

## CIVIL REGISTRATION AND IDENTIFICATION GLOSSARY

MIA HARBITZ JUAN CARLOS BENÍTEZ MOLINA



# CIVIL REGISTRATION AND IDENTIFICATION GLOSSARY



**Inter-American Development Bank** 

© Inter-American Development Bank, 2010. All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by information storage or retrieval system, without permission from the IDB.

The views expressed herein are those of the authors alone, and do not necessarily reflect the views of the Inter-American Development Bank or any of its member countries.

Produced by the IDB Office of External Relations

Publisher a.i.: Gerardo Giannoni

**Publications Coordinator:** Elisabeth Schmitt

Editor: Leslie Hunter

Proofreader: Dania Sheldon

**Editorial Assistant:** Cathy Conkling-Shaker

Cover Design: Dolores Subiza

Cataloging-in-Publication data provided by the Inter-American Development Bank Felipe Herrera Library

Civil registration and identification glossary.

p. cm.

Includes bibliographical references.

ISBN: 978-1-59782-107-0

- 1. Recording and registration—Glossaries, vocabularies, etc. 2. Civil law—Glossaries, vocabularies, etc. 3. Legal documents—Glossaries, vocabularies, etc.
- 4. Legal instruments—Glossaries, vocabularies, etc. I. Inter-American Development Bank.

LCCN: 2009913255

K648.C58 2009 346 C582--dc22

To order this book, contact: Pórtico Bookstore 1350 New York Ave., N.W. Washington, D.C. 20005

Tel.: (202) 312-4186 Fax: (202) 312-4188

E-mail: portico.sales@fceusa.com Cover photos: iStockphoto.com

Questions and comments can be sent to the author at IDGlossary@iadb.org.

### **FOREWORD**

America and England are two countries separated by the same language.

—George Bernard Shaw

The same can be said about the countries in Latin America, where, with the exception of Brazil, the predominant language is Spanish.

-Mia Harbitz

Civil registration and citizen identification have gained importance in recent years, given their multiple implications for human development, particularly in the areas of poverty reduction, education, health, governance, and democracy.

Efficient and universal civil registration increases the reliability of vital statistics, which are the foundation for inclusive social policies. It enables all citizens to have a legal identity, which in turn facilitates their ability to exercise a broad range of basic rights. For this reason, many countries in the region are undertaking projects to modernize their civil registries in an attempt to provide efficient and universal coverage.

The Inter-American Development Bank (IDB) supports the region's governments in their efforts to modernize such systems through collaborative efforts. One important challenge in the area of civil registration is the lack of a common nomenclature. In the Latin American region, different terminology is used in different

countries to describe the same term or activity. The Latin American Council on Civil Registration, Identification, and Vital Statistics (CLARCIEV) has expressed interest in promoting a common language for the region's registries and this glossary makes an important contribution to reaching this objective. While the glossary was originally developed in Spanish, there is also a need for an English version.

The main objective of this glossary is to standardize terminology in this field in order to achieve more harmonious communication among civil registration and identification systems in the region. The glossary, which presents common definitions validated by experts and users, is based on a review of the literature and existing glossaries and definitions, which until now have been dispersed. It covers heterogeneous registration systems, developed in very different national contexts, and it is not intended to replace or substitute national nomenclatures. It does not claim to be a complete work, but rather a contribution to the process of building a common terminology.

Civil registration is a key element in the design and implementation of economic and social policies in the countries of the region. With this glossary, the IDB hopes to make a contribution to the processes of harmonization of terminology and modernization of civil registries. Due to the multiple ongoing modifications of legislation concerning this subject—which include changes to civil codes—there is a great diversity in national regulations. In view of this diversity, a common institutional nomenclature is essential to facilitate greater regional integration.

It is my hope that this glossary will be useful not only to experts in civil registration and identification, but also to researchers and policymakers in this area.

—Mario Marcel
Manager, Institutional Capacity and Finances (ICF)
Inter-American Development Bank

### **ACKNOWLEDGMENTS**

This glossary was developed to bring together terms and concepts that are available in the public domain but not necessarily readily accessible. Our work is based on a comprehensive review of the literature, and we have attempted to update and incorporate terms whose meanings have evolved since they first appeared. The authors owe much gratitude to a number of institutions that have previously published glossaries of terms in a variety of related fields.

We are particularly grateful to Sarah Schineller for her editorial support throughout the process, and to Patricia Holness, Mariko Rusell, Lauro Lage-Filho, Larry Meek, and Eduardo Rojas for their advice and encouragement throughout the process. The authors would like to thank the Government of Norway, which contributed significant funding to this initiative.

## A

**A2C:** See Administration to Citizen.

**Abandonment of citizenship:** process by which a person renounces his or her rights of citizenship in a given country, generally to acquire citizenship in another country.

**Abortion:** the spontaneous or intentional ending of a pregnancy.

**Abortion rate:** number of abortions per 1,000 women ages 15 to 44 or 15 to 49 in a given year.

**Absolute lack of documentation:** absence of any kind of identity document, including birth certificate.

**Accreditation:** 1) with respect to a digital signature, the act by which the competent authority, in accordance with the law, enables a soliciting entity to provide services related to the digital signature, and 2) with respect to identification, the provision of assurances that people are who they say they are or appear to be.

**Acculturation:** progressive adoption of elements of a foreign culture (ideas, language, values, norms, behavior, and institutions) by persons, groups, or classes of a given culture, as a result of contacts and interactions between different cultures through migration and trade relations. *See also assimilation*.

**Accuracy:** how well a biometric system performs. The actual statistic for performance varies by task (verification, open-set identification [watchlist], and closed-set identification). *See also verification, open-set identification, watchlist, closed-set identification.* 

Accuracy of register-based vital statistics: data items on the statistical report have been correctly and completely filled out and no errors have been introduced during transcription of data from vital

records onto the statistical report (if this step occurs) or during the processing stages (coding, editing, input, tabulation).

**Accuracy of registration**: data items for each vital event on the vital record have been correctly and completely filled out (i.e., there are no response errors or missing items). The measurement of any deviation from accuracy is called "content error."

**Address:** the street name and number, city, state or province, and country where a person resides on a permanent basis.

**Administration to Citizen (A2C):** a type of service that specifies that the target group for an e-government application is citizens.

**Administrative registration:** in the civil registry, the process by which a vital act can be registered without the intervention of judges or judicial processes.

**Admission:** granting of entry into a state. A foreigner has been "admitted" if she or he has passed through a border checkpoint (air, land, or sea) and is permitted to enter by border officials. A foreigner who has entered clandestinely has not been officially "admitted." *See also border officials, entry.* 

**Adoption:** legal and voluntary taking and treating of the child of other parents as one's own.

**Adoptive family:** the family that a child acquires after being adopted.

**Advanced electronic signature:** the electronic signature that enables the signer to be identified and any change to the signed data to be detected. The signature is linked to the signer in a unique way and has been created by means that only the signer can keep under his exclusive control.

**Affinity relationship:** bond established between a person and the relatives of his or her spouse or partner.

**AFIS:** See Automated Fingerprint Identification System.

**Age adjustment:** statistical tool utilized to facilitate comparison of populations and to control the effects of their different components, such as age.

**Age dependence rate:** found by dividing the number of people who depend upon others (generally people younger than 15 or older than 64) by the total economically active population.

**Aging of population:** gradual process in which the proportion of adults and elderly increases in a population, while the proportion of children and adolescents decreases. This process results in a rise in the median age of the population. It occurs when fertility rates decline while life expectancy remains constant or improves.

**Algorithm:** limited sequence of instructions or steps that tells a computer system how to solve a particular problem. A biometric system will have multiple algorithms, for example: image processing, template generation, and comparisons, among others.

Alias: See pseudonym.

**Alien:** most commonly used in the United States to describe a person who is not a national of a given state or country that he or she is entering or visiting. *See also foreigner*.

**Also Known As (AKA):** term used to identify other names by which a person can be identified. *See also alias, pseudonym, nom de guerre.* 

**Amend:** in documents, to rectify perceivable material mistakes or factual errors.

American National Standards Institute (ANSI): a private, nonprofit organization that administers and coordinates the U.S. voluntary standardization and conformity assessment system. Its mission is to enhance both the global competitiveness of U.S. business and

quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems, and safeguarding their integrity.

**Ancestor:** a person from whom another person is descended and who is usually more remote in the line of descent than a grand-parent.

**Annulment:** the invalidation or voiding of a legal marriage by a competent authority, according to the laws of the country, thus conferring on the parties the status of never having been married to each other.

**Anonymity:** the condition by which a person does not reveal his or her identity.

ANSI: see American National Standards Institute.

**Anti-natalist:** the policy orientation of a government, society, or social group to slow population growth by attempting to limit the number of births.

**Application:** 1) A computer-based program that serves a specific function. 2) The use of information resources to satisfy a specific set of user requirements.

**Arch:** fingerprint pattern in which the friction ridges enter from one side, make a rise in the center, and exit on the opposite side. The pattern will contain no true delta point. *See also delta point, loop, whorl.* 

**Arrival/departure card:** a card that is filled out by an individual prior to or upon arrival in the country of destination and presented (along with passport and, if requested, visa) to officials at the checkpoint. *See also passport, visa.* 

**Assimilation:** adaptation of one ethnic or social group—usually a minority—to another. Assimilation can imply the adoption of language, traditions, values, and behavior, or even fundamental vital interests. Assimilation goes further than acculturation. *See also acculturation.* 

**Assisted migration:** the movement of migrants with the assistance of one or more governments or international organizations, as opposed to spontaneous, unaided migration.

**Assisted voluntary return:** logistical and financial support for rejected asylum seekers, trafficked migrants, stranded students, qualified nationals, and other migrants who are unable or unwilling to remain in the host country and who volunteer to return to their countries of origin. *See also repatriation, return*.

Asymmetric cryptography: branch of applied mathematics that transforms messages into apparently unintelligible forms and then turns them back into their original state. Algorithmic functions are used to generate different keys that are mathematically related. One of these keys is used to create the numeric signature or to transform data into an apparently unintelligible form (private key) and the other is used to verify the numerical signature or to return the message to its original state (public key). The keys are mathematically related so that the existence of one implies the existence of the other, but gaining access to a private key from a public key is technically impossible.

**Attempt:** in identification tasks, the submission of a single set of biometric samples to a biometric system for identification or verification. Some biometric systems permit more than one attempt to identify or verify an individual.

Attributes: qualities and distinctive features of an individual.

**Authentic document:** a true document that has been authorized or legalized.

**Authentication:** 1) The process of establishing confidence in the truth of a claim, which could be any declarative statement. 2) The process by which a user conveys data into a system in order to be recognized and to be able to interact with the system. 3) In biometrics, sometimes used as a generic synonym for verification. *See also verification*.

**Authentication protocol:** a message exchange that verifies possession of a token to remotely authenticate a claimant. Some authentication protocols also generate cryptographic keys that are used to protect an entire session, for which reason the data transferred in the session is cryptographically protected.

**Authentication stamp:** generally used to refer to a stamp added to a document so it can be considered a document that proves the authenticity of the original.

**Authenticity:** proof of veracity, guarantee that data originated from its purported source.

**Authorization:** (computer systems) process by which a user is allowed to access the system.

**Automated agent:** processes and hardware programmed to check predefined requirements and to give automatic responses without human intervention.

**Automated Fingerprint Identification System (AFIS):** a highly specialized biometric system that compares a submitted fingerprint record (usually of multiple fingers) to a database of records, to determine the identity of an individual.

**Available data**: data that have been collected, processed, and stored in each system, contain information on civil registration and vital statistics, and are accessible to users in a user-friendly format.

**Average age:** the average age of all members of a population.

B

**Backbone network:** refers to the high-capacity communication facilities that connect primary nodes. It is the highest level of a network hierarchy. It is also the main pathway for the exchange of information between sub-networks, providing the greatest speed.

**Balancing equation:** a basic demographic formula used to estimate total population change between two points in time or to estimate any unknown component of population change, provided that the other components are known. The balancing equation includes all components of population change: births, deaths, immigration, and emigration.

**Bandwidth:** the amount of information that a given connection is able to support (i.e., send and receive).

**Barcode:** an optical representation of information, comprising a set of parallel vertical lines of differing thickness and spacing. Barcodes may be classified as 1D and 2D. Generally, 2D barcodes come in patterns other than lines, such as dots, squares, hexagons, and other geometric patterns.

**Base population:** a group of people selected by personal, geographic, or temporal characteristics who are eligible to participate in a study.

**Behavioral biometric characteristic:** a biometric characteristic that is learned and acquired over time. Examples include signature

recognition and keystroke dynamics. See also biological biometric characteristic.

**Bifurcation:** the point in a fingerprint where a friction ridge divides or splits to form two ridges.

**Bigamy:** the condition of being married simultaneously to two spouses.

**Binning:** the process of parsing (examining) or classifying data in order to accelerate and/or improve biometric matching.

**Biological biometric characteristic:** a biometric characteristic based primarily on an anatomical or physiological characteristic. *See also behavioral biometric characteristic.* 

**Biometric characteristic:** a mathematical reference derived from a biometric sample, used to generate biological (anatomical and physiological) and behavioral references that can be used for automated recognition of individuals.

**Biometric data:** a term for computer data created during a biometric process. It encompasses raw sensor observations, biometric samples, models, templates, and/or similarity scores. Biometric data are used to describe the information collected during an enrollment, verification, or identification process.

Biometric identification: a task in which the biometric system searches a database for a reference matching a submitted biometric sample and, if it is found, returns a corresponding identity. A biometric is collected and compared to all the references in a database. Identification is "closed-set" if the person is known to exist in the database. In "open-set" identification, sometimes referred to as a "watchlist," the person is not guaranteed to exist in the database. The system must determine whether the person is in the database, and then verifies the identity. See also closed-set identification, open-set identification, verification, watchlist.

**Biometric identifier:** a personal biological (anatomical or physiological) or behavioral characteristic that can be used to establish a person's identity by comparison with stored reference data. Traditionally, the most frequently used biometric identifier is the fingerprint. Other biometric identifiers include facial image, iris image, and hand geometry. Biometric identifiers can be used for biometric recognition processes such as facial and iris recognition. *See also biometrics*.

**Biometric passport:** a document carrying a chip that stores information about a person, which can be read by an RFID reader. This chip is incorporated into the travel document in various ways. It may be inserted in a thick plastic film, inside the front cover of the document, or on a special polycarbonate page. To preserve the security of the data, a basic access control is applied in the Machine Readable Zone (MRZ) (the reader can only read the chip once it has been activated by a validated personal access key), as well as a broader access control (authentication of the terminal). The authentication of data is protected through a codified protocol of public key infrastructure. See also passport, Machine Readable Passport, public key infrastructure, RFID.

**Biometric process:** automated methods of recognizing an individual based on measurable biological (anatomical and physiological) and behavioral characteristics.

**Biometric sample:** information or computer data obtained from a biometric sensor device. Examples are facial images or fingerprints.

**Biometric system:** multiple individual components (such as sensor, matching algorithm, and result display) that combine to make a fully operational system. A biometric system is an automated system capable of: 1) capturing a biometric sample from an end user; 2) extracting and processing the biometric data from that sample; 3) storing the extracted information in a database; 4) comparing the biometric data with data contained in one or more references; and 5) deciding how well they match and indicating whether or

not an identification or verification of identity has been achieved. A biometric system may be a component of a larger system.

**Biometric template**: a characteristic of biometric information, such as minutiae or patterns.

**Biometrics:** a measurable physical characteristic or personal behavioral trait used to recognize the identity, or verify the claimed identity, of an applicant, such as the iris, facial image, gait, or fingerprints.

**Birth:** the act and effect of being born; to become free of the maternal womb, breathe, and show signs of life.

**Birth attendant:** the person who assists the mother in giving birth, for example, a physician, midwife, nurse, or other paramedical person or lay person. *See also midwife*.

**Birth certificate:** an original document, usually issued by a government authority, stating when and where a person was born and identifying one or both of his or her parents. *See also breeder document*.

**Birth history**: a list of all live births to a given woman, or all births prior to a specified date, providing information on the date of birth and the sex of the child/children. When the birth history includes births prior to a specified date, the list will usually also include information on whether each child born is surviving as of that date and, if not, the date of death and/or age at death. Birth histories are sometimes partial, limited to births occurring during a particular time period.

**Birth records:** compiled records of the births that have occurred and are registered.

**Birth registration:** the official recording of the birth of a child, via a public administrative process. It is the permanent and official record of a person's existence and is fundamental to the realization of children's rights and practical needs.

**Book restoration:** the process by which books that contain vital acts and events receive special treatment to prolong their useful life and preserve the information contained in them.

**Border:** a geographic political division separating two countries.

**Border control:** a state's regulation of the entry of persons to its territory, in exercise of its sovereignty. *See also border management.* 

**Border management:** facilitation of authorized flows of persons, with the aim of detecting and preventing illegal entry of individuals and goods into a given country. Measures to manage borders include the imposition by states of visa requirements, sanctions against transportation companies bringing irregular foreigners to the territory, and interdiction at sea. International standards require a balance between facilitating the entry of legitimate travelers and preventing travelers from entering for inappropriate reasons or with false or invalid documentation. *See also border control*.

**Border officials:** a generic term describing those officials whose primary task is to guard the border and enforce the immigration (and occasionally customs) laws of the state. Also called border guards or border police.

**Border population:** a population that resides in territories contiguous to other countries.

**Border zone:** a portion of land or waterway contiguous to the territory of another country in which a country's laws are applicable.

