T20 Policy Brief

G20 BRASIL 2024

T20 Brasil 2024 Let's rethink the world

Task Force 06

STRENGTHENING MULTILATERALISM AND GLOBAL GOVERNANCE

Leveraging the DPI Approach for Multilateral Cooperation in Humanitarian Aid

Rohan Pai, Senior Research Analyst, Aapti Institute (India)

Dr Emrys Schoemaker, Senior Research Director, Caribou Digital (Switzerland)

Dr Aaron Martin, Assistant Professor of Media Studies and Data Science, University of Virginia (USA)

Amrita Nanda, Manager, Aapti Institute (India)

TF06

Abstract

The global multilateral system is struggling and failing to meet the needs and expectations of crisis-affected populations, migrants and people on the move (Pope 2023). As half the world goes to vote in 2024 (The Economist 2023), globally 110 million people are forcibly displaced (UNHCR 2023), geopolitical conflicts are on the rise, and the climate crisis is resulting in adverse effects in vulnerable regions. Multilateral cooperation in humanitarian aid and assistance is the need of the hour, and the digital public infrastructure (DPI) approach (UNDP 2023) could help realise policy goals, meet needs and strengthen multilateralism by providing principles for technology design that enable these objectives. Endorsed during India's G20 Presidency 2023, the DPI approach offers a framework for digital transformation that can serve as a focus for multilateral cooperation, streamline humanitarian aid across stakeholders, and realise policy goals for more integrated support to the most vulnerable, such as the Grand Bargain (Gonçalves 2023).

The policy brief provides a set of recommendations for the G20 forum to adopt DPI principles that can enable coordination in humanitarian aid and assistance through multilateral cooperation.

Diagnosis of the Issue

Emergence of digital approaches within multilateral and humanitarian response

Globally, humanitarian aid takes place within a fragmented environment of diverse actors without defined governance mechanisms and structures. Rapid digitalisation within this sector is increasingly impacting how these actors manage serving affected populations, and how they work together. For large-scale aid and assistance agencies, providing identification to refugees can help claim legal status, manage access to basic assistance and protection (UNHCR n.d.), while personal data collected by these agencies during registration can help ensure service provision is targeted and efficient (IFRC 2023). Additionally, intentional technological design choices can increase accountability and lower risk of fraud (ITU News 2020). However, the adoption and implementation of digital technologies in the sector is fragmented and differentiated amongst UN agencies, aid organisations and host states, resulting in lack of coordination during service provision. Often, this adversely impacts beneficiaries of humanitarian aid—left vulnerable to system inefficiencies arising from varying interests and incentives in managing affected populations.

The increased attention to technological design and implementation (EU Parliament 2019) highlights a growing focus on better governance of digital technologies in humanitarian aid. Intentional technological design choices can help realise policy goals of the 2016 World Humanitarian Summit's Grand Bargain (GB). As digitalisation gains prominence in humanitarian aid, there is a need to evaluate the use of techno-legal frameworks toward meeting the objectives of humanitarian assistance (UN OCHA 2020).

In order to work toward a composite technological and policy framework for the sector, we must first understand the nature of priorities and commitments outlined. Technology

is central to the GB's three policy commitments—around the role of digital technology, the humanitarian-development nexus, and localisation (Metcalfe-Hough et al. 2022). The ***first*** highlights innovation and new technologies as key to improving coordination, accountability and effectiveness. ***Second*** is to strengthen a 'humanitarian-development nexus'; a closer integration of short-term humanitarian assistance and longer-term development assistance. ***Third*** articulates a localisation agenda that prioritises direct funding to local and national actors.

For example, the provision of digital cash and using digital technologies—a trend mirrored in state social welfare and protection, especially post-COVID-19—contributes to the goals of the GB by enabling interoperability between humanitarian response and longer term, state-delivered social protection programming (Cherrier 2021). The World Food Programme (WFP) is increasingly offering its management and information system, SCOPE, to deliver nationally led social protection (WFP 2024).

