

# POLICY BRIEF

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## Migration Governance and Data Saturation: Is Less More?

### EXECUTIVE SUMMARY

The conventional wisdom among migration policy practitioners is that migration governance faces a problem of data scarcity. Against this backdrop, various stakeholders such as international organizations emphasize the need to leverage the latest advances in digital technology and the numerous sources of digital data to quantify, monitor and predict previously invisible processes, practices and vulnerable populations. In other words, the datafication of migration appears as a panacea which promises an affordable, efficient, timely and objective collection, analysis and dissemination of an ever-increasing volume and variety of data relevant to migration. Yet this approach of data maximization overwhelms policy practitioners with conflicting information. It also sustains an increasingly costly arms race for information which burdens international organizations and threatens the human rights of vulnerable populations. This brief addresses the policy problem of data saturation and recommends the implementation of data minimization. This principle requires to collect only the minimum amount of data necessary to accomplish a carefully predetermined goal. Data minimization would not solely protect the rights of migrants, refugees, asylum seekers and internally displaced persons. It would also tackle the increasingly unwieldy and dysfunctional data saturation which diminishes the value and usefulness of data and generates additional data management costs and risks. With the support of the private sector and academia, the international organizations comprising the UN Network on Migration could effectively implement and showcase data minimization.

### MIGRATION GOVERNANCE FACES A PROBLEM OF DATA SATURATION

Datafication has become a mainstay of migration governance. This is epitomized by the very first of the 23 objectives of the [Global Compact for Migration](#) (GCM) which encouraged states to 'Collect and utilize accurate and disaggregated data as a basis for evidence-based policies'. Furthermore, the GCM

stipulated that the monitoring and evaluation of the implementation of all its objectives require building digital systems of data collection, analysis and dissemination; enhancing national data capacities through financial and technical assistance; and exploring new data sources. Despite the contentious negotiations of the GCM throughout 2017 and 2018, the quantification of migration through digital technology and data consistently garnered the widespread support of states. This consensus mirrored a prevalent trend in international politics favouring the technocratic and data-driven formulation, implementation and evaluation of policy.

This trend notably became apparent following the adoption of the 2030 Agenda for Sustainable Development in 2015. The event spurred a large [coalition](#) of states, international organizations, NGOs, corporations and research institutions to instigate a [data revolution](#) that would solve the world's protracted problems such as extreme poverty, humanitarian crises or the effects of climate change. This revolution rests upon the belief that datafication constitutes a panacea for the perennial knowledge gaps, dearth of resources, bureaucratic red tape and politicized bargaining-hampering policy-making. Indeed, datafication promises an affordable, efficient, timely and objective monitoring, analysis and prediction of hitherto invisible and unknowable processes, practices and vulnerable populations. To achieve success, policy-making must then leverage the latest advances in digital technology and the numerous sources of data generated by the increase in the [world's internet, mobile and social media users](#).

**By continuously emphasizing the need to fill data gaps, the proponents of datafication overlook the paradox, often recognized by organization studies, that ignorance can also result from having too much data.**

Accordingly, the datafication of migration championed by the GCM creates an insatiable demand for digital technology and data. Migration policy practitioners regularly deplore the scarcity and insufficient availability, use and sharing of data. For example, both the [outcome document](#) of the 2nd International Forum on Migration Statistics held in 2020 and the [UN Secretary General's report](#) on the GCM's implementation published in 2021 criticized the persistence of significant data gaps. These gaps concern the migrants' stock, flow, age, gender, status, health, well-being, trafficking and the impacts of development and climate change on migration. Such an extensive list suggests that migration governance faces an urgent and far-reaching problem of ignorance stemming from the scarcity of data.

The next logical step to remedy this problem would consist of collecting, analysing and disseminating additional and better data. International organizations such as the International Organization for Migration (IOM), the UN High Commissioner for Refugees (UNHCR), the UN Department of Economic and Social Affairs (UNDESA), the International Labour Organization (ILO), and the World Bank are the main proponents of this solution. In line with their role as providers of expert and technical knowledge unavailable to (some) states, they actively collect, analyse and disseminate data on migration and migrants, provide forums on data for policy practitioners, and implement capacity building programs.