**Born in wedlock:** a characteristic of a live-born infant or dead fetus whose mother and father were legally married (any recognized union according to the laws or customs of the country) at the time of delivery.

**Born out of wedlock:** a characteristic of a live-born infant or dead fetus whose mother and father were not legally married at the time of delivery.

Boundary: see border.

**Boy or girl:** a term used to refer to persons who have not yet reached puberty.

**Breach notification:** U.S. legislation that requires any government or nongovernment agency, corporation, institution, or individual that manages personal and financial data to notify all persons whose information may have been compromised by unauthorized access.

**Breeder document:** a document, such as a birth certificate, that is used to establish the identity of a person. *See also birth certificate*.

**Burial permit:** an official document, usually issued only for a legally registered death, authorizing the removal of the corpse to the cemetery or other final destination.

C

**CAC:** see Common Access Cards.

**Capacity building:** building the capacity of governments and civil society by strengthening their knowledge, skills, and aptitudes. Capacity building can take the form of a substantive project with a partner government, or in other circumstances it can be carried out through a bilateral or multilateral agenda put in place by the competent authorities. In all cases, capacity building aims to improve a country's management capacity.

**Capture:** in the context of biometrics, the process of collecting a biometric sample from an individual via a sensor.

**Case rate:** the number of reported cases of a specific disease per 100,000 inhabitants in a given year.

Causes of death: any events related to the cessation of vital functioning of an individual or living being. Diseases or injuries that resulted in or contributed to death. See underlying cause of death, contributory cause of death.

**CBEFF:** See Common Biometric Exchange File Format.

**Cédula de Identidad:** one of the terms used in Latin America for the identification document. It is used in countries such as Uruguay, Costa Rica, Bolivia, and Chile. It is an official document that expresses the name, date of birth, document expiration date, age, address (in some cases), and may also describe other attributes and information about the holder.

Cédula de Identidad Personal (CIP): an identification document issued in Panama.

**CEN:** See European Committee for Standardization.

**Census:** a survey conducted on the full set of observation objects belonging to a given population or universe, including demographic, social, and economic data at a given moment.

**Centralization:** an administrative arrangement in which entities are grouped in a hierarchical fashion.

Certificate: 1. Public or private document which attests to the occurrence of an event. 2. (Digital signature) A set of data that uniquely identifies a key pair and an owner that is authorized to use the key pair. The certificate contains the owner's public key and possibly other information, and is digitally signed by a certification authority. See also asymmetric cryptography, key pair, public key, private key.

**Certificate amendment:** an act by which a factual error or mistake is corrected by a competent authority on the vital record.

**Certificate deposit:** a system that stores certificates, as well as information pertaining to these, available for retrieval by telematic means.

**Certificate of identity:** a document (other than a passport) issued by a government to an individual in order to facilitate his or her entry into or exit from the country. *See also travel document*.

**Certificate revocation list:** a list of revoked public key certificates created and digitally signed by a certification authority.

**Certification:** the act by which a person or institution attests that something occurred.

**Certification authority:** a trusted entity that issues and revokes public key certificates.

**Certified document:** a document that has been certified by a competent authority, in which the veracity of an event is assured.

Certifier of cause of death: a person authorized by law to issue a certificate, in a prescribed format, stating the underlying and contributory causes of death and other facts related to the event for submission to the local registrar or other appropriate authority. The certifier is usually the physician who attended the deceased in his or her last illness, or in the case of the death of a person who was not attended during his or her last illness by a physician or who may have died due to violence or injury, the certifier is the forensic medical officer (e.g., coroner or medical examiner).

**Challenge response:** an authentication protocol in which the verifier sends a challenge to the other party, which the other party combines with a shared secret to generate a response that is sent to

the verifier. The verifier knows the shared secret, and can compute the response and compare it with the response generated by the other party. In cases when both are equal, the other party is considered to have identified him/herself positively. *See also Personal Identification Number*.

**Challenge-response protocol**: belongs to a set of protocols in which one party presents a question ("challenge") and another party must provide a valid answer ("response") to be authenticated.

**Change of immigration status:** a procedure whereby a foreigner legally present in a state may seek a different immigration status. For example, legal provisions may be made so that, upon completion of his or her studies, a non-national on a student visa is able to seek a work visa. *See also foreigner, immigration status, visa.* 

**Child:** an individual under the age of 18 unless, under the law applicable to the child, majority is attained earlier. Such a person usually cannot exercise civil and political rights. *See also minor, boy or girl.* 

**CIEC:** See International Commission on Civil Status.

**Cipher:** transformations that convert plain text to cipher-text using a cryptographic key to prevent the message from being interpreted by anyone who does not know the key.

**Citizen:** a person who, by either birth or naturalization, is a member of a political community, owing allegiance to the community and being entitled to enjoy all of its civil rights and protections. *See also national*.

**Citizen participation:** the right of citizens to be part of the social and political life of the community and the country, and to participate in the decision-making process and other aspects affecting citizenship.

**Citizen rights suspension:** takes place when an individual does not comply with rules or regulations contained in the legislation of the state of which he or she is a citizen.

**Citizenship:** rights, responsibilities, and duties of citizens. *See also nationality*.

**Civic right:** refers to the civil status of individuals, their rights and obligations, the acquisition, use, and enjoyment of property and of public or private goods. *See also civil right*.

Civil and political rights: the rights contained in the *International Covenant on Civil and Political Rights*, 1966. These include self-determination; free disposition of natural wealth and resources; non-discrimination; equal rights of men and women; the right to life; freedom from torture, cruel, inhuman, or degrading treatment or punishment; freedom from slavery and servitude; freedom from arbitrary arrest or detention; freedom of movement within a state; the right to liberty and security of person; equality before the courts; the right to a fair and public hearing by an impartial tribunal with respect to criminal charges; the right of recognition as a person before the law; freedom of thought, conscience, and religion; freedom of expression; the right to peaceful assembly; and freedom of association and of participation in public affairs.

**Civil identification:** the verification, registration, management, and conservation of personal data of citizens, with the goal of establishing a unique civil identity. The civil identification includes all of the data from the civil registration and can also include a unique number and/or biometric data. The civil identification serves as a basis for the verification of identity (i.e., passport or national identification documents).

**Civil register:** loose-leaf file, ledger book, electronic file, or any other official file set up for the permanent recording, in accordance with established procedures, of each type of vital event and its

associated data of the population of a defined area (a county, district, municipality, parish, etc.).

**Civil registrar:** official in charge of civil registration of vital events in a defined area (country, district, municipality, parish, etc.) and responsible for recording and timely reporting of information on those vital events for legal and statistical purposes.

**Civil registration:** continuous, permanent, compulsory, and universal recording of the occurrence and characteristics of vital events (live births, deaths, fetal deaths, marriages, and divorces) and other civil status events pertaining to the population as provided by decree, law, or regulation, in accordance with the legal requirements in each country. It establishes and provides legal documentation of such events. These records are also an essential source of vital statistics.

**Civil registration certificate:** annotations made on the civil registry pertaining to births, adoptions, emancipations, marriages, divorces, recognitions, filial legitimizations/adding of father's particulars, naturalizations, and deaths of people.

**Civil registration system:** the institutional, legal, and technical norms established by government to conduct civil registration in a technical, sound, coordinated, and standardized manner throughout the country, taking into account cultural and social circumstances particular to the country. *See also civil registration*.

**Civil registry book:** a book containing complete records in chronological order of vital events, including births, marriages, deaths, adoptions, emancipations, tutelage, and naturalizations.

**Civil registry officer:** See civil registrar.

**Civil relationship:** a relationship or linkage established by law between the adopting family and an adopted child.

**Civil right:** the civil status of individuals, their rights and obligations, and the acquisition, use, and enjoyment of property and public or private goods.

**Civil society:** pertaining to the whole body or community of citizens; pertaining to the organization and internal affairs of the body politic or state.

**Civil status:** the legal situation of a person before the state, society. and family.

**Civil status usurpation:** conduct by which a person deliberately tries to impersonate another person in order to claim his or her rights. See also identity theft.

**Civil wedding:** a wedding celebrated before a competent officer of the law

**Claim of identity:** a statement that a person is or is not the source of a reference in a database. Claims can be positive (subject is in the database), negative (subject is not in the database), or specific (subject is user "N" in the database).

**Claimed signatory:** from the verifier's perspective, the entity that purportedly generated a digital signature.

**CLARCIEV:** in Spanish, Consejo Latinoamericano y del Caribe de Registros Civiles, Identidad y Estadísticas Vitales. In English, Latin American and Caribbean Council of Civil Registries, Identification, and Vital Statistics.

Clave Única de Registro de Población (CURP): in English, Unique Code of Population Registration, which is issued to Mexican residents and citizens. It is composed of 18 alphanumeric characters.

**Close relative:** a person directly related to another person by consanguinity.

**Closed population:** a theoretical population that lacks immigrating or emigrating trends and in which population change can thus only occur as a result of births and deaths.

**Closed-set identification:** a biometric task where an unidentified individual is known to be in the database and the system attempts to determine his or her identity.

**CNE:** in Spanish, *Consejo Nacional Electoral*. In English, National Electoral Board.

**Código Único de Identificación (CUI):** in English, Unique Identification Code, which is a unique way to identify people through the assignment of a codified number. It enables access to automated information. It is used in Guatemala and Peru. *See also Número Único de Identidad*.

**Cohort:** a group of people who share demographic events during a given time span. For instance, the birth cohort of 1900 refers to all people born in that year. Other examples include marriage cohorts, school grade cohorts, etc. *See also cohort analysis*.

**Cohort analysis:** observation of a cohort's demographic behavior during a certain period of time. *See also cohort*.

**Cohort measure:** statistics that measure the events during a cohort within a specific time period. The cohort for most common use is the birth cohort (people born in the same year or period). Other types of cohorts include marriage cohorts and school grade cohorts.

**Common Access Card:** a hybrid identity card used in the United States. This is the *de facto* standard for government-issued employee cards in the United States. *See also PIV* 

**Common Biometric Exchange File Format (CBEFF):** a standard that provides the ability for a system to identify and interface with

multi-modal biometric systems and to exchange data between system components.

**Comparison:** the process of comparing a biometric reference with a previously stored reference or references in order to make an identification or verification decision.

**Compilation of vital statistics data:** the process of classifying and summarizing information on vital events by tabulating data into categories or groups to produce vital statistics.

**Complete civil registration:** when every vital event that has occurred for the members of the population of a particular country (or area) has been registered in the civil registration system within a specified period (contained in a vital registration record). Thus, the system has attained 100 percent coverage. Any deviation from complete coverage is considered coverage error.

**Complete vital statistics:** vital statistics from civil registration data are complete when, in addition to the requirement of registration of each vital event, a vital statistics report is forwarded to the agency responsible for the compilation and production of vital statistics. *See also complete civil registration.* 

**Confidentiality:** maintaining restrictions on access to and disclosure of information, except for authorized users. *See also privacy, intimacy, right to privacy.* 

**Connected governance:** the means to achieve maximum cost savings and improved service delivery in the public sector. The underlying principle is to improve the internal workings of the public sector by reducing financial costs and transaction time; to better manage the workflow and processes; to improve institutional linkages between different government agencies, ministries, and units; and to enable a better flow of resources and allocation of responsibilities to promote the delivery of public services. *See also e-governent*.

**Consanguinity:** relationship or linkage of people who descend from the same family, have the same origins, or are related by blood.

Consejo Latinoamericano de Registros Civiles, Identificación y Estadísticas Vitales (CLARCIEV): in English, Latin American and Caribbean Council of Civil Registries, Identification, and Vital Statistics. It is an organization created for the exchange of institutional information and experiences.

Consejo Nacional Electoral de la República Bolivariana de Venezuela: in English, National Electoral Board of the Bolivarian Republic of Venezuela. Through its Civil Registry Commission, it is in charge of centralizing the information in the civil registry. It also creates, organizes, supervises, and updates the civil registry and the voter rolls.

**Consejo Supremo Electoral de Nicaragua (CSE):** in English, Supreme Electoral Council of Nicaragua. The CSE supervises the municipalities in charge of civil registration and identification.

**Consensual union:** the cohabitation of an unmarried couple.

**Constant:** a number that has a fixed value in a given situation or universally, or that is characteristic of some substance or instrument.

**Constitution:** the fundamental law of a state that establishes the concept, character, and organization of its government, the scope of its sovereign power, and the way that it exercises power. A treaty, pact, statute, or agreement by which an international organization is constituted and which defines its mandate, structure, and functioning.

**Consular card:** a document issued by the Government of Mexico. It demonstrates that a person is a Mexican citizen and that he or she is currently living in the United States.

**Consular fee:** a tariff charged by consulates to provide services or transactions.

**Consular functions:** consist of protecting the interests of the sending state and of its nationals in the receiving state of both individuals and corporate bodies, within the limits permitted by international law.

**Consular officer:** any person, including the head of a consular post, entrusted with the exercise of consular functions. (Art. 1(d), Vienna Convention on Consular Relations, 1963). See also consular offices, consular functions.

**Consular offices:** any general consulate, vice-consulate, or consular agency. (Art. 1(a), Vienna Convention on Consular Relations, 1963.) See also consular officer, consular functions.

**Consular protection:** consular functions aimed at assisting in the protection of rights and interests of nationals abroad, through consular offices accredited in another state. In particular, protection extended to migrants arrested or committed to prison or custody in another state. Such migrants must be informed without delay of the right to communicate with consular authorities (Art. 36(1), *Vienna Convention on Consular Relations*, 1963). See also consular functions.

**Consular registration:** for those nationals residing abroad or in transit, it serves analogous purposes to register births, marriages, deaths, adoptions, emancipations, and other acts related to the civil status of persons.

**Contact microchip:** integrated circuit (microchip) for the storage and processing of data, embedded, for example, in ID cards. The secure electronic chip contains personal data: name, date of birth, place of birth, issuing office, and a digitized version of the image of the holder. An ID card with contact chip must be inserted into a reader to make contact with electrical connectors that make read-

able the information on it. The visible parts of the chip module are the typical gold contacts. It must comply with ISO 7816 standards.

**Contact smart card:** a card that contains visible metallic and duly standardized contacts. The card must be inserted in a slot to interact. The reading device updates the information on the card electronically and sends data to interoperate with the card according to the defined standard

**Contactless microchip:** an integrated circuit (microchip) embedded in, for example, passports, ID cards, and biometric residence permits, for the storage and processing of data. The chip, not visible in most documents, communicates with the card reader via electromagnetic waves for which proximity to the reader is required (Radio Frequency Identification, RFID). To initiate transmission, the chip must be located near the reader. It must comply with ISO 14443 standards. *See also RFID*.

**Contactless smart card:** a card with a chip that establishes communication with the reading device through induction, without direct contact between the card and the reading device.

**Context of use:** the purpose for which personally identifiable information is collected, stored, used, processed, disclosed, or disseminated. *See also personally identifiable information*.

**Contributory cause of death:** significant medical condition that contributes to death but is not related to the disease or condition directly causing death.

**Control code:** a mechanism used to detect errors and to verify that the information has been corrected (generally used as a computer support instrument). The control digits are used mainly to detect mistakes when typing or transmitting data.

**Control digit:** See control code.

**Convention on the Rights of a Child:** a United Nations convention which sets out the civil, cultural, economic, social, and political rights of children.

**Convention:** *See international treaty.* 

**Cooperative user:** an individual who willingly provides his or her biometric information to the biometric system for capture.

**Core identity document:** a document that proves the existence of a person and serves as the basis for obtaining other identification documents. The birth certificate is the core identity document most widely used. *See also birth certificate, birth registration, breeder document.* 

**Core point:** the "center(s)" of a fingerprint. In a whorl pattern, the core point is found in the middle of the spiral/circles. In a loop pattern, the core point is found in the top region of the innermost loop. More technically, a core point is defined as the topmost point on the innermost upwardly curving friction ridgeline. A fingerprint may have multiple cores or no cores. *See also arch, delta point, friction ridge, loop, whorl.* 

**Coroner:** an officer of a county, district, municipality, parish, etc., authorized by law to hold an inquest regarding the deaths of persons who may have died by violence, injury, or under suspicious circumstances, to determine if the death was due to non-natural causes, such as accident, suicide, or homicide. *See also medical examiner*.

**Country of destination:** a country that is a destination for migratory flows (legal or illegal). *See also receiving country.* 

**Country of habitual/usual residence:** the country in which a person lives; that is, the country in which she or he has a place to live and normally spends the daily period of rest. Temporary travel abroad for purposes of recreation, holiday, visits to friends and relatives,

business, medical treatment, or religious pilgrimage does not change a person's country of usual residence. *See also residence*.

**Country of origin:** 1) State or country of which an individual is a national. 2) Country from which migratory flows proceed (legal or illegal).

**Covert information gathering:** the manner of collecting biometric samples without people's authorization or awareness. An example of a covert environment might involve an airport checkpoint where face images of passengers are captured and compared to a watchlist without their knowledge. *See also overt information gathering*.

**Credential:** a document or token that establishes the identity and proves the condition of a person and his/her competency or authority to perform a certain activity or function. *See also token*.

**Credential service provider (CSP):** a trusted entity that issues or registers subscriber tokens and issues electronic credentials to subscribers. The CSP may encompass registration authorities and verifiers that it operates.

**Crossover Error Rate (CER):** See equal error rate.

**Crude birth rate:** a vital statistics summary rate based on the number of live births occurring among the population of a given geographical area during a given period of time, usually a year, per 1.000 inhabitants.