The principal characteristics of 'digital public infrastructure (DPI)'—interoperability and modularity (discussed ahead) can play important roles in contributing to GB policy goals. However, the current political economy of the humanitarian sector mitigates against this and requires intentional efforts to realise the potential of technology to contribute to the GB's stated policy goals.

Problems with existing approaches

The political economy of the humanitarian sector hampers the adoption of shared systems, open data sharing and interoperability. The humanitarian sector is a competitive marketplace, in which aid organisations must compete for funds provided by humanitarian donors. Humanitarian service providers holding beneficiary data are able to deliver services faster with more accuracy – and so hoard data to more effectively

compete in the humanitarian marketplace. Their incentives are at odds with the use of digital systems that are interoperable, open access and free to use. This affects their ability to make support to migrants and vulnerable communities more efficient, accessible and integrated into state social protection systems.

There is recognition of this problem, and increasing efforts to address it. The European Civil Protection and Humanitarian Aid Operations (ECHO) is one of the largest providers of humanitarian relief and funds. It is currently supporting two projects to promote interoperability - the exploration of a person-centric ‘data portability’ approach (CCD 2024) and the development of an institutionally focused ‘interoperability protocol’ (DIGID Consortium 2023), both of which are efforts to unlock the digital systems and data at the heart of humanitarian response.

Recommendations

Potential to achieve multilateral cooperation through DPI principles

Last year, the DPI approach was brought to the forefront through India's G20 Presidency, where the first-ever multilateral consensus on DPI (Chaudhari 2023) and its outcomes was achieved. This marked the beginning of a growing discourse on how safe, trusted and inclusive public digital systems can be developed through a DPI-based approach.

Considering DPI is still a nascent framework, there are differences as to what DPI means, including among certain G20 members; for instance, the 'India Stack' and Singapore's 'Digital Utility Stack' offer public digital environments in which businesses can build innovative applications—a public-private model that is based on foundational protocols for ID, payments and data exchange (World Bank 2022) provided by the state. On the other hand, Ukraine, largely supported by the USAID and Estonia, has created 'Diia', a portable application that allows uninterrupted access to public services for end users. In the EU the 'EU Digital Wallet Consortium' (EWC), is a joint initiative between EU Members to allow cross-border digital identity and authentication, and provide users with greater control over their data (EU Parliament News 2024). Other efforts are focused on supporting multilaterals and states that may lack the capacity to build a complete digital stack independently, but can use extensible 'digital public goods' (DPGs) (Nordhaug and Harris 2021) and 'building blocks' (BB) that enable a plug-and-play architecture. This has been achieved through efforts made by the Digital Public Goods Alliance (DPGA)—a multi-stakeholder initiative set up in response to recommendation 1B of the UN Secretary-General's High-level Panel on Digital Cooperation (United Nations 2020).

Even though the term DPI encompasses different approaches amongst states and multilateral groupings, consensus on DPI has mobilised attention to ***technology design and governance principles.*** This attention should also include exploration of how a principle-based DPI approach could help advance the humanitarian sectors policy goals articulated within the GB.

The ***G20 forum*** can play a pivotal role in advancing this by carrying out an evaluation of how DPI principles for technologies in the humanitarian sector could further progress towards the GB policy goals, activate coordination in service delivery, efficiency in processes and deeper involvement from local actors in regions of conflict. Here are a set of inter-related recommendations that the G20 should prioritise:

1. **Set up a working group as part of the G20 sherpa track, that specifically tracks humanitarian aid and assistance**. Forced displacement and illegal migration are likely to rise in the coming decades, driven by climate related risk and geopolitical tensions. While multilateral agreements have been established through UN Office for the Coordination of Humanitarian Affairs, the Inter-Agency Standing Committee and other stakeholders, there is a lack of coordination among these entities, organisations involved in funding humanitarian activities, and humanitarian service providers. By setting up a working group, the G20 forum could play a crucial role in building consensus each year on what needs to be prioritised—charting out pathways for multilateral cooperation in the humanitarian sector. This should be a multi-stakeholder track including non-state actors and representatives of affected populations.

