



**United Nations Commission on Science and Technology for Development
(UN CSTD)**

Working Group on Data Governance

SURVEY RESPONSE*

Track 2 – Interoperability between National, Regional and International Data Systems

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1. What are the key challenges and risks to achieving interoperability at the national, regional, and international levels?

- Fragmented legal environments (regionally and globally);
- Differences in institutional and human capacity between countries

2. In which areas of development could interoperability have the most significant positive impact for your area of work, country or region in the next decade?

Below in response to the questions I include extracts from the AfriSIG 2025 output document which consists of a response to the CSTD WG on Data Governance in the four areas identified in the Global Digital Compact.

3. How can interoperability be advanced in ways that support collaboration while protecting each country's control over its own data, systems, and development priorities?

Common public standards that are open and agreed to regionally and ideally globally which countries commit to complying with at national level while also retaining control over their own data systems and development priorities.

4. How can technical and semantic standards be developed or adapted so they work across different cultural, linguistic, and institutional contexts?

- *Common public standards:* Policymakers should prioritize the adoption and implementation of common public and internationally recognized data standards to enhance system interoperability. Standards for interoperability must be adaptable and accommodate language diversity and

* This survey was designed by Ms. Nurul Sofia (Indonesia) and Mr. Renata Ávila (Open Knowledge Foundation), Co-facilitators of Track 2 on Interoperability between national, regional and international data systems. The survey supports the work of the UN CSTD Working Group on Data Governance (WGDG), established by the United Nations General Assembly ([A/RES/79/1](#)).

accessibility for people with disabilities. They should ensure that systems across sectors and borders can interact efficiently while safeguarding data privacy and security. This should be complemented by robust encryption and authentication mechanisms to protect data integrity and privacy.

5. How can governance and legal frameworks be designed to enable cooperation on interoperability without creating reliance on external actors or systems and remain aligned with public interest?

If these frameworks are based on the idea of data "stewardship" rather than "data ownership". Data stewardship, citizen participation, and the inclusion of mechanisms for redress in interoperability frameworks: This will foster public trust and encourage compliance.

The AfriSIG fellows also felt that these principles and considerations can help ensure alignment with the public interest and international human rights frameworks:

- Data justice: The entire data lifecycle - collection, processing, use, and governance - must promote fairness, equity, and inclusivity. Data practices can reinforce or disrupt existing power asymmetries and must therefore be designed to uphold dignity, equality, and the rights of all people. Data justice calls for participatory governance, equitable access to data, and redress mechanisms to address harm and exclusion.
- Sustainability and environmental justice: Sustainability and environmental justice require that data governance frameworks emphasize green data infrastructure, circular economy practices, and climate-aligned policies.
- Data access as a tool for advancing human rights: Equitable access to data, encompassing statistics, datasets and research findings, is essential for nurturing a just, informed, and inclusive society in the digital era and is an extension of the right to access to information.

6. What approaches could make interoperability efforts financially and institutionally sustainable over time?

Investing in interoperability: Investment priorities should include:

- Shared regional data centers
- IPv6-ready infrastructure
- Peering databases and neutral IXPs
- Public-private partnerships to boost infrastructure gaps
- Multistakeholder collaborations between governments, researchers, the private sector, and civil society

7. What capacities, skills, or partnerships are most important to strengthen the ability to manage and govern interoperable systems?

Capacity building: Capacity is needed in regional bodies involved in harmonization, such as the AUC and Regional Economic Communities (RECs) to enable them effectively coordinate the development and adoption of joint standards, accountability mechanisms and digital integration initiatives. Capacity is needed at the level of data systems, but human capacity building is an even more important dimension of interoperability. Capacity is needed at the level of communities who generate data, civil society and data justice defenders, civic education groups, the media, schools and universities - nationally, regionally and internationally. Parliamentarians also need capacity to be able to play their oversight role effectively. Peer learning and technical assistance are powerful means of strengthening capacity and should be encouraged and supported within stakeholder groups but also at multistakeholder level.

8. Which interoperability framework at the national, regional, or international level might be considered a good practice?

I am not aware of a specific framework.

9. Are there any other points, ideas, or issues you would like to raise that were not addressed in this survey?

No.



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