**Crude death rate:** the number of deaths per 1,000 inhabitants in a given year.

**Crude divorce rate:** the number of divorces per 1,000 inhabitants in a given year. This rate is calculated using the number of divorces rather than the number of people obtaining a divorce.

**Crude marriage rate:** the number of marriages per 1,000 inhabitants in a given year.

**Cryptographic key:** a value used along with a cryptographic algorithm to transform, validate, authenticate, encrypt, or decrypt data.

**Cryptographic strength:** the measure of the expected number of operations required to defeat a cryptographic mechanism.

**Cryptographic token:** usually a hardware device with a secure cryptographic key for verification and/or authentication purposes. *See also cryptographic key.* 

**Cryptography:** the discipline that transforms information in order to protect it from modifications and unauthorized use. It uses complex mathematical algorithms to encrypt information and to return encrypted information to its original form. *See also credential service provider.* 

**CSP:** See credential service provider.

**CUI:** in Spanish, acronym for Código Único de Identificación (Unique Identification Code). Used in Peru and Guatemala.

**Cultural identity:** consciousness of being part of history, a country, or a group of people. The cultural heritage of a community, group of people, region, country, or nation. *See also social identity, national identity.* 

**Cumulative Match Characteristic (CMC):** a method of showing measured accuracy performance of a biometric system operating in the closed-set identification task. Biometric templates are compared and ranked based on their similarity. The CMC shows how often these templates appear in predefined ranks based on the match rate.

**CURP:** in Spanish, acronym for Clave Única del Registro de Población (Unique Population Registration Key). Used in Mexico.

### D

**Dactyloscopist:** a person specialized in the classification and identification of people through the study of their fingerprint patterns.

**Dactyloscopy:** the set of techniques and procedures in the study and classification of fingerprints.

**Data authentication:** consists of verifying the origin and integrity of data.

**Data bank:** an organized set of personal information which has been subjected to treatment or processing, electronically or not, regardless of the manner in which it has been arranged, stored, organized, or accessed.

**Data integrity:** assurance that data have not been accessed or altered by an unauthorized entity.

**Data message:** the information generated, sent, received, filed or communicated through electronic, optic, or other means, which could include electronic data interchange (EDI), electronic mail, telegram, or telefax. *See also electronic data interchange.* 

**Database:** a collection of one or more computer files. For biometric systems, these files could consist of biometric sensor readings, templates, match results, related end user information, etc.

**Date of birth:** day, month, and year of birth, to determine age in completed units of time.

**Date of occurrence:** day, month, and year of occurrence of a vital event, including hours and minutes in the case of births and deaths of infants in the first week of life.

**Date of registration:** day, month, and year when an entry of a vital event is made into a register within the civil registration system.

**Daugman system:** an algorithm that was developed for identification by recognition of the iris.

De facto: (Latin) existing as a matter of fact. See also de jure.

**De facto** partner: a growing number of states recognize not only spouses, but also certain relationships between unmarried adults, for purposes of granting permanent residence or other immigration status.

**De facto** population: a concept under which individuals (or vital events) are recorded (or are attributed) to the geographic area where they were present (or occurred) at a specified time.

**De facto refugees:** persons not recognized as refugees within the meaning of the *UN Convention Relating to the Status of Refugees,* 1951 and *Protocol Relating to the Status of Refugees,* 1967, and who are unable or, for reasons recognized as valid, unwilling to return to the country of their nationality or, if they have no nationality, to the country of their habitual residence. See also externally displaced persons, internally displaced persons, refugee.

**De facto statelessness:** the situation of individuals who possess the nationality of a state but, having left the state, enjoy no protection from it, either because they decline to claim such protection or because the State refuses to protect them. *De facto* statelessness is a term often connected with refugees. *See also nationality, statelessness.* 

**De jure:** (Latin) existing by right or as a matter of law. See also de facto.

**De jure population:** a concept under which individuals (or vital events) are recorded (or are attributed) to a geographical area on the basis of the place of residence.

**Death:** the permanent disappearance of all evidence of life at any time after live birth has taken place. This definition excludes fetal deaths.

**Death certificate:** a document of proof produced by the civil registry to certify the death of a person, including the cause(s) of death.

**Death records:** a compilation of all deaths recorded in a given year.

**Death registration:** the act of annotating deaths of individuals and compiling them for every year.

**Decentralization:** in public administration, the granting of a certain degree of autonomy to specialized agents acting on behalf of central institutions, which supervise the agents' activities.

**Decision:** the resultant action taken (either automated or manual) based on a comparison of a similarity score (or similar measure) and the system's threshold.

**Declaration of certification practices:** a document officially presented by a certifying entity to the competent administrative authority and which defines its certification practices.

**Deconcentration**: the process by which the agents of central government control are relocated and geographically dispersed.

**Degrees of freedom:** the number of statistically independent features (parameters) contained in biometric data.

**De-identified information:** records that have had enough Personally Identifiable Information (PII) removed or obscured such that the remaining information does not identify an individual.

**Delayed registration:** the registration of a vital event after the prescribed period indicated in existing laws, rules, or regulations (including any grace period, if one is specified). A late registration is the registration of a vital event after the prescribed time period but within a specified grace period. Delayed registration is usually considered the registration of a vital event one year or more after the vital event has occurred. *See also late registration*.

**Delta point:** the part of the pattern of a fingerprint that resembles the Greek letter  $\Delta$  (delta). Technically, it is the point on a friction ridge at or nearest to the point of divergence of two type lines, and located at or directly in front of the point of divergence.

**Demographic transition:** the historical shift of birth and death rates from high to low levels in a population.

**Demography:** the scientific study of human populations, including their size, composition, distribution, density, growth, and other demographic and socioeconomic characteristics, and the causes and consequences of changes in such factors.

**Denationalization:** See loss of nationality.

**Depopulation:** the state of decline in the population of a given territory.

**Deportation:** the act of a state, in the exercise of its sovereignty, to remove a foreigner from its territory to a certain place after refusal of admission or termination of permission to remain. *See also expulsion*.

**Descendants:** persons proceeding from an ancestor or source.

**Detection and identification rate:** the rate at which individuals in a database are properly identified in an open-set identification (watchlist) application. *See also open-set identification, watchlist.* 

**Detection Error Trade-off Curve (DET):** a graphic depiction of measured error rates. DET curves typically plot matching error rates (false non-match rate versus false match rate) or decision error rates (false reject rate versus false accept rate).

**DGREC:** in Spanish, acronym of the *Dirección General del Registro del Estado Civil* (General Directorate of the Registration of Civil Status) in Uruguay.

**Diaspora:** refers to any national or ethnic population that leaves their homeland, individually or as part of organized networks, and that maintains ties to their homeland.

**Difference score:** a value returned by a biometric algorithm that indicates the degree of difference between a biometric sample and a reference. *See also hamming distance, similarity score.* 

**Diffractive Optically Variable Image Devices (DOVIDs):** devices that contain gratings (usually in the form of surface reliefs) which are able to modify light by diffraction. This can be used to create different effects, such as two- or three-dimensional images or kinematic and color-changing effects.

**Digital:** in binary code, the language of the numbers (ones and zeros) used by computers to store and process data.

**Digital document:** a document elaborated over electronic support that incorporates electronic signed data.

**Digital identity:** a set of features that individualize a person in a computer-based environment.

**Digital signature:** an asymmetric key operation where the private key is used to digitally sign an electronic document and the public key is used to verify the signature. Digital signatures provide authentication and integrity protection. They have the same validity and legal effects as a handwritten signature.

**Digital signature holder:** a person or entity to whom a digital certificate can be exclusively attributed, identifying him or her objectively in relation to a data message.

**Digital signature mechanisms:** configured computer program or device used to apply data in creating a signature. The mechanisms vary according to the level of security applied.

**Digital track:** a unique number that enables the identification of a document; therefore, different numbers correspond to different digital tracks.

**Digitalize:** to transform any kind of information—graphic, audio, video, or other—into binary data that is readable by computers.

**Dirección General del Registro Civil e Identificación y Cedulación de Ecuador** (**DGRCIC**): in English, General Directorate of Civil Registration and Identification in Ecuador, charged with civil registration and corresponding emission of certificates, as well as issuance of the national identification document in Ecuador. Institutionally it is located within the Ministry of Telecommunications.

Dirección General del Registro del Estado Civil de Paraguay: in English, General Directorate of the Registration of Civil Status in Paraguay, which reports to the Labor and Justice Ministry and whose mission is to compile, document, file, maintain, register, rectify, reconstitute, validate, and certify the vital acts and events pertaining to the civil status of the citizens.

**Dirección General del Registro del Estado Civil de Uruguay** (**DGREC**): in English, General Directorate of the Registration of Civil Status, which is located within the Education and Culture Ministry of Uruguay. It is the institution in charge of all matters pertaining to civil registration and is responsible for the registration of the civil status of people and vital events.

**Dirección General del Registro Nacional de Población e Identificación Personal de México (RENAPO):** in English, General Directorate for the National Population Registry and Personal Identification, which is part of the Ministry of Governance of Mexico. RENAPO issues the unique identity number called CURP, and by law issues the national identity card. RENAPO is also in charge of establishing links between the civil registries and the National Service for Accreditation and Personal Identification. *See also CURP*.

Dirección Nacional de Identificación Civil del Uruguay (DNIC): in English, National Directorate of Civil Identification of Uruguay, in charge of identifying physical persons who live in the country, providing an identity document in accordance with base identity documents emitted by DGREC and dactyloscopic confirmation. It also issues passports.

**Disabled person:** an individual with limitations in corporal functioning (physiological or psychological) and/or structural parts (parts of the body, organs, extremities, and their components).

**Discrimination:** negative or positive differential treatment of a group or individual based on aspects such as sex, racial origin, ethnicity, religion, convictions, incapacity, age, sexual orientation, or another quality, which impedes the exercise of rights.

**Displaced person:** a person forced to flee his or her state or community because of internal conflict, natural or human-made disasters, or other reasons beyond their control. *See also de facto refugees, externally displaced persons.* 

**Displacement:** forced removal of a person from his or her home or country, generally because of armed conflict or natural disaster.

**Disqualification:** in voter roll purge, a penalty that consists in disabling a person from the right to vote, actively or passively, during the time this person serves time in prison.

**Distinguishable information:** information that can be used to identify an individual.

**Divorce:** legal dissolution of a marriage; a separation of husband and wife that confers on the parties the right to remarriage under civil, religious, and/or other provisions in accordance with the laws of the country.

**Divorce rate:** the number of divorces per 1,000 population in a given year.

**DNA:** acronym for Deoxyribonucleic Acid, a molecule that contains and transmits the genetic instructions used in the development and functioning of all known living organisms except some viruses (retroviruses). Two complementary chains of nucleotides that are entwined and form a double helix that remains united by hydrogen bonds form this molecule. The four types of nucleotides that form DNA are the bases Adenine, Guanine, Cytosine, and Thymine.

**DNI:** in Spanish, the acronym for National Identity Document, which is used in countries such as Peru, Argentina, and Spain. *See also Documento Nacional de Identidad.* 

**DNIC:** See Dirección Nacional de Identificación Civil del Uruguay.

**Documento Nacional de Identidad (DNI):** in Peru, Argentina, and Spain, the denomination for the public, personal, and non-transferable unique identification document for all civil, commercial, administrative, judicial, and other acts. It is also the legal document required to exercise the right to vote.

**Documento Personal de Identidad (DPI):** in Guatemala, the denomination for the official public, personal, non-transferable identity document. All Guatemalan citizens and resident foreigners are entitled to this document. It is the only document to be used in civil, administrative, and legal issues in Guatemala.

**Document renovation:** the process by which a person obtains or replaces an identity document due to loss or expiration.

**Documento Único de Identidad (DUI):** an identity document that is used in El Salvador for all citizens more than 18 years old, in every public or private act within the country and outside the country when these acts have effects in El Salvador. It is also used to vote.

**Documentation:** used generically to refer to identity and identification documents.

**Documented migrant:** a migrant who enters a country legally and remains in the country in accordance with his or her admission criteria.

**Domain:** a set of computers connected in a network in which the administration of users and privileges is delegated to one of the computers.

**Domicile:** the place in which a person is physically present and that the person regards as home; a person's true, fixed, principal, and permanent home where he or she intends to return and remain even when residing elsewhere. This is also the place where a person considers him- or herself to be legally established for the fulfillment of his or her obligations and the exercise of his or her rights. *See also residence*.

**Double or multiple births:** births that happen one followed by the other, differentiated only by small units of time. *See also simultaneous births.* 

**Doubling time:** the number of years required for the population of an area to double its present size, given the current rate of population growth.

**DOVIDs:** See Diffractive Optically Variable Image Devices.

**DPI**: See Documento Personal de Identidad

**D-Prime (D'):** a statistical measure of how well a system can discriminate between a signal and a nonsignal. See also signal.

**Dual citizen:** a citizen of one country who is allowed to hold a passport of another country.

**Dual records system:** the simultaneous collection of vital statistics data, mainly births and deaths, through two methods theoretically independent of each other. One is the continuous collection of vital statistics, which can be the responsibility of another institution besides the civil registry: the other is a periodic household survey within the same geographic area. By crossing the information gathered by both methods, the method of estimating the total number of vital events and acts is improved.

**Dual-interface card:** a smart card with a single chip that can operate in both contact and contactless mode. See smart card.

**DUI**: See Documento Único de Identidad.

**Duplicate:** a second document or text with the same contents and value as the original.

**Duplicate records:** an anomaly or deficiency in the registration of vital acts. An example is the existence of two or more entries of the same event (real estate, legal entity, natural person, or any other element).

**Eavesdropping:** surreptitiously obtaining data from an unknowing end user. An example involves having a hidden sensor co-located with the legitimate sensor.

**e-Credential:** an identity credential that is purely electronic, and is not necessarily tied to a specific physical token. The e-Credential establishes identity, and it may be used to authenticate the subject, to sign documents and messages, or to encrypt data. *See also token*.

**EDI:** See Electronic Data Interchange.

**EER:** See Equal Error Rate.

**e-Government:** the use of information technologies by government agencies, which have the ability to transform and optimize relations between the government and citizens, businesses, and other sectors of government. *See also connected governance.* 

**e-ID:** the acronym for Electronic Identification Documentation. This is a token that proves an individual's identity and is used for the purposes of identification, authentication, and electronic signature. Generally, it is a smart card that contains a contact or contactless chip. It is an identity management trend begun in Europe. *See also smart card*.

**Elder:** a person who is or has exceeded the age of sixty years old.

**Electronic certificate:** a document signed electronically by a certification service provider that links verification data of a signature and confirms the holder's identity.

**Electronic credentials:** digital documents used in authentication that bind an identity or an attribute to a subscriber's token.

**Electronic Data Interchange (EDI):** a standard for the exchange of structured information between computers.

**Electronic governance**: using information and communication technologies at various levels of the government and the public

sector and beyond for the purpose of enhancing governance. See also e-government, connected governance.

**Electronic passport:** See biometric passport.

**Electronic signature:** a set of electronic data that can be used to identify the signer. *See also digital signature*.

**Electronic signature holder:** a natural person who can be linked exclusively to a data message signed electronically using a private key. *See also digital signature*.

**Eligible:** having the possibility of being chosen.

**Emigration**: the process of leaving one country to take up residence in another.

**Emigration rate:** the number of emigrants per 1,000 population departing an area of origin in a given year.

**e-MRTD:** an electronic machine-readable travel document that contains a contactless integrated circuit chip for identifying an individual.

**EMV:** the acronym for Europay, Mastercard, and Visa. It is an interoperation standard for chip cards and point of sale terminals for the authentication of pay through credit and debit cards.

**Encrypt:** to transform one message into another using a password to prevent that transformed message from being interpreted by those who do not know the password.

**Encryption:** the act of transforming data into an unintelligible form so that it cannot be read by unauthorized individuals and systems. A key or a password is used to decrypt (decode) the encrypted data.

**End User:** an individual who interacts with a system to be enrolled, verified, or identified.

**Enrollment:** the process of collecting a biometric sample from an end user, converting it into a biometric reference, and storing it in the biometric system's database for later comparison.

**Entry:** any entrance of a person into a country other than his or her homeland country on which he or she is entitled to enter, whether voluntarily, involuntarily, legally, or illegally. *See also admission*.

**Entry stamp:** a mark made by a border official in a person's passport stating the date and place at which that person entered the state. Most countries stamp the passports of all who enter, whether citizens or non-citizens.

**e-Passport:** an electronic passport on which biometric data is stored in an embedded microchip that complies with the recommended standards of the International Civil Aviation Organization. *See also e-MRTD, biometric passport.* 

**Epidemiological incidence:** the proportion of people who become ill in a given period of time.

**Epidemiology:** the study of the distribution, determinants, and frequency of health-related factors and human diseases.

**Equal Error Rate (EER):** a statistic used to show biometric performance, typically during a verification operation. The EER is the location on a DET curve where the false accept rate and false reject rate (or one minus the verification rate) are equal. In general, the lower the EER value, the higher the accuracy of the biometric system. Note, however, that most operational systems are not set up to operate at the EER, so the measure's true usefulness is limited to comparing biometric system performance. The EER is sometimes referred to as the "Crossover Error Rate." *See also Detection Error Trade-off (DET) curve, false acceptance rate, false rejection rate.* 

**Ethnicity:** cultural values and practices that distinguish groups of people. It has two dimensions: social and cultural characteristics (language, religious faith, and residence) and a shared sense of identity, tradition, solidarity, or belonging.

