# IOM AND BIOMETRICS

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## SUPPORTING THE RESPONSIBLE USE OF BIOMETRICS

Biometric technologies have become a vital part of migration management. With the help of biometric technologies for identity management, IOM is now better placed to support governments, partner organizations and migrants. The responsible use of biometrics, in full respect of applicable privacy and personal data protection laws and regulations, facilitates regular and safe cross-border mobility and migration, helps to protect vulnerable migrants and contributes to increasing security for all. Furthermore, biometrics has become a valuable tool in the field of humanitarian action.

IOM is committed to the principle that humane and orderly migration benefits migrants and society. The IOM-developed Migration Governance Framework, which outlines the essential elements for facilitating orderly, regular, safe and responsible migration and the mobility of people through planned and well-managed migration policies, consists of three principles (adherence to international standards and fulfilment of migrants' rights; formulating policy using evidence and a whole-of government approach; and engaging with partners to address migration and related issues) and three objectives (advance the socioeconomic well-being of migrants and society; effectively address the mobility dimensions of crises; and ensure that migration takes place in a safe, orderly and dignified manner), all of which are of relevance to biometric applications used by – or supported through – IOM.

This information brochure aims to provide a short overview of IOM's growing engagement in the responsible use of biometrics for improved migration management.

The responsible use of biometrics in migration management contributes to the protection of vulnerable migrants, the empowerment of migrants, facilitated cross-border mobility and security for all.
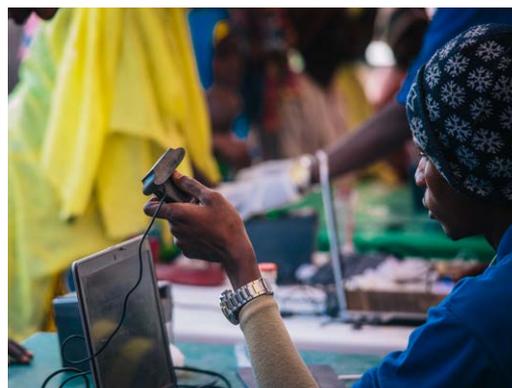


Registration is underway in Maiduguri, Nigeria. ©IOM 2016

# ORDERLY, SAFE AND REGULAR MIGRATION

The IOM mission is to support humane, safe and orderly migration for the benefit of all. The Organization's comprehensive and cross-cutting activities include: the provision of fora for policy debate and support to platforms for regional and international cooperation; raising awareness of international migration law and promoting migrants' rights; humanitarian action and response; technical cooperation and capacity-building; the provision of migration services; and support for the development of good migration governance and management. Many of these activities can be facilitated and supported through the responsible use of smart technologies, including biometrics.

IOM recognizes the nexus between migration and sustainable economic, social and cultural development. Indeed, this nexus is notably captured by the 2030 Agenda for Sustainable Development – and its Goals and targets – which features several references to migration. Biometric applications for identity and migration management are of great relevance, particularly to target 10.7: Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies. They are also linked to target 16.9: By 2030, provide legal identity for all, including birth registration.

# BIOMETRICS IN IOM PROJECTS: A COMPREHENSIVE ASSESSMENT

In 2016, IOM carried out a comprehensive in-house assessment of the Organization's global work related to biometrics for identity management to inform further policymaking and priority-setting. The assessment covered a broad range of thematic areas of IOM activities, e.g. border management, health, emergency response, resettlement, migrant protection and assistance. Based on qualitative interviews and a global survey involving IOM Country Offices worldwide, the survey assessed IOM projects with a biometric component implemented between January 2012 and June 2016.

The results of this assessment highlighted the fact that IOM has become a considerable global player in the field of biometrics for identity management. Over the assessment period, IOM offices in 80 countries had implemented 125 projects with significant biometric components. Since then, the responsible use of biometrics in IOM programming has further evolved.

The Organization's specific work with biometrics covers a broad array of migration activities, ranging from the development of biometric applications made available to States for enhanced border management, via the processing of migrants' biometric data for facilitated regular migration, to the use of biometrics in crisis situations to support humanitarian work.

Today, IOM is globally engaged in the use of biometrics for migration management. By providing concrete support for – and promoting – the responsible use of biometrics for identity management, IOM aims to contribute to improved migration management worldwide.