Despite the conventional wisdom that data is scarce, there is also evidence of an unprecedented growth in the volume and variety of relevant [migration data](#). So much so that a study published by the [Migration Policy Institute](#) (MPI) in 2020 found that policy practitioners from around the world were confronted with the proliferation of conflicting data scattered among multiple databases, portals and platforms. This proliferation left them increasingly unsure how to interpret data and assess their accuracy and quality. The MPI linked this uncertainty to the actions of an unspecified 'panoply of actors' which provide competing data often with self-serving aims. The outcome document of the 2nd International Forum on Migration Statistics conveyed a similar uneasiness towards the overwhelming proliferation of data. While welcoming the continuous growth in initiatives addressing data gaps, it admitted that their poor coordination and duplication of effort caused policy practitioners to struggle to follow all that is happening.

In other words, migration governance seems to face a problem of data saturation rather than data scarcity. By continuously emphasizing the need to fill data gaps, the proponents of datafication overlook the paradox, often recognized by [organization studies](#), that ignorance can also result from having too much data. This raises the question whether it is time for migration governance to abide by the principle of data minimization. Brought to the fore by the European Union's [General Data Protection Regulation](#), this principle requires organizations to collect only the minimum amount of data necessary to accomplish a specified goal. Data minimization has the benefit of better protecting the privacy of internet users. But it also helps organizations tackle the increasingly unwieldy and dysfunctional proliferation of data which

[diminishes its value and usefulness](#) and generates additional data management costs and risks. To this end, organizations must first define the objectives that need to be achieved and the questions that require answers [before beginning data collection](#).

This policy brief argues for the relevance of data minimization to resolve the problem of data saturation facing migration governance. This principle would also ensure that the datafication of migration stems from a careful reflection about the aim and impact of the data-driven production of knowledge which is not necessarily efficient, objective and innocuous.

## THE ORGANIZATIONAL AND HUMAN RIGHTS CHALLENGES OF DATA MAXIMIZATION

Data minimization contradicts the approach of data maximization currently prevailing in migration governance. International organizations are particularly engaged in resolving the supposed problem of data scarcity. Rather than acting purposefully and in a coordinated manner, they engage in an arms race for information that incentivizes collecting the largest possible volume and variety of data and harnessing the latest technological advances. This is notably exemplified by two important international organizations in migration governance: the IOM and the UNHCR.

In 2021, the IOM proudly showcased its status as the leading provider and holder of data on [internally displaced persons](#) (IDPs). The organization achieved this feat thanks to its flagship digital system: the [Displacement Tracking Matrix](#) (DTM). Gradually designed, implemented and expanded since 2004 with the support of the accounting firm [Deloitte](#) and the software developer [SAS Institute](#), the DTM quantifies and monitors the mobility of IDPs, refugees and migrants in crisis situations. To this end, it routinely collects biometric data and data regarding the name, gender, nationality, ethnic origin, education, employment, phone number, etc. of hundreds of thousands of vulnerable individuals in countries of the Global South such as [South Sudan](#) or [Nigeria](#). Similarly, the UNHCR announced to its member states in 2019 that it collected [7.2 million biometric records](#) of IDPs, refugees and asylum seekers from around

the world by rolling out its new identity management systems. This announcement represented the latest example of the UNHCR's reliance on biometrics that harks back to the [introduction of iris-recognition technology](#) in 2002 to identify refugees returning from Pakistan to Afghanistan. Yet despite achieving an ever-increasing production of data, both international organizations are confronted with organizational and human rights challenges.

Although the DTM bolstered the authority of the IOM in the [humanitarian regime](#), it also collected data regardless of their policy relevance or operational usefulness. Speaking during a [UN policy event on migration data](#) held in 2016, one prominent IOM official stated that his organization had lots of data in most circumstances and that it needed to figure out what to do with them. One can then surmise that parts of the DTM's data remained on the cloud and that a continuous stream of data overwhelmed the IOM staff. After recognizing that a vast amount of 'potential policy knowledge' remained static in its databases, the IOM designed in 2020 the [Migration Data Strategy](#) to strengthen its analysis capabilities. Achieving this objective would entail setting up new digital systems and hiring computer scientists, data and policy analysts and software designers. But the strategy did not question the approach of data maximization burdening the IOM. On the contrary, it required developing additional 'data-collection assets' in the hope of shoring up the IOM's position as provider of information related to migration.