**EURODAC system:** an acronym for European Dactyloscopic System, which is a single-purpose application with a centralized database. It is used to ensure that members of the European Union account for asylum seekers by allowing countries to identify where the person has sought asylum first. The system requires fingerprints from all the fingers of asylum seekers over 18 years of age. The database does not include any personal details about the individual, such as name. It only lets the user of the system know whether the applicant has already been registered in the database or not. The information is stored for 10 years, after which it is cleared from the database.

**European Committee for Standardization (CEN):** a private organization whose mission is to promote the European economy in global commerce, the welfare of European citizens, and the environment. It has under its jurisdiction the International Society for the Systems Sciences (ISSS). *See also NIST, ANSI.* 

**European Visa Information System (VIS):** a centralized database kept by the European Union to ensure the free movement of persons, provide a common asylum policy, and remove border checks. It is the system through which people apply for visas to enter the European Union. This database contains all applicant data. Data are retained for five years.

**Exclusion:** the action and effect of impeding the participation of a person or certain social groups in valuable aspects of social and political life.

**Exit visa:** a document issued for individuals with expired visas who need to extend them before leaving the country.

**Exodus:** the displacement of large numbers of people or of part of a community or population.

**Exponential growth:** the increase in number or size of a population at a constantly growing rate.

**Expulsion:** an act by an authority of the state with the intention and the effect of securing the removal of a person or persons (foreigners or stateless persons) against their will from the territory of that state.

**Expulsion order:** an order of a state, informing of the prohibition of a non-national to remain on its territory. This order is given if the individual either entered the territory illegally or is no longer authorized to remain in the state. This order is generally combined with the announcement that it will be enforced, if necessary, by deportation. *See also deportation*.

**Externally displaced persons:** people who have fled their country due to persecution, generalized violence, armed conflict situations, or other man-made disasters. *See also de facto refugees*.

**Extraction:** the process of converting a captured biometric sample into biometric data so that it can be compared to a reference.

**Extramarital birth**: the birth of a child to a mother who, according to national law or customs, was not married at the time of the birth. This term should not be used to explicitly describe the child on the birth certificate unless specifically required by law; rather, it is a statistical term used to describe the number of out-of-wedlock births that have occurred.

F

**Face recognition:** a biometric modality that uses an image of the visible physical structure of an individual's face for recognition purposes. See also fingerprint recognition, hand geometry recognition, palm print recognition, speaker recognition, iris recognition.

**Facial biometry:** a biometric modality in which the physical structure of the face is used for recognition purposes. *See also face recognition, facial detection.* 

**Facial detection:** *see face recognition.* 

**Failure to Acquire (FTA):** the failure of a biometric system to capture and/or extract usable information from a biometric sample.

**Failure to Enroll (FTE):** the failure of a biometric system to form a proper enrollment reference for an end user. Common failures include end users who are not properly trained to provide their biometrics, the capturing of incorrect information, or the capturing of information that is insufficient in quality to develop a biometric template.

**False acceptance:** when a biometric system incorrectly identifies an individual or incorrectly verifies an impostor against a claimed identity. *See also type II error*.

False Accept Rate (FAR): a statistic used to measure biometric performance when operating in the verification task. The percentage of times a system produces a false acceptance, which occurs when an individual is incorrectly matched to another individual's existing biometric. See also False Match Rate, type II error.

**False Alarm Rate (FAR):** a statistic used to measure biometric performance when operating in the open-set identification (sometimes referred to as watchlist) task. This is the percentage of times

an alarm is incorrectly sounded on an individual who is not in the biometric system's database, or an alarm is sounded but the wrong person is identified.

False Match Rate (FMR): a statistic used to measure biometric performance. Similar to the False Acceptance Rate (FAR).

False Non-Match Rate (FNMR): a statistic used to measure biometric performance. Similar to the False Reject Rate (FRR), except the FRR includes the FTA error rate but the False Non-Match Rate does not. See also FTA, FNMA.

**False rejection:** when a biometric system fails to identify an applicant or fails to verify the legitimate claimed identity of an applicant. See also false acceptance.

**False Reject Rate (FRR):** a statistic used to measure biometric performance when operating in the verification task. The percentage of times the system produces a false rejection. A false rejection occurs when an individual is not matched to his or her own existing biometric template. See also False Non-Match Rate.

**Family:** a group of two or more persons living together who are related by birth, marriage, or adoption.

Family records: acts pertaining to civil status as well as vital records that are registered.

**FAR:** See False Accept Rate.

**Feature Extraction:** *See extraction.* 

**Feature(s):** distinctive mathematical characteristic(s) derived from a biometric sample; used to generate a reference. See also extraction, biometric template.

**Fecundity:** the physiological capacity of a woman to produce a child.

**Federated Identity Management (FIM):** a standard in the process of authentication of a user through multiple information technology systems and organizations.

**Fertility**: the actual reproductive performance of an individual, a couple, a group, or a population.

**Fertility rate:** the number of live births per 1,000 women between the ages of 15 and 49 in a given year.

**Fertility rate by specific age:** the fertility rate calculated for groups of specific ages to observe the differences in fertility at different ages or for comparison purposes.

**Fetal death:** death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the period of gestation; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

**Fetal death rate:** the number of fetal deaths after 28 weeks of gestation, plus the number of deaths of children under seven days, per 1,000 live births.

**Fetus:** a conceived or unborn embryo until it becomes a person, which for civil purposes is only after birth and remaining separated from the maternal womb for 24 hours.

**Filiation:** family relationship between relatives, regardless of degree, in the strictest connotation; the relationship of rights that exists between parent and child.

FIM: See Federated Identity Management.

**Final fertility rate:** the number of children born to every woman in a cohort of women by the end of their reproductive period.

**Fingerprint:** a visible impression produced following contact of the friction ridges with a surface.

**Fingerprint recognition:** a biometric modality that uses the physical structure of an individual's fingerprint for recognition purposes. Important features used in most fingerprint recognition systems are minutiae points that include bifurcations and ridge endings. See also bifurcation, palm print recognition, friction ridge, loop, pelmatoscopy, dactyloscopy, hand geometry recognition.

**Firewall:** a hardware/software system used as a gateway that limits access between networks in order to control and protect incoming and outgoing information.

FMR: See False Match Rate

**FNMR**: See False Non-Match Rate

**Foliate:** to number administrative or legal actions in a correlative fashion.

**Folio:** a page of a book, notebook, or chart. One side of the page is called the even page and the other is the odd page.

**Forced migration:** a general term used to describe a migratory movement in which an element of coercion exists, including threats to life and livelihood, whether arising from natural or manmade causes. *See also refugee*.

**Forced resettlement/relocation:** the process of transfer and reestablishment of the means of subsistence and living conditions of a population due to activities related to a project. *See also internally displaced persons*.

**Forced return:** the compulsory return of an individual to the country of origin or transit, or a third country, on the basis of an administrative or judicial decision. *See also deportation*.

**Foreigner:** a person who is either temporarily or permanently in a country not of his/her nationality. People who were born in another country and acquire citizenship through naturalization in the country of residence are not considered foreigners.

**Formulary:** a sheet with predetermined spaces on which critical information is compiled; a book or page that contains formulas that are used for a petition, issuance, or execution of something.

**Fraudulent document:** any travel or identity document that has been falsely made or altered in some material way by anyone other than a person or agency lawfully authorized to make or issue the travel or identity document; or that has been improperly issued or obtained through misrepresentation, corruption, or duress or in any other unlawful manner; or that is being used by a person other than the rightful holder. *See also identity document, travel documents, MRP, MRTD.* 

**Freedom of movement:** a human right based on the freedom of movement within the territory of a country (Art. 13(1), *Universal Declaration of Human Rights, 1948*: "Everyone has the right to freedom of movement and residence within the borders of each state."), and the right to leave any country and to return to one's own country (Art. 13(2), *Universal Declaration of Human Rights, 1948*: "Everyone has the right to leave any country, including his own, and to return to his country.").

**Friction ridge:** distinctive patterns on the skin of the fingers and toes, and on the palms and soles of the feet, which make contact with a surface under normal touch. On the fingers, the patterns make up the fingerprints. *See also minutia(e) point, fingerprint.* 

Frontier: See border.

FRR: See False Rejection Rate.

FTA: See Failure to Acquire.

FTE: See Failure to Enroll.

**Function creep:** the use of personal information stored in a database for purposes different than those for which it was initially collected. Generally, this information has been collected and stored for specific or limited purposes and is later used for other objectives with or without the authorization of the people to whom the data belong.

**Fundamental human rights:** within the scope of human rights, some human rights are claimed to be inalienable. Thus, Art. 4(1), *International Covenant on Civil and Political Rights, 1966*, permits derogation of human rights "in times of public emergency threatening the life of the nation" but prohibits any derogation from Arts. 6 (right to life), 7 (torture), 8(1) and (2) (slavery and servitude), 11 (imprisonment for breach of contractual obligation), 15 (retroactive criminal liability), 16 (recognition as a person in law) and 18 (freedom of thought, conscience and religion). This notwithstanding, the trend is to regard all human rights as universal, indivisible, interdependent, and interrelated, to be treated in fair and equal manner, on the same footing and with the same emphasis. *See also human rights*.

G

**G2B**: See Government to business.

**G2C:** See Government to citizen.

**G2G:** See Government to government.

**Gallery:** a set of known individuals from a biometric database, used for a specific implementation or evaluation experiment.

**Gender rate:** the relationship between the number of men and women given a total population, expressed normally as the number of men for every 100 women.

**Geometric population growth:** the continual and accelerated growth of a population.

**Geometry of the hand:** *See hand geometry recognition.* 

**Gestational period:** the interval in completed weeks between the first day of the pregnancy until the delivery.

**Given name:** a word or words used to designate and individualize people. *See also surname*.

**Global fertility rate:** the average number of children a woman would have had at the end of her reproductive years if she had adjusted to the fertility rates by specific age during every year of her reproductive life.

**Government to business (G2B):** practices in e-government focused on enhancing relationships and services given to businesses.

**Government to citizen (G2C):** practices in e-government oriented to improving the efficiency of services targeted to citizens.

**Government to government (G2G):** practices in e-government aimed at increasing efficiency among government agencies and branches

**Grace period:** an extension of time allowed for complying with a requirement after the legally prescribed period has passed.

**Green card:** an identity card issued by the U.S. Government to non-nationals in order to obtain permanent resident status in the United States. Also called a Permanent Resident Card, it is evidence of a non-national being a lawful permanent resident with a right to live and work permanently in the United States.

**Gross reproduction rate (GRR):** the average number of female children a woman would have if she survived to the end of her

childbearing years, by specific age and for particular years during her reproductive life.

**Grounds of inadmissibility:** definitions set forth in immigration law or regulations, of reasons for which non-nationals may be prohibited from entering the state. Even where a person is otherwise eligible for a visa or other immigration status, if she or he falls within a ground of inadmissibility, the visa or other status will be denied. Grounds of inadmissibility are typically designed to preclude entry of undesirable non-nationals, such as persons without valid travel documents, persons with criminal convictions, persons who are believed to be a danger to public health or public safety, and persons who have been previously deported.

**Growth rate:** the rate at which a population grows during a given year due to natural increases and net migration, expressed as a percentage of the base population.

**Guilloche image:** a curvy image of fine continuous lines used on identification cards as a security measure.

**Guilloches:** interlaced continuous lines arranged in geometric patterns. Security printing composes designs of guilloches or of other fine line patterns, with the aim of raising the barrier for re-origination and reproduction. They are often combined with rainbow coloring.



Habeas data: the right that every person, identified or identifiable, has to request his or her public or private records that include his or her personal data or relatives' data, to acknowledge their accuracy, and to require rectification or deletion in case of inaccurate information that may cause discrimination, such as political affiliations and religion, among others.

**Habitual/usual residence:** a place within a country where a person lives and normally spends the daily period of rest. *See also domicile, country of habitual residence.* 

**Hamming distance:** a number of noncorresponding digits in a string of binary digits; used to measure dissimilarity. Hamming distances are used in many Daugman iris recognition algorithms.

**Hand geometry recognition:** a biometric modality that uses the physical structure of an individual's hand for recognition purposes. *See also fingerprint recognition, palm recognition.* 

Hash function: a mathematical function which converts a large, possibly variable-sized amount of data into a small datum. It functions in a one-way direction, that is, it is not possible to start with the summary value to calculate the original data. When the entry is a document, the result of the function is a number that unequivocally identifies text. If this number is added to the text, the receiver can apply the function and prove the result. For these operations, software is used that automates both the function to calculate the hash function and its subsequent verification. See also hash value.

**Hash value:** the result of applying a hash function to data.

**HDSC:** See High Density Smart Card.

Henry classification: a method by which fingerprints are classified due to their physiological features for one to many types of searches. This method was developed in 1800 for criminal investigation purposes by Sir Edward Henry and is the base for modern AFIS. *See also one-to-many (1:N), one-to-one (1:1), AFIS.* 

**High Density Smart Card:** a breed of smartcards that are capable of increasing memory 1,000+ fold and increasing communications 100 fold. While their use is still being studied, more storage might lead to adding more information into e-IDs.

**Holder:** a person who has ownership, possession, or use of something.

**Hologram:** a fine microscopic diffraction structure, used to generate three-dimensional images.

**Holographic patch:** an element that contains a holographic structure with three-dimensional images.

**Home birth:** a birth attended at the home or house of the woman who is giving birth. Generally a midwife attends the birth without further assistance of medical personnel.

**Homonym:** designates two or more people with the same names.

**Household:** a family or social unit living together.

**Human rights:** liberties and benefits which, by accepted contemporary values, all human beings should be able to claim "as of right" in the society in which they live. These rights are contained in the *International Bill of Rights*, comprising the *Universal Declaration of Human Rights*, 1948 and the *International Covenants on Economic, Social and Cultural Rights, and on Civil and Political Rights*, 1966 and have been included in other treaties (e.g., *Convention on the Elimination of All Forms of Discrimination against Women*, 1979; *International Convention on the Elimination of All Forms of Racial Discrimination*, 1965). *See also fundamental human rights*.

**Human trafficker:** an intermediary who transports persons who hire him or her with the aim of illegally crossing an internationally recognized border of a state. He or she may also transport people through coercion. *See trafficker, human trafficking*.

**Human trafficking:** the capture, transportation, transfer, harboring, or receipt of persons, by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse of power or of a position of vulnerability, or the giving or receiving of

payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. (Art. 3(a) of the *Protocol to Prevent, Suppress, and Punish Trafficking of Persons, Especially Women and Children*, supplementing the *United Nations Convention Against Transnational Organized Crime, 2000*).

**Hybrid card:** a kind of card that contains two kinds of chips: a contact chip and a contactless one.

IC card: See integrated circuit card.

**ICAM:** See Identity, Credential, and Access Management.

**ICAO:** See International Civil Aviation Organization.

**ICAO Public Key Directory (ICAO PKD):** a directory established by ICAO to support the global interoperability of electronic passports and to manage the exchange of certificates and revocation certificates. *See also ICAO, certificate, certificate revocation list.* 

Idemix: See identity mixer.

**Identification:** the determination of identity; the action or process of determining what a thing is; the recognition of a thing as being what it is.

**Identification culture:** a series of shared and embedded elements of the members of a society, which are manifested by their actions related to the registration of vital acts.

**Identification document:** a document issued to a person that enables verification of his or her identity. *See also DNI, DPI, DUI, green card.* 

**Identification rate:** the rate at which an individual in a database is correctly identified.

**Identify:** with respect to people, to engage in the scientific-technical study of physical characteristics of an individual for subsequent comparison against a reference pattern to score its similarity and establish an identity relationship, associating a person with filiation data.

**Identigram®:** a holographic security feature used in German passports and ID cards, combining several individual elements: 1) a holographic facial image of the holder; 2) the MRZ (Machine Readable Zone), and other elements. *See also MRZ, Machine Readable Zone*.

**Identity:** a unique set of features that individualize a person, such as the name of an individual. Since the legal names of persons are not necessarily unique, the identity of a person must include sufficient additional information to make the complete name unique.

**Identity credential:** information (electronic or printed) that seeks to either uniquely identify or provide qualifications or defining attributes about an individual's identity.

Identity, Credential, and Access Management (ICAM): U.S. Government initiative to promote a consolidated approach for all government-wide identity, credential, and access management activities to ensure alignment, clarity, and interoperability. The objective is to provide effective government-wide identity and access management while enabling trust in online transactions through common identity and access management policies and approaches; aligning federal agencies around common identity and access management practices; reducing the identity and access management burden for individual agencies by fostering common interoperable approaches; ensuring alignment across all identity and access management activities that cross individual agency boundaries; and collaborating with external identity management activities through interfederation to enhance interoperability.

**Identity document:** a piece of documentation designed to prove the identity of the person carrying it. *See also passport, travel documents.* 

**Identity fraud:** See identity theft.

**Identity governance framework:** a combination of policies and actions that ensure an individual's privacy protection and adequate operations within the individual's identity management.

**Identity management:** a combination of systems, rules, and procedures that are defined between an individual and organizations regarding the entitlement, use, and protection of personal information.

**Identity management application:** a tool used by administrators to manage users' partial identities.

**Identity management systems:** the technical and organizational infrastructure used for the definition, designation, and administration of the attributes of an identity.

**Identity mixer:** IBM software that enables users to purchase through the Internet without revealing personal information, thus preventing identity theft and other illicit activities with users' personal information.