## DEFINITIONS

**Biometrics** is the automated recognition of individuals based on their biological and behavioural characteristics (Source: ISO/IEC 2382-37:2017. Information technology — Vocabulary — Part 37: Biometrics).

**Biometric characteristic** is a biological and behavioural characteristic of an individual from which distinguishing, repeatable biometric features can be extracted for the purpose of biometric recognition (Source: ISO/IEC 2382-37:2017. Information technology — Vocabulary — Part 37: Biometrics).

**Biometric identifiers** are pieces of information that encode a representation of a person's unique biological make-up (e.g. fingerprints, retinal scans or voice scans). (Source: IOM Data Protection Manual)



Technical support and training of government counter parts has helped Armenia benefit from the latest technologies for biometric document issuance and verification.
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Biometrics considerably improves the quality and accuracy of registration processes. A good example was the biometric registration of the population living in Panyijar county in South Sudan. Working with a partner organization, IOM started biometrics registration in early 2017. A paper registration had been conducted the year before. When the biometric registration was completed two months later, the figures between the two registration methods showed a significant difference. The overall number of individuals decreased by 55 per cent, from 154,180 to 69,389. Biometric systems prevent duplication in the registration of beneficiaries and provide a realistic picture of the total population. This enables IOM and partners to plan and target projects with increased accountability and precision.



IOM demonstrates the use of biometric registration to Government authorities in the DR Congo. ©IOM 2018



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## BENEFITS OF BIOMETRICS FOR MIGRATION MANAGEMENT

IOM considers biometrics to be a valuable tool for identity and migration management processes. As with all new technologies, the advantages and disadvantages, and benefits and risks, need to be carefully assessed. The Organization therefore underlines the importance of using biometrics responsibly and, notably, of ensuring the protection of personal data of beneficiaries and respect for the rule of law.

Using biometrics contributes to the accurate and efficient identification of individuals. Reliable identification is vital for protecting identity and preventing identity or entitlement fraud. Delivering efficient and swift protection or assistance to beneficiaries often relies on the ability to identify individuals and to prevent irregularities regarding identity claims.

The benefits of using biometrics can be specifically illustrated in registration processes. IOM can, for instance, help to collect data to identify vulnerable individuals who may require additional assistance, including pregnant women, persons with physical disabilities and unaccompanied children. Reliable data on vulnerabilities enable relief agencies to provide more targeted and individualized assistance. Biometric technologies offer a valuable tool that contributes to preventing identity theft and identity substitution; they also reduce the risk of multiple registrations of the same person under different identities.

Biometrics is also of great importance to facilitate and expedite regular and safe cross-border mobility and migration; for instance, it enables the use of automated border control gates.

Lastly, the responsible use of biometrics enhances security in migration and border management processes.

IOM's global work related to biometrics covers a broad range of thematic fields, such as regular migration pathways and visa support, border management, health, emergency response, resettlement and migrant assistance. In all areas, the swift and accurate identification of individuals ensures that IOM-supported programmes are coherent and client-focused.

Biometrics is used for identity and migration management, the registration of internally displaced persons, returnees and vulnerable migrants, the management and distribution of humanitarian assistance and integration grants, assisting governments to carry out identity verification when issuing passports, visas and other travel documents; and the verification of traveller identity by government border authorities.

## IMMIGRATION AND VISAS

Biometric enrolment on behalf of Member States as part of the visa application process is a key component of IOM's immigration and visas related work. In line with the Migration Governance Framework and target 10.7 of the Sustainable Development Goals, IOM facilitates the orderly, safe, regular and responsible migration and mobility of people through the implementation of planned and well-managed migration policies.

IOM's immigration and visas portfolio is also aligned with the objectives of the global compact for safe, orderly and regular migration. IOM's work in this area aims to facilitate and strengthen complementary legal pathways, for instance in support of vulnerable migrants under family reunification and humanitarian visa schemes. This involves the creation and expansion of safe and regular pathways for migration.

The use of biometrics in support of immigration and visa related solutions  enhances the efficiency, cost-effectiveness and reliability of entry and visa programmes. Within its facilitated migration services portfolio, IOM operates as an external service provider for Member States, managing visa application centres, which manage all administrative aspects of the visa application process, including biometrics enrolment, linking identities with visa applications.