**These examples of the adverse effects of data maximization show the propensity of international organizations to engage in data collection without prior reflection regarding its objectives, legality and impact.**

The UNHCR also faced serious shortcomings in its efforts to maximize data collection. Its collection of biometric data mainly strove to produce accurate registration data as a response to the [donor states' concerns with the efficient use of their funds](#). This puts less emphasis on the risks that biometric

registration could entail for the protection of refugees. In this regard, [Human Rights Watch](#) claimed in 2021 that the UNHCR shared personal and biometric data about 830,000 Rohingya refugees with Bangladesh which in turn shared them with Myanmar. It also criticized the UNHCR for collecting and sharing these data without previously conducting a full data impact assessment nor systematically obtaining the refugees' free and informed consent. While the UNHCR denied any wrongdoing, these claims seem to confirm the worst fears of members of civil society who as early as 2017 [cautioned against gathering biometric data](#) from Rohingya refugees.

These examples of the adverse effects of data maximization show the propensity of international organizations to engage in data collection without prior reflection regarding its objectives, legality and impact. Instead, as argued by [Charlotte Lindsey Curtet](#), former director of digital transformation at the International Committee of the Red Cross, the scope of data collection seems to be determined by the technologies at their disposal. By continuing to implement the latest technology to get ahead in the increasingly expensive, time consuming, and organizationally demanding competition for information, international organizations active in migration governance could gradually lose sight of their core missions.

## WHAT HAS BEEN DONE TO ADDRESS DATA MAXIMIZATION?

Against this backdrop, various actors sought to safeguard the human rights of vulnerable populations from data maximization. Chief among them is the [Harvard Humanitarian Initiative](#) (HHI). This research centre in humanitarian crisis based at Harvard University represents one of the most active advocates for a more responsible datafication notably in humanitarian settings. In 2015, HHI criticized the widespread assumption that digital technology and data are [intrinsically humanitarian and good](#). Instead, it argued that designing, testing or applying any given digital technology must first abide by pre-existing codes of ethics and their corresponding technical standards.

Specifically, the HHI suggested guiding, limiting and shaping datafication in light of the humanitarian principles of humanity, neutrality, impartiality and independence as defined by the [UN Office for the Coordination of Humanitarian Affairs](#) (OCHA). To uphold these principles, the collection of data must avoid:

- further endangering vulnerable populations;
- favouring one demographic group or political actor over the others;
- responding to the requests of donors rather than the needs of affected populations; and
- relying on governmental or private sector actors for technology and raw data.

In partnership with the OCHA, the HHI further developed [minimum standards](#) for handling data in 2016. These standards require:

- identifying the need before collecting data;
- ensuring the existence of secure digital infrastructure and data sharing codes of conducts; and
- conforming with applicable domestic and international legal regulations.

Although these principles and standards do not explicitly acknowledge the principle of data minimization, the HHI noted that their effectiveness depends on the formulation of clear restrictions on what data should not be collected, shared or used. In this regard, the UN sought to limit the scope of the data collected by its agencies. First, it adopted in 2018 a document titled [Personal Data Protection and Privacy Principles](#) which stipulated that UN agencies should only process data according to specified purposes and what is necessary. Second, the UN Development Group – which includes the main UN agencies implementing the 2030 Agenda such as the IOM, UNHCR, ILO – published a [Guidance Note on Big Data](#) in 2017. This document notably required that the access, analysis and use of data should be kept to the minimum amount necessary to fulfil narrowly and precisely defined needs. This would mitigate the risk that the collection of data could expose vulnerable populations to harm or discriminatory treatment.



These various actions taken in the humanitarian and development regimes are relevant to migration governance and should be replicated. However, by solely focusing on the effect of data maximization on the human rights of vulnerable populations, they ignore its additional organizational impact in terms of data management costs. Moreover, these actions fail to address the arms race for information which incentivize international organizations to compete in collecting the maximum amount possible of data.

## RECOMMENDATIONS

Considering the problem of data saturation, migration governance would benefit from a unified and globally accepted approach to data minimization. The following recommendations show how the amount of data collected by international organizations can be limited and the competition for information mitigated.