**Identity number:** a numerical or alphanumerical code assigned to identity documents as a control, follow-up, and linking tool.

**Identity proofing:** See proof of identity. See also credential service provider, registration authority.

**Identity supplanting:** See identity theft.

**Identity theft:** the illegal acquisition of confidential information so that unauthorized individuals can use it to impersonate the true user. *See also civil status usurpation*.

**Identity verification:** the process of confirming or denying that a claimed identity is correct by comparing the credentials (something you know, something you have, something you are) of a person requesting access with those previously proven and stored in the PIV Card or system and associated with the identity being claimed.

**IDPs:** See internally displaced persons.

**Illegal entry:** the act of crossing a border without complying with the necessary requirements for legal entry into the receiving state (Art. 3(b), *UN Protocol against the Smuggling of Migrants by Land, Sea and Air, supplementing the United Nations Convention against Transnational Organized Crime, 2000).* 

**Illegal foreigner:** a foreign person who has entered a country without submitting to inspection or adequate documentation, or someone who has not complied with the migratory procedures to enter a country legally, such as persons remaining beyond the expiration of their tourist or student visas.

**International Labor Organization (ILO) seafarers' identity document:** a document that possesses a 2D barcode and which is issued by nation states as a form of verifying the identity of seafarers, but is not recognized as a travel document (passport).

**Image analysis:** the extraction of information from sensors and its representation graphically in the formats of two or three dimensions. Digital or visual analysis may be used for these purposes.

**Immigration:** the process of moving from one country to other to take up permanent residence.

**Immigration rate:** the number of immigrants arriving at a destination per 1,000 population at that destination in a given year.

**Immigration status:** the legal or illegal condition accorded to a migrant under the immigration law of the host country.

**Immigration zone:** the high seas and land territory of a state in which the state's immigration laws are applicable.

**Impostor:** a person who submits a biometric sample in an either intentional or inadvertent attempt to claim the identity of another person within a biometric system.

**Incidence rate:** the number of persons contracting a disease per 1,000 population for a given period of time.

**INCITS:** See International Committee for Information Technology Standards.

**Incline effect:** the perceptible change of an image or object in aspects such as its brilliance, color, or contents, achieved by changing the direction or angle of illumination.

**Indifferent user:** an individual who knows that his or her biometric sample is being collected and does not attempt to help or hinder the collection of the sample.

**Indigenous populations:** there are different definitions that encompass the criteria of sociocultural differentiation, including social, cultural, linguistic, and economic characteristics that distinguish them from other sectors.

**Indisputable:** true, full of veracity, trustworthy, authentic.

**Induced abortion:** voluntary interruption of a pregnancy.

**Infant deaths:** deaths of live-born children under one year of age.

**Infant mortality rate:** the number of deaths under one year of age per 1,000 live births in a given year.

**Informant:** an individual whose responsibility, designated by law, is to report to the local registrar the occurrence of a vital event and

to provide all the information and characteristics related to the event. On the basis of such a report, the local registrar may legally register the event.

Infrared light (IR light): electromagnetic waves between the upper end of the visible light range and the microwave region of the electromagnetic spectrum.

**Infrared pre-printing:** printing visible only with infrared-light source lamps that cover the required wavelengths.

**Inscription:** the recording of acts and documents in public registration books.

**Inscription certification:** a document provided after inscription in the civil registration that states the occurrence of the inscription.

**Institutional delivery:** birth that occurs in a health service institution where skilled birth attendants are available.

**Integrated circuit card**: *See smart card*.

**Integrated Automated Fingerprint Identification System (IAFIS):** a national fingerprint and criminal history system maintained by the Federal Bureau of Investigation (FBI). IAFIS provides automated fingerprint search capabilities, latent searching capability, electronic image storage, and electronic exchange of fingerprints and responses. See also AFIS.

**Integrity:** a feature indicating that a data message or electronic document has not been altered between its transmission and receipt.

**Interface**: a means by which a user can interact with a computer, machine, or other electronic device. It comprises all of the contact points between the user and the machine. It tends to be user friendly.

**Intermediate fetal death:** death occurring after 20 completed weeks of gestation but before 28 weeks.

**Internal migration:** the movement of people from one area of a country to another for the purpose or with the effect of establishing a new residence. This migration may be temporary or permanent. Internal migrants move but remain within their country of origin (e.g., rural to urban migration). See also de facto refugees, internally displaced persons, international migration, rural-urban migrants, urban-rural migrants.

**Internal passports:** also known as passes, designated identity documents to regulate movements within the jurisdiction of a state.

**Internally displaced persons (IDPs):** persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, or natural or human-made disasters, and who have not crossed an internationally recognized state border.

**International Civil Aviation Organization (ICAO):** part of the UN Systems Organizations, established in 1944 by 52 nations, whose goal is to ensure the secure, orderly, and economical development of international air transport.

International Commission on Civil Status (CIEC): an intergovernmental body that seeks to facilitate exchanges of legal texts and improve the operation of national organizations concerned with civil status. It maintains documentation on legislation of member states, provides information and assistance, carries out technical and legal studies, prepares publications, draft projects and recommendations, and holds conferences.

International Committee for Information Technology Standards (INCITS): a body that promotes the efficient use of information and communication technology through standardization, balancing

the interests of all stakeholders and increasing global competitiveness of the member organizations.

**International migration:** the movement of persons who leave their country of origin or country of habitual residence to establish themselves either permanently or temporarily in another country. *See also internal migration.* 

International Organization for Standardization (ISO): a nongovernmental network of national standards institutes in 157 countries. Its main function is to promote the standardization of norms on products and safety for businesses and organizations on an international level.

**International Police (INTERPOL):** the largest police organization, with 187 member countries. It facilitates cross-border police cooperation and it supports and gives assistance to all of the organizations, authorities, and services whose mission is to combat or prevent international crime.

**International technical standards:** technical requirements used on an international level that must be observed and complied with in the issuance of electronic signatures and in certification practices. *See also International Committee on Information Technology Standards.* 

**INTERPOL:** See International Police.

**Intimacy:** pertaining to something of a personal or private nature.

**Invisible Personal Information (IPI):** a system that encodes personal data into a photo; this data is invisible to the naked eye and requires a decoding lens.

**Involuntary repatriation:** repatriation of refugees to the country of origin, induced by the receiving country by creating circumstances that do not leave any other alternative. As repatriation is a personal

right (unlike expulsion and deportation, which are primarily within the domain of state sovereignty), as such, neither the state of nationality nor the state of temporary residence or detaining power is justified in enforcing repatriation against the will of an eligible person, whether refugee or prisoner of war. In accordance with contemporary international law, war prisoners or refugees who refuse to be repatriated, particularly if they have a reasonable fear of persecution in their own countries, must be protected and benefit, if possible, from temporary or permanent asylum. See also deportation, repatriation, voluntary repatriation, voluntary return.

**Iridescence:** radiant shine shown by matter that produces a change of color, depending on the angle at which it is seen and the illumination. Iridescence is based on the diffraction and interference of light.

**Iridescent:** copy protection color that could be printed over a full card size or partially. Print technology is silk-screen preprint. Card could not be copied or reproduced with common copiers.

**Iridescent ink:** ink that fluctuates in shine and color, depending on the angle of light and observation. It differs from regular ink, whose shine and color is practically independent of the angle of illumination and observation. There are different types of iridescent inks: metallic inks, pearl luster inks, and optically variable inks (OVI).

**Iriodin:** metalized pigments in transparent color that give the impression of a metalized effect. It is used in identification documents as a security measure.

**Iris detection:** *See iris recognition, iris scanner.* 

**Iris recognition:** a biometric modality that uses an image of the physical structure of an individual's iris for recognition purposes. *See also iris scanner, IrisCode, Daugman system.* 

**Iris scanner:** a device that uses a digital camera to check the unique patterns of the irises of an individual's eyes.

**IrisCode**©: a biometric feature format used in the Daugman iris recognition system. *See also Daugman system*.

**Irregular migrant:** someone who, owing to illegal entry or the expiry of his or her visa, lacks legal status in a transit or host country. The term applies to migrants who infringe a country's admission rules, and any other persons not authorized to remain in the host country. *See also illegal foreigner*.

**Irregular migration:** movement that takes place outside the regulatory norms of the sending, transit, and receiving countries. *See also undocumented foreigner, illegal foreigner.* 

**ISO:** See International Organization for Standardization.

**JCE:** See Junta Central Electoral de la República Dominicana.

**Judicial inscription:** in the civil registry, registration of an act after a ruling by a court or judge.

**Judicial separation:** disunion of married persons, without conferring on the parties the right to remarriage, according to the laws of each country.

Junta Central Electoral de la Republica Dominicana (JCE): in English, Central Electoral Board of the Dominican Republic, the institution in charge of managing the civil registration and relevant certificates for births, marriages, divorces, deaths, and recognitions, as well as of emitting the national identity card.

**Juridical act:** a manifestation of will destined to create, modify, or extinguish juridical relationships.

**Juridical person:** any entity legally constituted or organized under applicable laws, whether for profit or not, private or public, including corporations, limited liability companies, associations, foundations, etc.

*Jus sanguinis*: in English, the right of the blood; that is, the place of origin of the family, or the blood, rather than the place of birth determine the nationality and the rights of a person. *See also jus soli*.

*Jus soli*: the rule that a child's nationality is determined by its place of birth. *See also jus sanguinis*.

## K

**Key:** in cryptography, a parameter that enables the functional output of a cryptographic algorithm or cipher. Without a key, the algorithm would have no result. In encryption, a key specifies the particular transformation of plaintext into ciphertext, or vice versa, during decryption. Keys are also used in other cryptographic algorithms, such as digital signature schemes and message authentication codes.

**Key pair:** in an asymmetric cryptographic system, two mathematically related keys having properties such that (1) one key is used to encrypt a message that can only be decrypted using the other key, and (2) even if one key is known, it is computationally infeasible to discover the other key. Normally, a key pair is composed of a public key and its corresponding private key.

**Keystroke dynamics:** a biometric modality that uses the cadence of an individual's typing pattern for recognition.

**Kinefilm**<sup>®</sup>: heat-applied laminate with integral Kinegram<sup>®</sup> patch, existing in both metalized and transparent versions. Laminates can incorporate specific security features that are not usually available on the market.

Kinegram<sup>®</sup>: a computer-generated hologram capable of producing multiple high-resolution images, that contains special types of computer-generated diffractive optical elements with symmetric and asymmetric surface reliefs (gratings). These gratings are typically arranged vector-graphic-like and can be designed in different ways to exhibit kinematic, color changing, contrast reversal, and other special effects.

**Kinship:** relationships among people who have common ancestors or that derive from others, united by blood ties.

**Kinship degree:** the degree of relationship between two persons related by blood.

**Kinship line:** a series of relationship degrees, which can be straight or transversal.

Laissez-passer: a travel document issued by the United Nations (and recognized and accepted as a valid travel document by states) to its staff for official travel (General Convention on the Privileges and Immunities of the United Nations, 1946).

LAN: See Local Area Network.

**Late fee:** a pecuniary penalty imposed for a penal, administrative, or police infraction. See also pecuniary penalty.

**Late registration:** a vital event registered beyond the period specified in existing laws, rules, or regulations once certain requirements have been met, but within a specific grace period. The grace period is usually considered to be no more than one year beyond the occurrence of the vital event.

**Latent fingerprint:** a fingerprint "image" left on a surface that was touched by an individual. The transferred impression is left by surface contact with the friction ridges, usually caused by oily residues produced by sweat glands in fingers.

**Lawful admission:** legal entry of a foreigner into a country, including under a valid immigrant visa.

**Legal identity:** legal civil status obtained through birth registration and civil identification that recognizes the individual as a subject of law and protection of the state.

**Legal separation:** see judicial separation.

**Legitimation:** formal vesting of a person with the same status and rights of a person born in wedlock.

**Length of marriage:** time span between the day, month, and year of a wedding up to the current date (usually expressed in years).

**Life expectancy:** the average number of additional years a person could expect to live if current mortality trends were to continue for the rest of that person's life.

**Life span:** the maximum age that human beings would be able to reach under optimal conditions.

**Linkable information:** information that is not sufficient to allow the recipient to distinguish any individual, but that may be matched or compared to information from a secondary data source that is available to the general public or can be otherwise obtained,

in order to link together information and potentially distinguish an individual.

**Linked information:** information that is not sufficient to distinguish an individual when considered separately, but which could distinguish an individual when taken collectively or if considered in conjunction with other data elements in the same system or a closely related system.

**List of registered voters:** *See voter registration list.* 

**Live birth:** the result of the complete expulsion or extraction from its mother of a product of conception, which after such separation breathes or shows any other evidence of life (such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles), whether or not the umbilical cord has been cut or the placenta is attached.

**Live-birth certificate:** a document provided by the doctor who attends a birth, which certifies the birth of a child. It contains information such as the date and place of birth and the names of the child's parents.

**Live capture:** typically refers to a device that electronically captures fingerprint images using a sensor (rather than scanning inkbased fingerprint images on a card or lifting a latent fingerprint from a surface). *See also enrollment*.

**Liveness detection:** a technique used to ensure that a biometric sample submitted is from a live end user. A liveness detection method can help protect the system against some types of attacks.

**Local Area Network (LAN):** a network in which computers are connected through a physical cable.

**Login:** a procedure by which a user can gain access to a system with a user name and a password.

**Loop:** a fingerprint pattern in which the friction ridges enter from either side, curve sharply, and pass out near the same side they entered. This pattern will contain one core and one delta. See also arch, core point, delta point, friction ridge, whorl.

Loss of nationality: may result from an act of the individual (expatriation, deliberate renunciation of nationality by an individual, or automatic loss of nationality upon acquisition of another nationality) or of the state (denationalization). Art. 15(2) of the *Uni*versal Declaration of Human Rights states that "No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality." See also nationality, statelessness.

### M

Machine Readable Passport (MRP): a passport that possesses barcodes that compile biographic and or biometric data of the bearer and can be read by a machine. See also Machine Readable Travel Document, electronic passport.

Machine Readable Travel Document (MRTD): an international travel document that contains some information readable by humans and other exclusively by devices. Every kind of MRTD includes the holder's identification details, including picture or digital image, with compulsory identification elements reflected in a device-reading line zone.

Machine Readable Zone (MRZ): part of an MRTD or MRP that contains some of the information from the Visual Inspection Zone in the form of a sequence of alphanumeric characters and the symbol "<" that forms two or three lines. Document readers can read this sequence of characters in order to facilitate inspections of travel documents. See also Machine Readable Travel Document, Machine Readable Passport, Visual Inspection Zone.

**Machine verifiable feature:** a security feature that can be read and verified by document readers; it authenticates a travel or identity document by detection or measurement of special physical properties of document elements or structures.

**Magnetic stripe:** a dark stripe usually on credit cards, public transportation tokens, or personal identification cards that stores certain information. The magnetic stripe is recorded or read through physical contact when passed through a reader/writer.

**Manuscript signature:** the name and surname (or symbols) that each person writes with their hand on a document to provide authenticity or to express agreement with its contents. *See also digital signature*.

**Marginal note:** a secondary note imposed at the margin of the main public registers, especially within the civil registry, that contains modifications, or corrections of legal situations.

**Marginal notes book:** a separate book compiled in parallel to the birth registry that contains annotations or updated information on birth registration. This use is not universal; only a few countries have adopted this modality.

**Marital fertility rate:** the number of live births to married women per 1,000 married women ages 15 to 44 or 15 to 49 in a given year.

**Marriage:** the act, ceremony, or procedure by which a legal relationship between a couple is constituted. The legality of the union can be established through civilian or religious means, or any other methods recognized by the laws of each country.

**Marriage certificate:** a document that verifies the legal union of a couple, which necessarily and simultaneously affects both people in the reciprocal situation. It is the only certificate on which the participants declare and sign personally.

**Marriage records:** documentation of all marriages registered over the years.

**Marriage registration:** the act of annotating marriages and compiling them chronologically each year.

**Match:** the decision that a biometric sample and a stored biometric template come from the same human source, based on their high level of similarity (difference or Hamming distance). *See also Hamming distance*.

**Match on card:** a smart card for applications where biometric matching takes place on the card itself. It combines the decision stage in the same physical location as that of the data storage.

**Matching:** the process of comparing a biometric sample against a previously stored template and scoring the level of similarity (difference or Hamming distance). Systems then make decisions based on this score and its relationship above or below a predetermined threshold. *See also comparison, difference score, threshold.* 

**Maternal death:** the death of a woman while pregnant or within 42 days after the termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes

**Maternal mortality rate:** the number of deaths to mothers occurring in a given year per 100,000 live births in a given country, territory, or geographic area, reported by the national health authorities.

**Maternity:** the state or quality of being a mother. It includes the period from fertilization of the egg to delivery.

**Maximum population:** the highest number of habitants that an ecosystem can support.

**Measurement during a period:** a statistic that measures the events occurring among all or part of a population during a specified period of time.

**Median age:** the age that divides a population into two numerically equal groups; that is, half the people are younger than this age and half are older.

**Medical death certificate:** a document issued by an authorized and duly trained physician that certifies the principal and underlying causes of death.

**Medical examiner:** usually an appointed public officer with duties similar to those of a coroner but who is required to have specific medical training (such as in pathology) and is qualified to conduct medical examinations and autopsies. *See also coroner.* 

**Message:** in information and communication technology, data that are signed and sent to a receiver.

**Message Authentication Code (MAC):** a cryptographic checksum on data that uses a symmetric key to detect both accidental and intentional modifications of the data.

