INTEROPERABILITY

OBJECTIVES OF THE WORKING SESSION

- Understand the meaning and context of interoperability in humanitarian action in Africa.
- Explore frameworks and best practices for Interoperability in humanitarian efforts in the region.
- Develop strategies for Interoperability in Humanitarian Action that allows fostering cross-border collaboration, building local capacity, and using open data standards, while at the same time ensuring the respect for the rights and freedoms of individuals.

BACKGROUND INFORMATION

In the past decade, humanitarian response requirements have been increasing rapidly, with an estimated 311 million people being in need of humanitarian assistance as of August 2024.[1] In Africa, armed conflict and other situations of violence, climate extremes, and soaring food and energy prices have combined to create devastating humanitarian emergencies[2], requiring humanitarian organizations and other actors to find working ways to ensure that the needs of communities living through these crises are met.

Complexity in humanitarian space has increased as the number and type of actors has multiplied. The need of humanitarian organizations to aid in a timely and effective way raises the importance of having systems in place that allow for efficient and coordinated actions, improved decision making, resource optimization, transparency, and accountability. In most cases, these systems involve data. Indeed, as the remit of humanitarian organisations has grown, they have collected ever greater amounts of data on the people and communities they work with. The embeddedness of humanitarian services, the proliferation of different organisations working within the same space, and the protracted nature of humanitarian crisis has prompted discussions in the sector on interoperable systems. This session aims to discuss the nature of interoperability from both the technical and operational lens.

DEFINITION AND ASPECTS ON INTEROPERABILITY

Interoperability can be loosely defined as making different systems work together, in a way that it is predictable and allows the application of respective advantages of each system and accommodating different values.[3]

In the humanitarian context, it may refer to the *ability of organizations and systems to share and analyze data and resources to improve operations and satisfy the needs of*

[1] UN OCHA, 2024 Global Humanitarian Overview 2024, August Update. Available at: https://reliefweb.int/report/world/global-humanitarian-overview-2024-august-update-snapshot-31-august-2024

[2] ICRC, A year of "vast humanitarian need": Crises the world can't ignore in 2023. Available at https://www.icrc.org/en/document/humanitarian-crises-world-cant-ignore-2023

[3] UNOCHA, "Interoperability: Humanitarian Action in a Shared Space," (2015): https://www.unocha.org/publications/report/world/interoperability-humanitarian-action-shared-space

population.[4] In this aspect, consideration will not only be limited to the technical aspects of systems, rather it encompasses organization, semantic and legal landscapes, with an aim of establishing trust, and fostering accountability and responsibilities of actors involved.

There are several ways to look at the types and elements of interoperability. For example, on technical, in data governance, it comprises of both technical aspects like common data formats and application programming Interfaces (APIs) and organizational procedures like data sharing agreements. There is horizontal interoperability, which in the contexts of digital markets is described as 'interoperable products or services operate at the same level of the value chain'.[5] Taking this definition to humanitarian action can be inferred as actions done by same-level-different actors. While, vertical interoperability, may involve different-level-different actors.

In the legal context, interoperability may refer to having different organizations and actors operating under different governance regimes being able to cooperate. In organization interoperability, it may infer coordinating different organization operations and processes including the different data sharing practices. Other aspects include cultural and political interoperability.

In addition, it is noteworthy humanitarian organizations have a variety of methods and tools in sharing data. Therefore, there are varying data sharing approaches depending on the organizational setting which shows the diversity of actors involved. These approaches include open access, limited access, and bilateral data sharing. By understanding these approaches, it enables one to know the type of interoperability required.

By understanding how multifaceted interoperability is especially regarding data governance in humanitarian aspects, the leading question becomes how to best reconcile these heterogeneous systems while ensuring data protection in humanitarian action.

THE AFRICAN LANDSCAPE ON INTEROPERABILITY

The general challenges to interoperability include data silos,[6] and data privacy and security. In the African context, these plus fragmented data systems, technological limitations, and diverse governance frameworks, make it a challenge to achieve interoperability. Additionally, the continent faces unique challenges and opportunities due to the diverse political, economic, and technological landscapes.

The humanitarian space in Africa is characterised by complexities in the number and type of actors. For example, in cash transfer programming, a nexus of financial service providers, third-party technology providers, third-party auditors for donors exist alongside government interfaces and humanitarian actors.

