whose principal language and script are available on leading online services ▶ Availability of content on government websites in all languages with significant user groups within the population.

Examples: A indicators related to ICANN
21 MULTISTAKEHOLDER INDICATORS

POLICY, LEGAL AND REGULATORY FRAMEWORK

- Existence of an overall framework consistent with relevant international norms.

NATIONAL INTERNET GOVERNANCE

- Existence of arrangements for multistakeholder consultation and involvement in national policymaking institutions and processes concerned with the evolution and use of the Internet.

INTERNATIONAL AND REGIONAL INTERNET GOVERNANCE

- Evidence that government encourages and facilitates multistakeholder preparation for international meetings.
Theme B • National Internet Governance

MB4: Does the national domain name registry involve all stakeholders in its decision-making processes?
Indicator: Constitution and practice of domain name registry

Theme C • International and Regional Internet Governance

MC3: Does the government and do other stakeholders participate actively in ICANN?
Indicators:
- Membership of and active participation in ICANN’s Governmental Advisory Committee (GAC)
- Membership of and active participation in ICANN constituencies, working groups and other fora

Examples: M indicators related to ICANN
79 CROSS-CUTTING INDICATORS

GENDER
National strategies include explicit consideration of:
- women’s needs relating to the Internet and
- the potential of the Internet to support women’s empowerment and gender equality.

CHILDREN
Existence of a policy framework and legal protections consistent with the Conventions of the Rights of the Child (CRC), and evidence that this is implemented by government and other competent authorities.

SUSTAINABLE DEVELOPMENT
Existence of a recent, comprehensive policy for the development of ICTs, broadband and the Internet which includes consideration of likely future developments in these fields.

TRUST AND SECURITY
Existence of cybersecurity strategy, with multistakeholder involvement, which is consistent with international rights and norms.

LEGAL AND ETHICAL ASPECTS OF THE INTERNET
Evidence concerning the quality and reliability of online information, the extent to which information is manipulated, and assessments of the prevalence and impact of disinformation.
How are ROAM-X indicators assessment reports created?

1. **Establishing a Multistakeholder Advisory Board (role of MAB?)**
2. **Building a collaborative research team (the composition?)**
3. Developing a **research action plan**, 
4. Data **gathering**
5. Data **analysis**
6. **Report-writing and recommendations**
7. **Organizing a national validation multistakeholder workshop**
8. **Impact assessment and monitoring**

- Peer reviews (national and international levels)
- Publishing process: UNESCO Series of Internet Universality Indicators Assessments
- To translate Recommendations to Actions and changes
- Regular update of assessments (and indicators)
33 countries: ROAM-X assessments (5 SIDs)

- ASIA: Thailand, Nepal, Palestine, Pakistan, Uzbekistan, Cambodia, Mongolia, Kazakhstan, Tuvalu, Tonga, Fiji, Solomon Islands, Vanuatu
- ARAB STATES: Tunisia, Sudan, Jordan
- LATIN AMERICA: Brazil, Ecuador, Paraguay, Uruguay, Argentina
- EUROPE: Germany, France, Serbia

The ROAM-X Dynamic Coalition of IGF

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<thead>
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<th>Stakeholder Group</th>
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<tbody>
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<td><strong>Government</strong></td>
<td>• Polish National Commission for UNESCO&lt;br&gt; • German National Commission for UNESCO</td>
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<tr>
<td><strong>IGOs</strong></td>
<td>• Council of Europe&lt;br&gt; • Organisation for Economic Co-operation and Development (OECD)</td>
</tr>
<tr>
<td><strong>Civil Society/individuals</strong></td>
<td>• Association of Progressive Communications&lt;br&gt; • Missions Publiques</td>
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<tr>
<td><strong>Academia</strong></td>
<td>• CETIC.br</td>
</tr>
<tr>
<td><strong>Private Sector and Technical Community</strong></td>
<td>• Internet Society (ISOC)&lt;br&gt; • Internet Corporation for Assigned Names and Numbers (ICANN)</td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td>• Global Forum for Media Development (GFMD)</td>
</tr>
<tr>
<td><strong>Multi-stakeholder organizations</strong></td>
<td>• Global Network Initiative (GNI)</td>
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Join the DC on IUIs: [https://en.unesco.org/feedback/join-our-internet-universality-community](https://en.unesco.org/feedback/join-our-internet-universality-community)

For other queries, please contact: internet.indicators@unesco.org
Thank you!

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• Internet Universality Indicators: https://en.unesco.org/internetuniversality

• IGF Dynamic Coalition of Internet Universality Indicators: https://www.intgovforum.org/multilingual/content/dc-on-internet-universality-indicators-dc-iui