At present, IOM enrols biometrics in both regular and humanitarian visa application centres in over 50 countries. In 2016, IOM enrolled biometrics for over 64,000 migrants. In 2017, the Organization enrolled biometrics for over 72.900 migrants.

## BORDER MANAGEMENT

Effective and accurate identification of individuals enables the relevant government authorities to manage persons crossing international borders. The relevance of identity management to IOM's work with those moving across international borders is significant. IOM supports governments through technical advice and assistance and capacity-building, and by making available tailored biometrics-based identity and border management systems and related tools.

IOM's biometric-based tools for border management include Verifier TD&B (a document examination system) and the Migration Information and Data Analysis System (MIDAS), a border management information system currently used by border agencies in over 20 countries.

With the rapidly growing recognition of the benefits of the responsible use of biometrics for both the best interests of migrants and the legitimate aims of governments, States have increasingly called upon IOM for advice, support and services.



Syrian refugees undergoing biometric registration by Canadian officials as part of their application process to resettle in Canada. ©IOM 2016

# RESPONDING TO
# EMERGENCIES

Millions of people across the world are fleeing conflict, natural or human-made disasters and other dangers. As the co-lead of the Global Camp Coordination and Camp Management Cluster, IOM aims to improve the living conditions of displaced persons by facilitating the effective provision of assistance and protection and advocating for durable solutions.

Through its Displacement Tracking Matrix programme, IOM captures data on population movements and the needs of displaced populations, providing critical information for the provision of humanitarian assistance and delivery of services. Registration, which constitutes one of the tools used by the Displacement Tracking Matrix, involves the systematic collection of detailed data at individual or household level to identify beneficiaries, understand their characteristics and ultimately support targeted assistance delivery and assisted movement programmes, such as relocation and return operations.

The Displacement Tracking Matrix increasingly includes biometric registration, mostly to digitally register IDPs facing long-term displacement and to improve the overall registration process. This methodology captures, encodes, and stores fingerprint images to uniquely identify a person. Biometric registration thus prevents the storage of duplicate records and supports more targeted and efficient aid delivery.

Biometric registration is currently being implemented as part of the emergency response in Nigeria, Ethiopia, Sudan and South Sudan. The process of collecting and sharing information with humanitarian partners is carried out as per the IOM Data Protection Principles and based on dedicated tools and procedures developed by IOM.

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# PRIVACY AND DATA PROTECTION

The right to privacy is a universal right that is not restricted to a country's nationals; nor is there a distinction between non-nationals in a regular or an irregular situation. Data protection is the systematic application of a set of institutional, technical and physical safeguards that preserve the right to privacy with respect to the collection, storage, use and disclosure of personal data. In its commitment to respect the human dignity and well-being of migrants and other beneficiaries, IOM seeks to ensure that personal data are handled with the utmost care and confidentiality. IOM was one of the first international organizations to develop its own internal guidance on data protection. To protect the personal data of its beneficiaries, IOM applies its Data Protection Principles, which were issued in May 2009, systematically throughout the Organization. Furthermore, in 2010 IOM published the IOM Data Protection Manual, which provides practical guidance on the implementation of the Principles and is publicly available.

The IOM Data Protection Principles are applicable to all types of personal data, including biometric data. Biometric data are often categorized as being highly sensitive, mainly due to their unique nature and the increased difficulties relating to their alteration or duplication. When processing biometric data, IOM ensures that the data are collected in a lawful and fair manner with the consent of IOM beneficiaries, and that the purpose of the processing is specified and legitimate. It is important that the biometric data obtained be adequate, relevant and not excessive in relation to the specified purpose.

Data security is of great importance. IOM ensures that biometric data are kept secure, both technically and organizationally; it also ensures they are protected by reasonable and appropriate measures against unauthorized modification, tampering, unlawful destruction, accidental loss, improper disclosure and undue transfer.