### 1. Develop agreed upon data minimization standards (UN Network on Migration)

Building on examples from the humanitarian and development regimes, migration governance should possess agreed upon data minimization standards. These standards should guarantee that the use of digital technology and data is preceded by a thorough analysis of the needs, existing capacities, potential risks, and legal and ethical implications of the data-driven production of knowledge. The [UN Network on Migration](#) is best suited to formulate these standards since it gathers virtually all the UN agencies concerned with migration (e.g. the IOM, UNHCR, and UNDESA which [quantifies the number of international migrants](#)). Furthermore, the UN Network on Migration should discuss and promote the principle of data minimization and its standards in various migration policy venues to ensure practitioners' support. This advocacy should notably focus on the International Forum on Migration Statistics. Organized by members of the UN Network on Migration (i.e. the IOM and UNDESA), the forum gathers hundreds of migration data experts and organizational leaders from around the world. Convincing them to abandon the increasingly obsolete focus on data gaps in favour of data minimization is crucial for migration governance to tackle the problem of data saturation.

### 2. Establish a coordination mechanism to regulate the collection, analysis and sharing of data (UN Network on Migration)

The implementation of the data minimization standards hinges on establishing a coordination mechanism that would foster a clearer division of roles and responsibilities between the international organizations collecting migration data. The UN Network on Migration could host this mechanism since it is tasked with coordinating its members to support the implementation of the GCM. Specifically, the UN Network on Migration could create a [thematic working group](#) that would coordinate the collection, analysis and sharing of data according to the principle of data minimization. The working group should be open to all the international organizations collecting migration data and be led by the IOM and UNHCR. The main role of the working group would consist in eliminating redundancy and ensuring consistency across the UN system. The working group could review existing data policies and programmes to identify opportunities for partnership between international organizations. The working group could also encourage data sharing initiatives akin to the unprecedented [agreement to exchange biometric data in South Sudan](#) signed by the IOM and the World Food Programme in 2018. Moreover, members of the UN Network on Migration could approach the working group before rolling out new datafication projects to ensure their complementarity with existing capacities and technologies. Finally, international organizations could regularly report to the working group on their efforts to implement the principle of data minimization.

### 3. Map the migration data ecosystem using the method of process mapping (private sector, academia)

The coordination role of the UN Network on Migration should be supported by a comprehensive view of the migration data ecosystem. This would require identifying what migration data are collected, which international organizations collect and access them, and how they are collected, analysed and shared (through which hardware, infrastructure, software, databases and interface). Mapping out the migration data ecosystem would reveal instances of connections, interdependencies and duplication of efforts. By identifying the strengths and weaknesses

of the migration data ecosystem, this map would help adjust and coordinate the international organizations' data policy and programmes. The migration data ecosystem could be charted by using the process mapping method – first developed by the private sector – which provides policy practitioners with a 'bird's eye view' of the interactions subsumed by any given interorganizational network. Deloitte particularly demonstrated the relevance of this method in 2014. At the request of the IOM, Deloitte dispatched its [process mapping specialists](#) to study, sequence and map the circulation of data in refugee camps and highlight areas where international organizations could improve collaboration between them. The private sector or academia could replicate this example in a larger scale to map the migration data ecosystem and the role of international organizations therein.

#### 4. Centralize the international organizations' requests for technology and expertise (UN Network on Migration)

The technology and expertise provided by the private sector partly fuel the international organizations' efforts to maximize data collection. Private sector companies such as [Deloitte](#) or [SAS Institute](#) engage in so-called [data philanthropy](#) to fulfil their corporate social responsibility by sharing their digital technology and data with NGOs and international organizations. The latter often depend on the private sector to collect, analyse and share data. However, international organizations solicit the private sector in a piecemeal and uncoordinated manner to bolster their position. This transforms the access to the private sector into a zero-sum game where one organization's gain is equivalent to another's loss. One way to overcome this situation could be to centralize the international organizations' requests for the private sector's technology and expertise. Specifically, the UN Network on Migration could launch 'requests for information' on behalf of all its members. These requests would invite private sector companies to propose tailor-made technologies and solutions that would best fulfil a set of specific needs defined with the principle of data minimization in mind.

## CONCLUSION

With the continually expanding volume and variety of available and collected migration data, policy practitioners will be increasingly confronted with the problem of data saturation. This problem could prevent migration governance from taking full advantage of the potential of the datafication of migration. Consequently, recognizing the relevance of data minimization is crucial. This principle could ensure that the uses of digital technology and data do not threaten the human rights of vulnerable populations or hinder the effectiveness of organizations and policies. International organizations composing the UN Network on Migration should be at the forefront of data minimization. As providers of expert and technical knowledge for states and producers of migration data, they could set the tone by acknowledging the problem of data saturation. And with modest policy change and the support of the private sector and academia, these international organizations could effectively implement and showcase the principle of data minimization.

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## Suggested Readings

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