Message digest: See hash value.

**Metadata:** methodological information or information that is attached to regular data entries whose entire purpose is to describe the data (e.g., where it came from, its format, its provenance [data history], its relationship to other data and to concepts, etc.).

**Metadata structure:** a collection of metadata concepts, structure, and usage when used to collect or disseminate reference metadata. A reference metadata set also has a set of structural metadata that describes how it is organized. This metadata identifies what reference metadata concepts are being reported, how these concepts relate to each other (typically as hierarchies), what their presentational

structure is, how they may be represented (as free text, as coded values, etc.), and with which formal object types they are associated.

**Metropolitan area:** a large concentration of population, normally with an area of 100,000 or more inhabitants having an important city at its core and with suburbs surrounding the city that have social and economic relations. Its territory falls under the jurisdiction of more than one local authority. *See also metropolitan zone*.

**Metropolitan zone:** a large concentration of population, ordinarily an area with 100,000 or more inhabitants, which encompasses surrounding administrative areas that are socially and economically integrated into it. *See also metropolitan area*.

Microimpression: See microtext.

**Microtext:** the impression of a text with very small characters that seem like a fine line, although they can be read with a magnifying glass. This type of text offers a protection against photocopies.

**Midwife:** a person, with or without medical training, who helps or provides assistance to a woman giving birth. *See also birth attendant*.

**Migrant:** a person who freely decides to migrate for reasons of personal convenience and without intervention of an external compelling factor. This term therefore applies to persons and family members moving to another country or region to better their material or social conditions and improve the prospect for themselves or their family. There is no universally accepted definition of the term.

**Migration:** movement of persons across a political division for the purpose of establishing a new permanent residence. It includes international migration (between countries) and internal (within a country).

**Mimic:** the presentation of a live biometric measure in an attempt to fraudulently impersonate someone other than the submitter.

**Minor:** a person who, according to the law of the relevant country, is under the age of majority; that is, he or she is not yet entitled to exercise specific civil and political rights. *See also child*.

**Minority:** although in international law there is no universally accepted definition of the term, it may be considered to be a group that is numerically inferior to the rest of the population of a state and in a non-dominant position. Members possess ethnic, religious, or linguistic characteristics that differ from those of the rest of the population and maintain a sense of solidarity directed toward preserving their culture, traditions, religion, or language.

**Minutia(e) point:** friction ridge characteristics that are used to individualize a fingerprint image. Minutiae are the points where friction ridges begin, terminate, or split into two or more ridges. In many fingerprint systems, the minutiae (as opposed to the images) are compared for recognition purposes. *See also friction ridge, ridge ending.* 

**Mobility:** demographic movement of people.

**MOC**: See match on card.

**Modality:** a type or class of biometric system (e.g., face recognition, fingerprint recognition, iris recognition, etc.).

**Model:** a representation used to characterize an individual. Because of their inherently dynamic characteristics, behavior-based biometric systems use models rather than static templates. *See also template*.

Monitoring of a civil registration system or a vital statistics system: a check on civil registration system and vital statistics system operations designed to control efficiency, accuracy, timeliness, and coverage on an ongoing basis.

**Monogamy:** a matrimonial system characterized by the union of a couple, without the legal possibility of either spouse being able to celebrate a new marriage without a prior divorce or the death of one of the spouses.

**Morbidity:** the frequency of disease in a population.

**Mortality:** the frequency of deaths during a defined period for every 1,000 inhabitants in a population.

**Mortality rate:** *See crude death rate.* 

**Mortality rate by specific age:** a rate used to compare mortality at different ages or at the same age during a given period of time.

Mortality rate by specific cause: a rate used for comparison purposes, expressed normally by the number of deaths per 100,000 inhabitants.

**Mortality table:** used to simulate the probability that a certain number of deaths will occur within that year.

**Mortality under-registration rate:** the gap between the number of estimated deaths, according to the life expectancy charts of the period, and the number of registered deaths in a given year in a country, territory, or geographic area. A death is also considered under-registered when it has not been duly recorded in the civil registry after a year of the occurrence of the death.

**MRP:** See Machine Readable Passport. See also Machine Readable Travel Document.

MRTD: See Machine Readable Travel Document. See also Machine Readable Passport.

**MRZ:** See Machine Readable Zone.

**Multimodal biometric system:** a biometric system in which two or more of the modality components (biometric characteristic, sensor type, or feature extraction algorithm) are used at the same time.

**Municipal regulations:** legal text documents that contain rules on the organization and development of municipal activities, especially those pertaining to public services.

## N

Name: a sign that distinguishes a person and others in his/her legal and social relationships. It is composed of the first name and surname

**Nansen Passport:** a travel and identity document, issued during the first Russian refugee crisis in 1922, whose main purpose was to serve as identification for those seeking asylum in other nations.

**Natality:** in demography, the number of births in a given place and time.

**Natality rate:** a rate that indicates the number of live births for every 1,000 habitants during a given year.

**National:** a person who, either by birth or naturalization, is a member of a political community, owing allegiance to the community and being entitled to enjoy all its civil and political rights and protections; a member of the state, entitled to all its privileges; a person who holds nationality in a given state. *See also nationality, naturalization.* 

**National identity:** human, demographic, cultural, and behavioral features of every nation. They are perpetuated through rites and symbols from the countries.

**National Institute of Standards and Technology (NIST):** a federal agency within the U.S. Department of Commerce that develops and promotes measurement, standards, and technology to enhance productivity and citizen safety, facilitate trade, and improve quality of life.

**Nationality:** a legal bond between an individual and a state. The right to nationality is established at the international level in the *Universal Declaration of Human Rights, 1948*, Art. 15. *See also citizen, citizenship, nationality loss, national.* 

**Nationality loss:** may result from an act of the individual (expatriation, deliberate renunciation of nationality by an individual, or automatic loss of nationality upon acquisition of another nationality) or of the state (denationalization). Art. 15(2) of the *Universal Declaration of Human Rights* states that "No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality." *See also nationality, statelessness*.

**Native:** a juridical or legal condition, determined by birth alone, of a person, pertaining to the country in which he or she was born.

**Natural growth rate:** the natural rate, expressed as a percentage of the base population, at which a population is increasing (or declining) during a given year due to natural increase or net migration. This rate does not include the effects of immigration or emigration.

**Naturalization:** the formal act of granting privileges of citizenship to a foreigner by the state. International law does not provide detailed rules for naturalization, but it recognizes the competence of every state to naturalize those who are not its nationals and who apply to become its nationals. *See also citizen, citizenship, national, nationality.* 

**Naturalize:** to grant the privileges of citizenship by lawful procedures to a foreigner.

**Naturalized citizen:** One who, being born a foreigner, has lawfully become a citizen of the country under the constitution and laws.

**Negative growth of the population:** a net decline in the size of the population.

Neo-natal mortality rate: a vital statistics rate based on the number of infants who die in their first month of life relative to the number of live births during a given period of time, usually a calendar year (i.e., the number of infants dving at ages up to but less than 28 completed days of life per 1,000 live births in a given geographical area during a given year).

Neonate: newborn child.

**Net migration:** the net effect that immigration and emigration have on the population of an area (increase or decline).

**Net migration rate:** the net effect of immigration and emigration on an area's population, expressed as an increase or decrease per 1,000 population of the area in a given year.

**Net reproduction rate (NRR):** the average number of daughters that would be born to a woman (or a group of women) if she passed through her lifetime conforming to the age-specific fertility and mortality rates of a given year.

**Network:** (as in computer networks) is a connection between two or more computers for the purpose of sharing resources.

**Next of kin:** the person or persons most closely related by blood or marriage.

**NIST:** See National Institute of Standards and Technology.

**Node:** a node on a network environment is a link point, a technical center that enables the connection of different networks and that enables users and operators to spread the available information on other centers that may be under use.

**Noise:** unwanted components in a signal that degrade the quality of data or interfere with the desired signals processed by a system. See also signal.

**Nom de guerre:** a pseudonym utilized by a person to conceal his or her identity. See also alias, pseudonym.

Noninstitutional birth: See home birth

**Non-cooperative user:** an individual who is not aware that his or her biometric sample is being collected.

Non-national: See foreigner, third country national.

**Nonrepudiation:** in e-commerce, a code that makes it impossible for the author of an electronic signature to reject a document in which it appears.

**Non-signal:** the non-transmission of a codified message or data.

**Notary:** public official authorized to authenticate, by law, contracts and other extrajudicial acts; a person who can attest to the acts that he or she witnesses

**Notifier:** an individual appointed by the local registrar to act as an intermediary between the local registrar and the informant in providing all information and characteristics of an event that is to be legally registered by the local registrar.

**Normalization:** a statistical technique used to facilitate comparisons among populations and control the effects of the different variables, for instance, age (also known as age adjustment).

**NRR:** See net reproduction rate.

**Número Único de Identidad:** in Latin America, the numerical and/ or alphanumerical code used on an identity document as a tool for controlling, monitoring, and linking individuals.

**Nuptial rate:** the number of marriages for every 1,000 in the total population in a given year.

**Nuptiality:** the frequency, characteristics, and dissolution of marriages in a given period of time and place.

**OCSP:** see On-line Certificate Status Protocol.

O Registro Civil das Personas Naturais: In Brazil, the legal entity that registers births, marriages, deaths, and other acts related to the civil registry.

Obscured data: information that has been distorted by cryptographic or other means to hide it.

Of age: at the age that the law establishes to obtain full legal capacity as a person.

**Old population:** a population with a relatively high proportion of middle age and elderly persons, a high median age, and thus a lower growth potential.

**One-to-many (1:N):** a search methodology used in biometrics to describe a system that compares one reference to many enrolled references to make a decision. The phrase typically refers to the identification or watchlist tasks.

**One-to-one** (1:1): a search methodology in biometrics to describe a system that compares one reference to one enrolled reference to make a decision. The phrase typically refers to the verification task (though not all verification tasks are truly one-to-one), and the identification task can be accomplished by a series of one-to-one comparisons.

**Online Certificate Status Protocol (OCSP):** an online protocol used to determine the status of a public key certificate.

**Online identity:** a computer-based persona created to navigate the Internet.

**Open-set identification:** a biometric task that more closely follows operational biometric system conditions to a) determine if someone is in a database and b) find the record of the individual in the database. *See also watchlist*.

**Operational evaluation:** one of the three types of performance evaluations. The primary goal of an operational evaluation is to determine the workflow impact seen by the addition of a biometric system. *See also technology evaluation, scenario evaluation.* 

**Optical stripe:** a laser-readable memory device with a relatively large storage capacity.

**Optical Variable Devices (OVD):** complex, pixilated images that are created by millions of pulse laser emissions. They are bright and do not interfere with data playback. Simulation is exceptionally difficult.

**Optically variable inks:** iridescent or pearl luster inks that reflect light rays differently in white light, depending on the angle of observation on the surface. They cause interference with the incident light, which creates shiny, pearl-like shimmering effects with changes in color when the angle of view or illumination changes.

**Optimum population:** the ideal number of people that can be supported in a given area (as distinct from overpopulation and under-population).

**Outsource:** to hire and delegate one or more non-critical procedures to a specialized provider in order to achieve greater effectiveness and focus efforts on more critical needs for the fulfillment of a mission.

**Overlapping objects:** objects, such as a signature or a stamp, that are overlapped over other fields, such as the person's photo, to avoid alteration of identity documents.

**Overpopulation:** a condition in which population density exceeds the threshold of environmental resources and therefore cannot satisfy basic needs, such as housing, food, and other variables.

**Overt information gathering:** biometric sample collection where end users know they are being collected from and at what location. *See also covert information gathering.* 

#### Р

**Pair of keys:** in an asymmetric cryptographic system, this comprises a private key and its correspondent public key, associated mathematically.

**Palm print recognition:** a biometric modality that uses the physical structure of an individual's palm print for recognition purposes. *See also fingerprint recognition, hand geometry recognition.* 

**Parental authority:** rights, duties, and responsibilities of parents regarding a person and the goods of the dependent children.

**Parish records:** a series of books compiled by the Church throughout its history, through its parishes, on births, baptisms, confirmations, marriages, and deaths of the faithful. These records set the precedent for civil registration.

**Partial identity:** a subset of one or more attributes that do not necessarily identify a person unequivocally.

**Passport:** a government-issued document identifying a person as a national of the issuing state, which is evidence of the holder's right to return to that state. In Western countries, passports have been used for foreign travel purposes, not as domestic identity documents. The passport is the internationally accepted certificate or proof of nationality. See also identity document, travel documents, MRP, MRTD.

**Password:** a secret code used to identify a user when entering any kind of system that requires authentication.

**Paternity:** the state or quality of being a father; the fact of being the true father of a child whose paternity is attributed to him.

**Patronymic information:** information that refers to the filiation and identity of a person.

**Pecuniary penalty:** an administrative or legal sanction that consists of the obligation to pay a determined amount of money.

**Pelmatoscopy:** the science that studies the friction ridges of the fingers.

**Performance:** a generic phrase for describing a measurement of the characteristics, such as accuracy or speed, of a biometric system or its algorithms.

**Perinatal mortality rate:** the number of fetal deaths after 28 weeks of pregnancy (late fetal deaths), plus the number of deaths to infants under 7 days of age, per 1,000 live births.

**Period analysis:** study of a population over a specified or defined period of time.

**Permanent residence:** the right, granted by a host state to a non-national, to live and work therein on a permanent (unlimited) basis.

**Personal data:** any kind of information related to an identified or identifiable subject.

**Personal data cross-border flow:** the flow of personal data through borders without regard for state jurisdiction.

**Personal Identification Number (PIN):** an alphanumeric code or password used to authenticate an identity and provide access to systems.

**Personal Identity Verification (PIV) card:** a physical artifact (e.g., identity card, "smart" card) issued to an individual that contains stored identity credentials (e.g., photograph, cryptographic keys, digitized fingerprint representation) so that the claimed identity of the cardholder can be verified against the stored credentials by another person (human readable and verifiable) or an automated process (computer readable and verifiable).

**Personally Identifiable Information (PII):** information which can be used to distinguish or trace an individual's identity, such as name, unique identification number, social security number, biometric records, etc., alone or when combined with other personal or identifying information which is linked or linkable to a specific individual (such as date and place of birth, mother's maiden name, etc.).

**PET:** See Privacy Enhancing Technology.

**Phishing:** tricking individuals into disclosing sensitive personal information through deceptive computer-based means.

**Physical person:** an individual from the human species who is recognized by law as subject to rights and obligations, regardless of age, sex, race, or condition. He or she is also called a natural person.

**PII Confidentiality Impact Level:** the level of impact on organizations and individuals should there be a breach of confidentiality involving Personally Identifiable Information. The defined levels are low, moderate, and high.

**PIN:** See Personal Identification Number.

PIV: see Personal Identity Verification Card.

**Pixel:** a unit of measurement, being the smallest element of a digital image or display that can be assigned a color value.

**Pixels per inch (PPI):** a measure of the resolution of a digital image. The higher the PPI, the more information is included in the image, and the larger the file size.

**PKI:** See Public Key Infrastructure.

**Place of birth:** the municipality, province, department, state, and country in which an act or vital event occurred.

Place of habitual residence: See country of habitual/usual residence.

**Polygamy:** a family regime in which a person is able to marry several other people from the opposite sex.

**Population:** 1) A group of objects or organisms of the same species. 2) In biometrics, the set of potential end users for an application.

**Population age and sex structure:** the composition of the population according to the number of males and females in each age bracket. The structure of the population by age and sex is the aggregate result of retrospective tendencies from fecundity, mortality,

and migration. To describe and analyze many of the other classes of demographic data, it is essential to have information on the composition of the population by age and sex.

**Population census:** the process of gathering, compilation, appraisal, analysis, and publication of demographic, economic, and social information of the inhabitants of a geographic area within a specific time frame.

**Population density:** the number of habitants for every unit of geographic area.

**Population distribution:** the settlement or dispersion pattern of a given population.

**Population implosion:** the change in a population's distribution in geographical space due to declining birth rates.

**Population increase:** the net increase of a population resulting after the interaction of births, deaths, and migration, during a specific term.

**Population momentum:** the tendency of a population to continue its growth after reaching its replacement-level fertility. *See also replacement-level fertility.* 

**Population policy:** explicit or implicit measures implemented by a government to influence the size, growth, distribution, or composition of a population.

**Population projection:** an estimation of the future changes in the number of people, subject to certain hypotheses regarding future trends in the fecundity, mortality, and migration rates. Demographers usually posit low, moderate, and high projections for the same populations, based on different hypotheses about the change of these rates in the future.

**Population pyramid:** a horizontal bar chart that shows the distribution of a population by age and sex. The bars represent the number or proportion of men and women in each group. The pyramids show groups by individual or grouped ages.

**Population register**: a government data collection system in which the demographic and socioeconomic characteristics of all or part of the population are continuously recorded. Norway, Denmark, Sweden, and Israel are among the countries that maintain universal registers for demographic purposes, recording vital events (birth, marriage, moves, death) so that up-to-date information on the whole population is readily available. *See also civil registry*.

**Population at risk:** the population that is subject to the occurrence of a vital event, such as the total population in the case of deaths or the legally married population in the case of divorces.

**Practice statement:** a formal statement of the practices followed by an authentication entity (e.g., registration authority, Certification Service Provider, or verifier); typically, the specific steps taken to register and verify identities, issue credentials, and authenticate claimants.