## PARTNERSHIPS IN THE FIELD OF IDENTITY MANAGEMENT

IOM works closely with various partners in the field of identity management for development and humanitarian response. These partners include governments and intergovernmental organizations, such as the International Civil Aviation Organization, the United Nations Development Programme, the Office of the United Nations High Commissioner for Refugees, the United Nations Children's Fund, the World Food Programme, the International Committee of the Red Cross and the World Bank.

IOM's governmental partners include agencies responsible for birth registration, population registration, passport, visa and national identity card issuance, voter registration, border management and driving licence issuance.

While identity management has traditionally been a responsibility of the public sector, private entities are now becoming increasingly involved in operating identity management systems, including biometrics. Potential partnerships with private sector partners must be carefully assessed and formed in a transparent manner. Partners from the private sector can include banks and other financial institutions, credit card companies, pension funds, insurance companies, airlines and other transport providers, and digital service providers.

The use of automated recognition of individuals based on physical and behavioural characteristics improves the reliability of verification that the biographical identity matches the biometric identity. Current and emerging expertise – and the innovations and potential of the private market – are of fundamental importance to biometrics, identity, migration and border management systems. It is essential for IOM to identify areas for effective cooperation with the private sector, ensure access to the latest technologies and best practices, and embrace transparent and responsible cooperation models. The private sector plays a crucial partnering role to ensure the proper implementation of systems and processes and the delivery of effective support to governments.



Robust identity verification is integral part of IOM health assessements. ©IOM 2018



Responsible use of biometrics must ensure privacy and data protection. ©IOM 2016



IOM IBM training of trainers workshop on Travel Document Examination and Advanced Biometrics. ©IOM 2017

## IOM BIOMETRICS FOR IDENTITY MANAGEMENT WORKING GROUP

The IOM Biometrics for Identity Management Working Group was established in 2017 at the request of the Director General. The Working Group is an internal, interdepartmental body with expertise from different thematic and functional areas within IOM.

The Working Group's mandate includes driving innovation, improving coordination within IOM, exploring new technologies, developing IOM's biometrics strategy, providing support and guidance to staff in the field, developing guidance and training materials, facilitating contacts with outside partners, including the private sector, and ensuring that lessons learned are captured and disseminated throughout the Organization. The Working Group has four subgroups, each covering a specific area of expertise: policy; privacy and beneficiary personal data protection; technology; and communication.

The Working Group acts as the IOM focal point for issues relating to the use of biometrics in identity management and supports IOM staff around the world in the development and implementation of projects with a biometrics component. The Working Group can be contacted via BIMWG@iom.int.

## BIOMETRICS FOR BORDER CONTROL MANAGEMENT

Developed by IOM in 2009, the Migration Information and Data Analysis System (MIDAS) is a high-quality, user-friendly and fully customizable solution for States in need of a cost-effective and comprehensive border management information system. Already provided by IOM to 20 States in Africa and the Americas and installed in over 100 land, air and sea border-crossing points, MIDAS was designed to be compliant with international standards.

MIDAS automatically captures travellers' biographic and biometric data through the use of document readers, webcams and fingerprint readers. It also automatically checks all recorded entry and exit data against national and INTERPOL alert lists. This automation of data collection leads to quicker and more accurate information capture, and stops unwanted persons from entering or exiting a country.

With the capacity to collect, process, store and analyse traveller information - including biometrics - in real time and across an entire border network, MIDAS enables States to more effectively monitor those entering and exiting their territory, while providing a sound statistical basis for migration policy-related planning. IOM ensures that governments have full and exclusive ownership of any data recorded by MIDAS.

The system enables users to create different reports according to the types of traveller data needed, such as country of origin, age, sex, travel purpose, and to determine whether an individual features in an alert list. By processing and analysing the data collected, a more complete understanding of a country's migration dynamics and mobility patterns can be obtained. Data extracted from MIDAS can thus serve as the basis for the development of well-founded and evidence-based migration policies.

## FUTURE WORK

Building on the experience gained and expertise generated by current biometric projects, IOM aims at further strengthening its capacity to apply biometric tools in an effective and responsible manner in identity and migration management projects. In this work, the Organization promotes the responsible use of biometrics, effective personal data protection and respect of privacy. IOM sees biometrics, if used responsibly, as an effective tool to enhance migration management and empower migrants. It can improve human security and create an environment that helps people to realize their social and economic potential.