Sharing information between different operating systems, with actors who have different mandates is not complex. For these reasons, it has been suggested that interoperability is a way to make systems and processes more compatible with one another. This session will interrogate this and further consider the potential harms or drawbacks of an interoperable model.

The outstanding framework is the African Union (AU) Data Policy Framework which focuses on the regional collaborative approaches, infrastructural progress, and adopting emerging technologies. It specifically recommends that member states promote

[4] IFRC. "Enabling Dignified Humanitarian Assistance Through Safe Data Sharing: Landscape Mapping. https://interoperability.ifrc.org/services-1 ; Currion, Paul. "Data Portability and Digital Identity in Humanitarian Aid: A Desk Review (2022) https://www.collaborativecash.org/_files/ugd/477045_e582d8bf08a74b1ab5891b3bc5389bb0.pdf

[5] Bourreau Marc, Kräme Jan, and Miriam Buiten, "Interoperability in Digital Markets." 2022 Centre on Regulation in Europe (CERRE), available here https://cerre.eu/wp-content/uploads/2022/03/220321_CERRE_Report_Interoperability-in-Digital-Markets_FINAL.pdf

[6] See for example Data Revolution: testing ideas at the national level in Kenya: https://devinit.org/resources/data-revolution-testing-ideas-at-the-national-level-in-kenya/

interoperability; and govern the integrated national data system according to the principles of interoperability among others, It emphasizes the need for interoperability across African nations to enable seamless, secure, and coordinated data exchange; and harmonization of digital governance systems, development of common technical standards, and the alignment of legal frameworks across countries to ensure that data can flow freely while protecting privacy, human rights, and security. The framework advocates for having interoperable systems to boost cross-border collaboration in sectors like digital identity, e-commerce, and cybersecurity, fostering regional integration and economic development on the continent.

The AU also developed the AU Interoperability Framework for Digital ID aims to create a system where digital identity solutions across African Union member states can work together seamlessly. Rather than imposing a single, unified digital ID system for the entire continent, the framework provides guidelines for existing national ID systems to become interoperable.

AN IDEAL INTEROPERABILITY APPROACH?

Considering the challenges of achieving interoperability, is it still possible to learn, develop or enhance approaches or principles that would assist in humanitarian action? As established, humanitarian action continues to be needed and that may go up with the ongoing global crises. From previous learnings, the best practices for achieving interoperability include having formal data sharing agreements, capacity building, robust data privacy and protection and establishing or enhancing collaborative multi-stakeholder governance models.

GUIDING QUESTIONS

- What is interoperability and how does it look like in humanitarian action?
- What specifically would be useful for humanitarian organisations to implement interoperability?
- What technical knowledge gaps exist regarding interoperability?
- How should the issue of lawfulness be approached when there is exchange of data or other interoperability between humanitarian and government systems?
- What are the key challenges to achieving interoperability in Africa, and how do they impact humanitarian efforts?
- What existing frameworks and initiatives support interoperability in Africa's humanitarian sector, and how can they be improved?
- How can stakeholders collaborate to foster interoperability and overcome data-sharing barriers?
- How can actors ensure that interoperability is not detrimental to the individuals whose data is being processed?
- How would one define and apply "10 principles" on interoperable systems that cut across all sectors?

ADDITIONAL MATERIAL

- The AU Data Policy Framework (2022) Available at https://au.int/sites/default/files/documents/42078-doc-AU-DATA-POLICY-FRAMEWORK-ENG1.pdf
- The AU Interoperability Framework for Digital ID, available at https://au.int/sites/default/files/documents/43393-doc AU_Interoperability_framework_for_D_ID_English.pdf
- Mercy King'ori, Ulric Quee, and Hunter Dorwart, *The African Union's Data Policy Framework: Context, Key Takeaways, and Implications for Data Protection on the Continent* (2023), available at: https://fpf.org/blog/the-african-unions-data-policy-framework-context-key-takeaways-and-implications-for-data-protection-on-the-continent/

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- European Commission. 2017. *New European interoperability framework: Promoting seamless services and data flows for European public administrations*. Publications Office https://data.europa.eu/doi/10.2799/78681
- Marc Bourreau, Jan Kräme, and Miriam Buiten*, Interoperability in Digital Markets*, 2022 Centre on Regulation in Europe (CERRE), available here https://cerre.eu/wp-content/uploads/2022/03/220321_CERRE_Report_Interoperability-in-Digital-Markets_FINAL.pdf