2. **Build on the DPI consensus that was reached in 2023.** As rapid digitalisation ensues in the humanitarian sector, the digital ecosystems within which these technologies

operate can benefit from DPI technology and design principles. The following instances explain the advantages of adopting the DPI approach:

***Interoperability for coordination and governance*:** Digital technologies within the humanitarian sector are fragmented, resulting in a lack of coordination in crisis and emergency response (DIGID Consortium 2023). Unified open

standards can address this challenge by facilitating the transition from fragmented digital implementation to an open digital transaction network (Mishra, Jain, and Menon 2024). This creates systems and data interoperability, enabling local service providers in a region to participate and access digital technologies more easily.

Similar standard-setting initiatives have been unveiled before. The 'Global Cash Advisory Group' (IASC 2022) under the 'Grand Bargain Cash Coordination Caucus' is responsible for standard setting and capacity building required to implement cash-based assistance programs.

While these are housed under specific bodies like the IASC, it would be valuable for the G20 forum to provide technical and advisory input into these organisations and mechanisms. This can be achieved through techno-legal mechanisms—supporting the development of standards and principles around interoperability, modularity, data sharing and so on in ways that support GB policy goals, particularly as they relate to the role of technology in enabling transition of humanitarian response from humanitarian organisations to host state services and systems.

***Modularity and extensibility for scalability and standardisation*:** Digital public goods (DPGs) are readily-available open-source solutions that can be inserted to an existing digital stack for added functionalities. The International Committee of the Red Cross (ICRC) has displayed how DPGs can be used as effective tools to increase coordination in humanitarian response through their integration of the District Health Information

Software (DHIS 2) in crisis response (JSI, ICRC, and USAID 2024). ICRC resolved a range of information challenges by using DHIS 2 to standardise data collection across health service providers. This simplified data entry and calculation among stakeholders and enabled data-driven decision making in disease tracking.

The use of existing, readily-available open source solutions in this manner can be highly effective in emergency and crisis response where there is a requirement for a quick turnaround. Even DPGA's rigorous evaluation process (i.e. the DPG Standard) establishes inherent trust in the solutions published under their banner. Considering the DPGA is endorsed by international forums such as the UN General Assembly, the World Bank & IMF Annual Meetings, G7, G20, regional organisations such as the African Union and the European Union (DPGA 2021), they could play a strategic role in helping humanitarian organisations scale their operations in a region through plug-and-play architecture provided by DPGs.

3. **DPI approaches require framing around humanitarian principles and commitments.** At the core of all humanitarian actions lie the fundamental principles of humanity, impartiality, neutrality, and independence. These are codified in international humanitarian law, embraced by the United Nations through General Assembly Resolutions 46/182 and 58/114 and incorporated into sector wide agreements such as the Core Humanitarian Standard on Quality and Accountability (2024), and SPHERE Standards. The promotion of DPI as a contributor to GB policy goals and broader humanitarian response requires the framing and adaptation of DPI to meet these existing humanitarian principles and standards – such as Do No Harm. This requires matching the specific technical and operational dimensions of DPI – such as interoperability – against humanitarian policy commitments of protection and consent. This can be □perationalized

through the adaptation of technical and governance dimensions of DPI to meet data protection requirements, the effective enforcement of which is especially challenging in humanitarian settings (Kuner and Marelli 2020).

Limitations and the way forward

Establishing sector-wide sets of agreements around digital technologies is a challenge in any context, but especially in this sector (UN OCHA 2015). The governance context of the humanitarian sector, in addition to its political economy, resists singular adoptions, like the establishment of a set of DPI governance and design principles that could be used in crisis response. Establishing such agreements requires stakeholder collaboration, but minimal governance structures, characterised by voluntary and informal arrangements prevent this.