**Pre-consular support services:** services that assist governments and migrants in facilitating visa applications prior to the submission of the application. They may include assistance in completing and filing visa application forms; assistance in compiling supporting documentation for the visa application; verification of legal, educational, and employment-related papers; and translation of documents.

**Premature fetal death:** death that occurs before 20 completed weeks of gestation.

**Prevalence:** the proportion of people with a particular illness within a population in a specific period of time.

**Prevalence rate:** the number of people who suffer from a given illness in a specific term for every 1,000 habitants.

**Prima facie:** (Latin) at first view; evidence that is sufficient to raise a presumption of fact or to establish the fact in question unless rebutted.

**Privacy:** the area of private life to which everyone has a right to protection from any interference. *See also intimacy.* 

**Privacy Enhancing Technology (PET):** a set of computer tools and applications that enable a person to influence the availability of personal information, as well as restrict the level of its exposure to third parties.

**Privacy guidelines:** unanimous general international guidelines set for the collection and management of personal data. They are also known as guidelines for the protection of privacy and cross-border flows of personal data. These acknowledge that personal data should be protected by reasonable security safeguards against such risks as loss or unauthorized access, destruction, use, modification, or disclosure of data.

**Privacy Impact Assessment (PIA):** an analysis of how information is handled, which ensures that handling conforms to applicable legal, regulatory, and policy requirements regarding privacy; determines the risks and effects of collecting, maintaining, and disseminating information in identifiable form in an electronic information system; and examines and evaluates protections and alternative processes for handling information to mitigate potential privacy risks.

**Private key:** the secret part of an asymmetric key pair that is typically used to digitally sign or decrypt data and is maintained in reserve by the holder of the electronic signature.

**Probability sample:** a sample selected from a population by a method based on the theory of probability (random process), that is, a method involving knowledge of the likelihood of any unit being selected.

**Probe:** a biometric sample that is submitted to the biometric system to compare against one or more references in a gallery. *See also gallery.* 

**Profile:** a structured set of characteristics of a person or thing that describe specific properties or qualities in specific contexts.

**Pronatalist:** the policy of a government, society, or social group to increase population growth by attempting to raise the number of births.

**Proof of identity:** the process by which a credential service provider and a registration authority validate sufficient information to attest to the identity of a person. *See also credential service provider.* 

**Proof of Possession Protocol (PoP):** protocol where a claimant proves to a verifier that he or she possesses and controls a token (e.g., a key or password).

**Proportion:** as used in demography, the relationship between a subset of the population and the whole.

**Proportion of births attended by trained personnel:** the number of births attended by qualified personnel during a specific year, regardless of the place of occurrence, expressed as a percentage of the total births for that same year in a given country, territory, or geographical area.

**Proportion of gestating population attended by medical personnel during pregnancy:** the number of pregnant women that have received at least one medical checkup during pregnancy; a trained health worker must provide this medical checkup. It is expressed by the percentage of the population of born alive children for a given year in a given country, territory, or geographic area.

**Protocol:** a set of rules that determine the interactions between computers and applications.

**Protocol run:** an instance of the exchange of messages between a claimant and a verifier in a defined authentication protocol that results in the authentication (or authentication failure) of the claimant.

**Pseudonym:** a fictitious name. See also alias.

**Public key:** the public part of an asymmetric key pair that is typically used to verify signatures or encrypt data. *See also private key, pair of keys.* 

**Public key certificate:** a document that is issued and signed digitally by the private key of a certification authority, which binds the name of a subscriber to a public key. The certificate indicates that the subscriber identified in the certificate has sole control and access to the private key.

**Public Key Infrastructure (PKI):** in cryptography, it refers to a combination of hardware, software, settings, and safety procedures that enable cryptographic operations to be executed safely, such as the coding, digital signature, or non-repudiation of electronic transactions.

**Public writing:** A document prepared by a notary public in the presence of the parties who sign it before witnesses.

**Push-Pull Hypothesis:** migration theory that suggests that circumstances at the place of origin (such as poverty and unemployment) repel or push people out of that place to other places that exert a positive attraction or pull (such as a high standard of living or job opportunities).

**PVC:** (polyvinylchloride) a widely used thermoplastic (transparent) polymer. PVC is used as a substratum in identity or smart cards.

# Q

**Qualitative errors:** errors arising from ignorance or forgetting of the facts, refusal to reply to a question, failure to understand a question, or failure of an interviewer to put the question clearly or to record its answers properly.

**Quality of data:** in the civil registration system or in the vital statistics system, quality of data is measured according to their degree of completeness, correctness (accuracy), timeliness, and availability.

**Quality of a vital event record:** regarding a (report) element of a vital event report, refers to its effectiveness as the preferred legal proof of the fact that the event occurred, and to the accuracy and timeliness of its subsequent compilation for statistical purposes.

#### R

**Radio Frequency Chip:** a chip embedded on modern passports and/or identification cards from many countries, which contains additional security information for the validation of a passport. The chip can be read automatically when held close to a reader. *See also contact microchip, contactless microchip.* 

Radio Frequency Identification (RFID): a remote storage and retrieval system that uses tags or other elements equally capable of sending radio frequencies. The main purpose of the technology is to transmit the identity of a document (similar to a unique serial number) through radio waves.

**Rainbow printing:** ultra-fine lines or patterns that change gradually from one color to another.

**Real ID Act:** a US law aimed at improving security for driver's license and personal identification cards by imposing security, authentication, and issuance procedure standards in order to be accepted for official federal government purposes.

**Receiving country:** the country of destination, or a third country that has agreed to receive a certain number of refugees and migrants on a yearly basis by presidential, ministerial, or parliamentary decision. In the case of a return repatriation, the receiving country is also the country of origin.

**Recipient:** the person or entity that is addressed by the originator to receive the data message or an electronic document, but does not intervene as a mediator

**Recognition:** a generic term used in the description of biometric systems (e.g., face recognition or iris recognition) relating to their fundamental function. The term recognition does not inherently imply verification, closed-set identification, or open-set identification (watchlist).

**Recognition of extramarital children:** a juridical act through which a father or mother declares their paternity or maternity over a child born out of wedlock. This is an irrevocable act and cannot be subsumed under any modality that alters its legal consequences, or requires the acceptance of the child. The father or the mother may do this, together or separately, through a statement to the civil registry. This might be at the moment of the inscription of the birth or later, through public or private instruments and sometimes by will.

**Recognize:** 1) To observe with attention the identity or quality of a person or thing. 2) To admit something as one's own, be it an act, a document, or a manifestation. 3) To confess natural or legitimate paternity.

**Recognized certificate:** an electronic document issued by a certification service provider that complies with the requirements established by law regarding identity verification, offers reliability, and guarantees the services provided.

**Recognized electronic signature:** an electronic signature is considered as recognized when it is based on a recognized certificate and generated by means of a secure signature creation device.

**Record:** a template or compilation of the known facts regarding someone or something.

**Record linkage:** a process, usually computer-based, that brings together information from two or more data files into a new combined file containing selected information about individuals or events.

**Record reposition:** the process by which a person obtains a birth, marriage, and/or death certificate previously registered that has been lost or damaged partially or totally.

**Recount:** the gross account of population or demographic events that serves as the basis for other analyses and statistical studies.

**Reference:** the biometric data stored for an individual for use in future recognition. A reference can be one or more templates, models, or raw images. *See also biometric template*, *template*.

**Reference period error:** a type of false or mistaken result obtained in a survey or census which is due to the failure of the respondent to place past events in the proper time period.

**Reference term error:** a type of erroneous data obtained by means of a survey or census in which an event cannot be placed within a proper time frame.

**Refugee:** a person who, "owing to well-founded fear of persecution for reasons of race, religion, nationality, membership in a particu-

lar social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, unwilling to avail himself of the protection of that country" (*Convention Relating to the Status of Refugees, 1951, Art. 1A(2), as modified by the 1967 Protocol). See also de facto refugees.* 

**Registraduría Nacional del Estado Civil de la República de Co-lombia:** in English, National Register of the Civil Status of the Republic of Colombia, the entity responsible for the inscription and registration of all vital events. It also allocates the Unique National Identification Number (NUIP) at the moment of birth registration. The institution also issues the Colombian national identification document and the voter rolls.

**Registrar General's Department of Jamaica (RGD):** the institution responsible for recording and registering the vital events of births, deaths, adoptions, and marriages in Jamaica and emitting the corresponding certificates.

**Registration:** an act by which the administration notes, in any manner established by law, facts or acts whose occurrence must be recorded authentically for third parties.

**Registration authority:** a trusted entity that establishes and vouches for the identity of a subscriber to a credential service provider (CSP). The registration authority may be an integral part of a CSP, or it may be independent of a CSP. *See also credential service provider*.

**Registration record:** a loose page, book, or electronic file, or any other official document for the recording of every type of vital act, according to the preset procedures for each.

Registro de Identificación Nacional de Bolivia (RIN): in English, Registration for National Identification of Bolivia, which is a public decentralized entity with management autonomy but by hierarchy under the Ministry of Justice and Human Rights of Bolivia. RIN's

purpose is to manage a personal identification system and to issue a secure, unique, and reliable identification document.

**Registro Nacional de Identificación y Estado Civil de Perú** (**RENIEC**): in English, National Registry of Identification and Civil Status of Peru, a specialized autonomous organization responsible for the registration of all civil acts and events: births, marriages, deaths, divorces, and others that modify a person's civil status. RENIEC emits the national identification document (DNI).

Registro Nacional de las Personas de Argentina (RENAPER): in English, National Registry of Persons of Argentina, the federal agency responsible for the civil identification of all citizens and residents in Argentina. This agency also issues the national identification document (DNI) and all of the reports, certificates, or statements as established by law. RENAPER is an autonomous and decentralized institution within the Ministry of Interior through the Secretariat of Interior.

Registro Nacional de las Personas de Guatemala (RENAP): in English, National Registry of Persons of Guatemala, the independent entity in charge of maintaining the civil and identification registries of all natural persons, recording the acts and events related to their civil status, civil capacity, and other identifying information from birth until death, and emitting the corresponding certificates. It also issues the personal identification document (DPI).

Registro Nacional de las Personas de Honduras (RNP): in English, the National Registry of Persons of Honduras, an independent entity that plans, organizes, and manages the system comprising the civil registry and the identification system in Honduras, and emits the corresponding certificates as well as identification card. RNP also provides information to the Supreme Election Tribunal in order to periodically update the voter rolls.

Registro Nacional de las Personas Naturales de El Salvador (RNPN): in English, National Registry of Natural Persons of El Sal-

vador, a public entity with technical and administrative autonomy. The RNPN is in charge of maintaining and updating all the information on the civil registration and status of Salvadorans and emitting the corresponding certificates. The institution is also in charge of emitting the national identity document and providing information to the Supreme Electoral Tribunal to update the voter rolls.

**Regular migration:** migration that occurs through recognized, legal channels. *See also irregular migration*.

**Regulations:** rules that mainly state the material legislative functions of public administration.

**Re-inscription:** the process by which a record is registered more than once

**Relative lack of documentation:** this occurs when an individual possesses a birth certificate but does not possess an identification document.

**Religious wedding:** the union of a man and a woman, celebrated according to religious practices.

**RENAP:** See Registro Nacional de las Personas de Guatemala.

**RENAPER:** See Registro Nacional de Personas de Argentina.

**RENAPO:** See Dirección General del Registro Nacional de Población e Identificación Personal de México.

**RENIEC:** See Registro Nacional de Identificación y el Estado Civil de Perú.

**Repatriation:** the personal right of a refugee or a prisoner of war to return to his or her country of national origin under specific conditions laid down in various international instruments (*Geneva Conventions*, 1949 and Protocols, 1977; Regulations Respecting the

Laws and Customs of War on Land, Annexed to the Fourth Hague Convention, 1907; human rights instruments, as well as in customary international law). The option of repatriation is bestowed upon the individual personally and not upon the detaining power. Repatriation also entails the obligation of the detaining power to release eligible persons (soldiers and civilians) and the duty of the country of origin to receive its own nationals. Repatriation as a term also applies to diplomatic envoys and international officials in situations of international crisis. See also assisted voluntary return, involuntary repatriation, return, voluntary return.

**Replacement-level fertility:** the level of fertility at which a cohort of women has, on average, enough female children to replace themselves in the population. By definition, the replacement level is equal to a net reproduction rate of one.

**Reproduction period:** for a woman, the age at which she is still capable of procreating, which many countries have bracketed between the ages of 15 and 49 for statistical purposes.

**Resettlement:** the relocation and integration of people (refugees, internally displaced persons, etc.) into another geographic area and environment, usually in a third country. This term generally covers that part of the process that starts with the selection of the refugees for resettlement and ends with the placement of refugees in a community in the resettlement country.

**Residence:** a place where one is physically present for a given period of time. This contrasts with domicile, which is the place that one intends to make his or her permanent home. A person can have more than one residence but only one domicile. See also domicile, country of habitual residence.

**Residence permit:** a legal document issued by a state to a foreigner, confirming that the foreigner has the right to live in the country. *See also residence, green card.* 

**Resolution:** the number of pixels per unit distance in an image, which describes its sharpness and clarity. *See also pixel, pixels per inch.* 

**Retina scanner:** a device that measures the pattern of veins in the posterior portion of the eye, which is obtained by projecting infrared light through the pupil.

**Return:** refers broadly to the act or process of going back. This could occur within the territorial boundaries of a country, as in the case of returning IDPs and demobilized combatants, or from a host country (either transit or destination) to the country of origin, as in the case of refugees, asylum seekers, and qualified nationals. There are subcategories of return that can describe the way the return is implemented—e.g., voluntary, forced, assisted, or spontaneous return—as well as subcategories that describe who is participating in the return, e.g., repatriation (for refugees).

**Return migration:** the movement of persons returning to their country of origin or habitual residence, usually after spending at least one year in another country. This return may or may not be voluntary. Return migration includes voluntary repatriation.

**RFID:** See Radio Frequency Identification.

**RGD:** See Registrar General's Department of Jamaica.

**Ridge ending:** a minutia point at the ending of a friction ridge. *See also bifurcation, friction ridge.* 

**Right to confidentiality:** the right of persons to the privacy of their data, circumstances, documents, and procedures and responses, except with their express consent or when, in cases mandated by law, the authorities must be notified. *See also right to privacy*.

**Right to identity:** a human right that covers several distinctive aspects, including the right to a name and nationality, and to the

possibility of identification through an identity document. See also human rights, legal identity.

**Right to privacy:** 1) The right to personal autonomy. 2) The right of a person and the person's property to be free from unwarranted public scrutiny or exposure.

RIN: See Registro de Identificación Nacional de Bolivia.

**RNP:** See Registro Nacional de las Personas de Honduras.

**RNPN:** See Registro Nacional de las Personas Naturales de El Salvador.

**Rol Único Nacional de Chile (RUN):** a unique and unrepeatable number that every Chilean possesses, whether or not he or she resides in Chile, as well as all foreigners residing in Chile, whether temporarily or permanently, with a visa other than a tourist visa.

**Rolled fingerprints:** an image that includes fingerprint data from nail to nail, obtained by "rolling" the finger across a sensor.

**Rubricate:** to sign with a mark instead of a name.

RUN: See Rol Único Nacional de Chile.

**Rural percentage:** the proportion of a population that resides in rural areas.

**Rural zone:** a populated area that does not encompass urban or semi-urban areas.

**Rural-urban migrants:** internal migrants who move from rural to urban areas. *See also internal migration*.

S

**Safeguards to privacy protection:** a set of security measures utilized for the protection of personal data against risks such as loss, unauthorized access, destruction, modification, or disclosure.

**Sample:** a representative part of a population that reflects the characteristics of the whole population.

**Sampling:** the process of selecting a representative number of cases from all the cases in a particular group or population for the purpose of drawing inferences about the entire group or population.

**Sampling error:** a type of false or mistaken result obtained in a survey or experiment which is due to chance (random error), when the result from the sample differs from the result that would have been obtained if the entire population were studied.

**Sampling frame:** a collection of units (persons, households, institutions, events, etc.) from which a sample may be drawn. *See also population*.

**Scan:** to move a finely focused beam of light or electrons over a surface in a systematic pattern in order to reproduce or sense and subsequently transmit a digital image. A light reader scans the image point-by-point and line-by-line. The reflection of each point of the image is detected by a photoelectric cell and the measured value is stored in the memory of a computer, then subsequently converted to a digital image.

**Scanned signature:** the image of a handwritten signature.

**Scenario evaluation:** one of the three types of performance evaluations. The primary goal of a scenario evaluation is to measure the performance of a biometric system operating in a specific application. *See also technology evaluation, operational evaluation.* 

**Seafarer:** a migrant worker employed on board a vessel registered in a state of which he or she is not a national (includes fishermen) (Art. 2(2)(c), International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, 1990). See also migrant worker.

Secure Hash Standard: this standard specifies four secure hash algorithms (SHA-1, SHA-256, SHA-384, and SHA-512) for computing a condensed representation of electronic data (message). Secure Hash Algorithms are typically used with other cryptographic algorithms, such as digital signature algorithms and keyed-hash message authentication codes, or in the generation of random numbers (bits). See also digital signature, cryptography, hash function, message digest.

Secure Signature Creation Device (SSCD): a smart card that meets the requirements issued by a European board of digital signatures.

**Seed document**: See breeder document.

**Segmentation:** the process of parsing the biometric signal of interest from the entire acquired data system.

Sensor: hardware found on a biometric device that converts biometric input into a digital signal and conveys this information to the processing device.