Traditionally, stakeholders' ideologies, interests and the resources available to interoperating entities have shaped design, evolution and scalability of digital networks set up in this sector. This emphasises the frictions encountered in reaching a consensus on the standards for interoperability, interconnection and exchange, prior to any technological implementation (Constantinides and Barrett 2015) (Hanseth and Lyytinen 2016). The realisation of DPI principles in the medium term requires an evolution in the political economy of the sector, and the instantiation of a formal governance architecture.

For the G20 forum to carry this agenda forward, it must realise that efforts to advance the use of technologies that uphold principles and characteristics of DPI can be most successful if they take a governance-first approach, and focus on agreements around principles and standards while considering the political economy. In practice, this means that the adoption of DPI type approaches must look more like an iterative approach beginning with the application of decided and enabling principles and standards, rather than a move to any particular technological stack as observed in traditional DPI. Thus, based on themes, principles and instantiations explored in this brief, the authors hope to

spark the probing of technological systems for crisis response - one that must be grounded in DPI-held principles and formed collaboratively in the medium-term, through increased and diverse scholarship and policy-making.

References

CCD. 2024. “Data Interoperability.” Collaborative Cash Delivery Network. 2024. https://www.collaborativecash.org/data-interoperability.

Chaudhari, Rudra. 2023. “Decoding the G20 Consensus on Digital Public Infrastructure: A Key Outcome of India’s Presidency.” Carnegie Endowment for International Peace. September 1, 2023. https://carnegieendowment.org/research/2023/09/decoding-the-g20-consensus-on-digital-public-infrastructure-a-key-outcome-of-indias-presidency?lang=en&center=global.

Cherrier, Cécile. 2021. “The Humanitarian–Development Nexus.” In *Handbook on Social Protection Systems*. Edward Elgar Publishing. http://dx.doi.org/10.4337/9781839109119.00041.

Constantinides, Panos, and Michael Barrett. 2015. “Information Infrastructure Development and Governance as Collective Action.” *Information Systems Research* 26 (1): 40–56. https://doi.org/10.1287/isre.2014.0542.

Core Humanitarian Standard. 2024. “Home.” CHS 2024. 2024. https://www.corehumanitarianstandard.org/.

DIGID Consortium. 2023. “How Will Interoperable Systems and Data Sharing Benefit Affected Populations?” DIGID Consortium. August 29, 2023. https://interoperability.ifrc.org/2023/08/29/how-will-interoperable-systems-and-data-sharing-benefit-affected-populations/.

DIGID Consortium. 2023. “Interoperability.” DIGID Consortium. November 15, 2023. https://interoperability.ifrc.org/projects/interoperability/.

DPGA. 2021. “Digital Public Goods Alliance 5 Year Strategy (2021-2026).” June 2021. https://digitalpublicgoods.net/map/.

EU Parliament, Directorate-General for Parliamentary Research Services. 2019. "Technological innovation for humanitarian aid and assistance." Publications Office. https://data.europa.eu/doi/10.2861/545957.

EU Parliament News. 2024. "MEPs Back Plans for an EU-Wide Digital Wallet." European Parliament. February 29, 2024. https://www.europarl.europa.eu/news/en/press-room/20240223IPR18095/meps-back-plans-for-an-eu-wide-digital-wallet.

Gonçalves, Melissa. 2023. "One Pager Grand Bargain 2023-2026." Grand Bargain Secretariat, IASC. October 2023. https://interagencystandingcommittee.org/system/files/2023-10/One%20Pager%20Grand%20Bargain%202023-2026.pdf.

Hanseth, Ole, and Kalle Lyytinen. 2016. "Design Theory for Dynamic Complexity in Information Infrastructures: The Case of Building Internet." In *Enacting Research Methods in Information Systems*, 104–42. Cham: Springer International Publishing. http://dx.doi.org/10.1007/978-3-319-29272-4_4.

IASC. 2022. "Global Cash Advisory Group." IASC. 2022. https://interagencystandingcommittee.org/global-cash-advisory-group.

IFRC. 2023. "Digital Transformation Impact Platform Brochure." IFRC. Digital Transformation Impact Platform. December 6, 2023. https://www.ifrc.org/document/digital-transformation-impact-platform-brochure.

ITU News. 2020. "How the World Food Programme Uses Blockchain to Better Serve Refugees?" ITU. April 8, 2020. https://www.itu.int/hub/2020/04/how-the-world-food-programme-uses-blockchain-to-better-serve-refugees/.

JSI, ICRC, and USAID. 2024. "Using DHIS2 for Health Facility Stock Management in Humanitarian Settings - World." ReliefWeb. February 7, 2024.

https://reliefweb.int/report/world/using-dhis2-health-facility-stock-management-humanitarian-settings.

Kuner, Christopher, and Massimo Marelli, eds. 2020. “Handbook on Data Protection in Humanitarian Action.” International Committee of the Red Cross. May 28, 2020. https://www.icrc.org/en/data-protection-humanitarian-action-handbook.

Metcalfe-Hough, Victoria, Wendy Fenton, Patrick Saez, and Alexandra Spencer. 2022. “The Grand Bargain in 2021: An Independent Review.” ODI: Think Change. ODI. June 21, 2022. https://odi.org/en/publications/the-grand-bargain-in-2021-an-independent-review/.

Mishra, Satwik, Neeraj Jain, and Rajeesh Menon. 2024. “Can the Open Transaction Network Transform the Global Economy?” World Economic Forum. March 21, 2024. https://www.weforum.org/agenda/2024/03/open-transaction-network-shift-technology-transform-economy/.

Nordhaug, Liv Marte, and Lucy Harris. 2021. “26. Digital Public Goods: Enablers of Digital Sovereignty.” *OECD iLibrary*. *Development Co-operation Report 2021: Shaping a Just Digital Transformation*. 2021. https://www.oecd-ilibrary.org/sites/c023cb2e-en/index.html?itemId=/content/component/c023cb2e-en#.

Pope, Amy. 2023. “Human Migration Needs a New Multilateralism.” IOUNS. *Multilateralism in Action*, SIPA, Columbia University. May 10, 2023. https://multilateralism.sipa.columbia.edu/news/human-migration-needs-new-multilateralism.

The Economist. 2023. “2024 Is the Biggest Election Year in History.” The Economist. November 13, 2023. https://www.economist.com/interactive/the-world-ahead/2023/11/13/2024-is-the-biggest-election-year-in-history.

UNDP. 2023. “The DPI Approach: A Playbook.” UNDP. August 21, 2023.

https://www.undp.org/publications/dpi-approach-playbook.

UNHCR. 2023. “Refugee Data Finder.” UNHCR. October 24, 2023. https://www.unhcr.org/refugee-statistics/.

UNHCR. n.d. “Registration and Identity Management.” UNHCR. Accessed May 30, 2024. https://www.unhcr.org/what-we-do/protect-human-rights/protection/registration-and-identity-management.

UN OCHA. 2015. “OCHA Annual Report 2015 - World.” ReliefWeb. 2015. https://reliefweb.int/report/world/ocha-annual-report-2015.

UN OCHA. 2020. “AGENDA FOR HUMANITY.” AGENDA FOR HUMANITY. 2020. https://agendaforhumanity.org/.

United Nations. 2020. “Secretary-General’s High-Level Panel on Digital Cooperation.” United Nations. May 29, 2020. https://www.un.org/en/sg-digital-cooperation-panel.

WFP. 2024. “Social Protection.” World Food Programme. 2024. https://www.wfp.org/social-protection.

World Bank. 2022. “A Digital Stack for Transforming Service Delivery ID-Payments and Data Sharing (English).” World Bank Group. February 22, 2022. http://documents.worldbank.org/curated/en/099755004072288910/P1715920edb5990d60b83e037f756213782.

G20 BRASIL 2024
BUILDING A JUST WORLD AND A SUSTAINABLE PLANET

T20 Brasil 2024
Let's rethink the world

Let's rethink the world

CEBRI Rethink Tank

FUNDAÇÃO ALEXANDRE DE GUSMÃO

ipea
Instituto de Pesquisa Econômica Aplicada