Sensor aging: gradual degradation in performance of a sensor over time.

Servicio de Registro Civil e Identificación de Chile (SRCeI): in English, Service of Civil Registry and Identification of Chile, a dependency of the Ministry of Justice in charge of the registration, certification, and verification of the acts and events related to civil status and identity, as well as other registries as determined by law (driver's licenses, properties, etc.). SRCeI emits relevant certificates and the national identity card.

Servicio Nacional de Registro Civil de Bolivia: in English, National Civil Registry Service of Bolivia, the entity in charge of registering events pertaining to the civil status of persons, including births, marriages, and deaths, and emitting the corresponding certificates. Institutionally it is located within the National Electoral Court (CNE).

**SHA:** Secure Hash Algorithm. *See Secure Hash Standard*.

**Shadow image:** a reduced density copy of a person's photo—electronically generated—that is printed during personalization as background behind the text information. This process makes it difficult to alter the person's data without destroying the image.

**Signal:** 1) In information theory, a signal is a codified message, i.e., the sequence of states in a communication channel that encodes a message; 2) In signal processing, signals are analog and digital representations of analog physical quantities; arbitrary data streams are not considered signals.

**Signatory:** an entity that generates a digital signature on data using a private key.

**Signature dynamics:** a behavioral biometric modality that analyzes dynamic characteristics of an individual's signature for recognition, such as shape of signature, speed of signing, pen pressure when signing, and pen-in-air movements.

**Signature generation:** the process of using a digital signature algorithm and a private key to generate a digital signature on data.

**Signature validation:** mathematical verification of a digital signature and obtaining of the appropriate assurances.

**Signature verification:** the process of using a digital signature algorithm and a public key to verify a digital signature on data.

**Signed data:** the data or message upon which a digital signature has been computed.

**Similarity score:** a value returned by a biometric algorithm that indicates the degree of similarity or correlation between a biometric sample and a reference. *See also difference score*, *hamming distance*.

**Simultaneous births:** successive or multiple births that take place on the same day. *See also double or multiple births*.

**Single father family:** a family in which the children are supported entirely by the father, as a result of a being born out of marriage, divorce, separation, or death of the spouse.

**Single mother family:** a family in which the children are supported entirely by the mother, as a result of being born out of marriage, divorce, separation, or death of the spouse.

**Skimming:** the act of obtaining data from an unknowing end user who is not willingly submitting the information at that time. *See also eavesdropping and phishing*.

**Slap fingerprint:** fingerprints taken by simultaneously pressing the four fingers of one hand onto a scanner or a fingerprint card. Slaps are known as four finger simultaneous plain impressions.

**Smart card:** a card that generally has a chip that is capable of storing, processing, and encrypting data.

**Social identity:** conceived as the identity that is derived from the sense of belonging to a given group.

**Sovereignty:** a concept of international law that has three major aspects: external, internal, and territorial. The external aspect of sovereignty is the right of the state to determine its relations with other states or other entities without the restraint or control of another state. This aspect of sovereignty is also known as indepen-

dence. The internal aspect of sovereignty is the state's exclusive right or competence to determine the character of its own institutions, to enact laws of its own choice, and to ensure their respect. The territorial aspect of sovereignty is the exclusive authority that a state exercises over all persons and things found within its territory, including below the ground and in its airspace.

**Speaker recognition:** a biometric modality that uses an individual's speech, a feature influenced by both the physical structure of an individual's vocal tract and the behavioral characteristics of the individual, for recognition purposes (sometimes referred to as voice recognition).

**Spontaneous abortion:** the loss of the fetus during pregnancy due to natural causes.

**Spoofing:** the ability to fool a biometric sensor into recognizing an illegitimate user as a legitimate user (verification) or into missing an identification of someone that is in the database. *See also liveness detection, mimic, phishing.* 

**Spouse:** one of two people joined by marriage.

**Spying:** obtaining information from a user without his or her knowledge.

**SRCel:** See Servicio de Registro Civil e Identificación de Chile.

**SSCD:** See Secure Signature Creation Device.

**Stable population:** a population whose growth rate and age composition do not change because the natality and mortality rates by age remain constant over a prolonged period of time.

**State:** a political entity that has legal jurisdiction and effective control over a defined territory and the authority to make collective decisions for a permanent population, a monopoly on the legiti-

mate use of force, and an internationally recognized government that interacts, or has the capacity to interact, in formal relations with other entities. The criteria of statehood for purposes of international law are commonly held to be possession of a permanent population, a defined territory, a government structure, and the capacity to enter into international relations with other states (Art.1, *Montevideo Convention on the Rights and Duties of States, 1933*).

**Stateless person:** a person who is not considered a national by any state under its law (Art. 1, *UN Convention Relating to the Status of Stateless Persons, 1954*). As such, a stateless person lacks those rights attributable to nationality, such as diplomatic protection, the inherent right of sojourn in the state of residence, and the right of return in case she or he travels. *See also de facto statelessness*.

**Statelessness:** the condition of having had one's citizenship revoked without acquiring citizenship in another country.

**Stationary population:** a steady population with a growth rate that equals zero (because the natality rate is equal to the mortality rate) and a composition that does not change by age.

**Statistical reporting of vital event data:** transmission of statistical reports on vital events that are legally recorded to the agency responsible for compilation of statistics on these events.

**Submission:** process whereby an end user provides a biometric sample to a biometric system. *See also capture*.

**Surname:** the family name added to the given name of a person. *See also given name*.

**Survey:** a canvass of selected persons or households in a population, usually used to infer demographic characteristics or trends for a larger segment or all of the population.

**Survival probability:** the proportion of people from a specific group (by age, sex, health status, etc.) that were alive at the beginning of an interval (for instance, a period of five years) and that survive at the end of that interval.

**Symmetric key:** classic encryption algorithms in which a message is encrypted using a certain key without which the original message cannot be decrypted.

**System evaluation:** the appraisal of the value, worth, and importance of the operational elements of a civil registration or a vital statistics system.

**System of records:** a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

T

TAR: See True Accept Rate.

**Tarjeta de Identidad:** one of the terms used in Latin America for the identification document. It is used as the authentic and sufficient identification card for Honduran citizens. This document is issued exclusively by the National Registry of Persons and constitutes the personal identification document that is obligatory for the exercise of political, academic, civil, financial, administrative, judicial, and legal procedures for which proof of identity is mandatory.

**TE**: See Tribunal Electoral de Panama.

**Technical cooperation:** the sharing of information and expertise on a given subject, usually focused on public sector functions (e.g., development of legislation and procedures, assistance with the

design and implementation of infrastructure, or technological enhancement). See also capacity building.

**Technology evaluation:** one of the three types of performance evaluations. The primary goal of a technology evaluation is to measure performance of biometric systems, typically only the recognition algorithm component for general tasks. *See also operational evaluation, scenario evaluation.* 

**Telematic means:** a set of goods and technical computer elements united with the telecommunications that enable the generation, processing, transmission, and communication of files, data, and information. *See also telematics*.

**Telematics:** the blending of computers and wireless telecommunications technologies. It covers a broad scientific and technological area, which encompasses the study, design, management, and application of networks and communication services for the transmission, storage, and processing of any type of information (data, voice, video, etc.), including the analysis and design of computer technologies and systems. For this reason, telematic systems for the most part form or compose information systems.

**Template:** a digital representation of an individual's distinct characteristics, representing information extracted from a biometric sample. Templates are used during biometric authentication as the basis for comparison.

**Temporary residence:** the right given by a state to a foreigner to live and work within the geographic territory for a defined period of time.

**Term:** in a legal context, the appointed period of time granted to comply with a given act. It is legal if appointed by law, judicial if appointed by a court, and conventional when appointed freely by the parties.

**Third-country national:** generally, an employee of a multinational company or institution who works in a foreign country and does not have the citizenship of the parent company's home country or of the country of employment. *See also foreigner, non-national.* 

**Threat:** in computer systems, an intentional or unintentional potential event that could compromise the security and integrity of the system. *See also vulnerability*.

**Threshold:** in biometrics, a user setting for biometric systems operating in the verification or open-set identification (watchlist) tasks. The acceptance or rejection of biometric data is dependent on the match score falling above or below the threshold. The threshold is adjustable so that the biometric system can be more or less strict, depending on the requirements of any given biometric application. *See also comparison, match, matching.* 

**Throughput rate:** the number of successful biometric transactions that a biometric system processes within a stated time interval.

**Timeliness in register-based vital statistics:** implies that for every vital event registered within the interval specified by legislation, a statistical report form has been forwarded to the agency responsible for the compilation of vital statistics within the established time schedule of the vital statistics program, and that the production, publication, and dissemination of the vital statistics are prompt enough to serve the users' needs.

**Timeliness in registration:** an element of a vital event report that is determined by the difference between the date of the event and the date of its registration when compared to the interval specified by legislation.

**Token:** a physical object that verifies and/or authenticates its user to access a service or information (e.g., a smart card).

**Total fertility rate:** the number of live births for every group of 1,000 women between the ages of 15 and 49 during a given year.

**Total migration/net migration:** the sum of the entries or arrivals of immigrants, and of exits or departures of emigrants, yields the total volume of migration, and is termed *total migration*. This is distinct from *net migration*, or the migration balance, resulting from the difference between arrivals and departures.

**Total number of born children:** number of children born during various ages of the mother, which provides a fertility measure of the population (useful only if the age of the mothers is specified). This indicator is called final fertility rate when estimating for women over 49 and shows how many children were born in a given cohort. *See also final fertility rate*.

**Total population:** within a census, all of the people who have been counted by the census. In its widest sense, it can contain all of the people in the country at the time of the census or the usual residents. The total residents refer usually to the *de jure* population, and the total population who are present is known as the *de facto* population. *See also de jure population*.

**Transcript:** a handwritten or typed copy of a registration.

**Transit:** a stopover of passage, of varying length, while travelling between two or more countries, either incidental to continuous transportation, or for the purposes of changing planes or joining an ongoing flight or other mode of transport.

**Transit visa:** a visa, usually valid for three days or less, for passing through the country issuing the visa en route to a third country destination. *See also visa*.

**Travel documents:** a generic term used to encompass all documents that are acceptable proof of identity for the purpose of entering another country. Passports and visas are the most widely

used forms of travel documents. Some states also accept certain identity cards or other documents. See also certificate of identity, passport, MRP, MRTD, visa.

**Treaty:** an international agreement concluded between states in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation (Art. 2.1(a), *Vienna Convention on the Law of Treaties*, 1969).

**Tribunal Electoral de Panama (TE):** in English, Electoral Tribunal of Panama, which—through its civil registry section—is in charge of registering the births, deaths, naturalizations, marriages, and other vital and juridical events related to the civil status of people. This office also emits the corresponding certificates and the personal identity document (CIP) through the National Identification Directorate.

Tribunal Supremo de Elecciones de Costa Rica (TSE): in English, Supreme Electoral Tribunal of Costa Rica, which manages the Central Registry of Civil Status in charge of the inscriptions of vital events and cancellations or modifications that apply to the records. It issues proofs and certifications about these events. It also resolves applications to acquire, suspend, or recover Costa Rican citizenship. It issues the national identity document, and maintains the voter rolls, and is in charge of resolving matters related to acquiring, recuperating, or modifying the citizenship status.

TRR: See True Reject Rate.

**True Accept Rate (TAR):** a statistic used to measure biometric performance when operating in the verification task. The percentage of times a system correctly verifies a true claim of identity.

**True Reject Rate (TRR):** a statistic used to measure biometric performance when operating in the verification task. The percentage of times a system correctly rejects a false claim of identity.

**Trust anchor**: in cryptography, a trusted or authoritative entity, holder of a public key and associated data, usually at the top of the trust chain. *See also certification authority*.

**Trusted traveler:** a preapproved low risk traveler who has undergone biometric background checks and enrolled in programs that facilitate border crossings through dedicated lanes and kiosks.

**TSE:** See Tribunal Supremo de Elecciones de Costa Rica.

**Type I error:** an error that occurs in a statistical test when a true claim is (incorrectly) rejected. *See also False Reject Rate (FRR)*.

**Type II error:** an error that occurs in a statistical test when a false claim is (incorrectly) not rejected. *See also False Accept Rate (FAR)*.

**Typification:** a statistical technique used to facilitate the comparison of populations and control their effects over different components (e.g., age).

## U

**Uncooperative user:** an individual who actively tries to deny the capture of his or her biometric data (e.g., a detainee mutilates his or her finger upon capture to prevent fingerprint recognition). *See also cooperative user, indifferent user, non-cooperative user.* 

**Underage person:** an individual who has not yet legally reached adulthood. In many occidental countries, a person comes of age when he or she turns 18.

**Underlying cause of death:** the disease or injury that initiated the chain of morbid events leading directly to death or the circumstances of the accident or violence that produced the fatal injury.

**Under-registration:** absence of the record of a vital event.

**Under-registration of birth:** the difference between estimated births, according to the expected birth rate charts for a period, and the number of births that were actually recorded, expressed as a percentage of the estimated births for a given year in a given territory or geographical area. It is also defined as the lack of a record of a vital event, even if it were to be a late record. A vital event is considered under-registered if the event has not been recorded in the civil registry.

**Undocumented foreigner:** a migrant who enters or stays in a country without the appropriate documentation. This includes, among others, (a) one who has no legal documentation to enter a country but manages to enter clandestinely, (b) one who enters using fraudulent documentation, (c) one who, after entering using legal documentation, has stayed beyond the time authorized or otherwise violated the terms of entry and remained without authorization. *See also illegal foreigner*.

**Unique Identity Number:** in El Salvador, Número Único de Identidad (NUI), a unique number used to identify all of the people upon their inscription in the civil registration system.

**Unlinkability:** ensures that a user may make multiple uses of resources or services without others being able to link these uses together.

**Urban percentage:** the proportion of a population that resides in an urban area, expressed as a percentage of the whole population.

**Urban zone:** definitions of urban zones vary from country to country; typically, a zone is considered urban when it has a population of 2,000 or more inhabitants.

**Urbanization:** the increase in the proportion of people residing in urban areas.

**Urban-rural migrants:** internal migrants who move from urban to rural areas either for new settlement purposes or as return migrants, for those who have been rural-urban migrants. *See also internal migration*.

**U.S. passport card:** a travel document that can be used to enter the United States from Canada, Mexico, the Caribbean, and Bermuda at land border crossings or sea ports-of-entry. It cannot be used for other international air travel.

**User:** a person, such as an administrator, who interacts with or controls end users' interactions with a biometric system. *See also cooperative user, end user, indifferent user, non-cooperative user, uncooperative user.* 

**User name:** the name of the account by which a person has access to a system, often used with a password.

## V

**Validation:** verification that something is correct or conforms to a certain standard. In data collection or data entry, it is the process of ensuring that the data that are entered fall within the accepted boundaries of the application.

**Validity of a document:** the time span in which a document can be considered valid

**Variable laser image:** a laser-engraved image with tilting effect incorporated in plastic cards. These images are engraved at different angles through an array of cylindrical lenses embossed into the surface of the card, and are distinct, depending on the angle of view.

**Verification:** a task where the biometric system attempts to confirm an individual's claimed identity by comparing a submitted sample to one or more previously enrolled templates.

**Verification rate:** a statistic used to measure biometric performance when operating in the verification task. This is the rate at which legitimate end users are correctly verified.

**Verified name:** a subscriber name that has been verified by identity proofing.

**Verifier:** an entity that verifies the claimant's identity by verifying the claimant's possession of a token using an authentication protocol. To do this, the verifier may also need to validate credentials that link the token and identity and check their status.

**Verifying digit:** *See control code.* 

**Verifying entity:** the entity that verifies the authenticity of a digital signature using the public key.

**Victim of human trafficking:** an individual who is a victim of the crime of trafficking in persons. *See also human trafficker*.

Virtual Private Network: See VPN.

**VIS:** See European Visa Information System.

**Visa:** authorization to enter, leave, remain in, or transit through a country, issued by consular authorities of the country to be visited.

**Visual Inspection Zone (VIZ):** part of an MRTD containing the document designation, and the holder's facial image, personal data, and data concerning issuance and validity.

**Vital event:** the occurrence of a live birth, death, fetal death, marriage, divorce, adoption, legitimation, recognition of parenthood, annulment of marriage, or legal separation.

**Vital event record:** a legal document entered in the civil register that attests to the occurrence and characteristics of a vital event. See also vital event.

Vital statistical record: a document or record containing those items of information concerning an individual vital event that meet the needs for vital statistics compilation.

**Vital statistics system:** the total process of (a) collecting information by civil registration or enumeration on the frequency of occurrence of specified and defined vital events, as well as the relevant characteristics of the events themselves and of the person(s) concerned, and (b) compiling, processing, analyzing, evaluating, presenting, and disseminating these data in statistical form. See also vital event.

**Voice recognition:** *See speaker recognition.* 

**Voluntary repatriation:** return of persons to their country of origin on the basis of freely expressed willingness to so return. See also assisted voluntary return, involuntary repatriation, repatriation, return.

**Voluntary return:** the assisted or independent return to the country of origin or transit, or to a third country, based on the free will of the returnee. See also assisted voluntary return, forced return, involuntary repatriation, return, repatriation, voluntary repatriation.

Voter identification card: an identity document that legally enables a person to vote.

**Voter purge:** the act of disqualifying a person whose name appears on a voter registration list from voting.

**Voter purge list:** a list of people who have been removed from the voter registration list by the corresponding authorities.

**Voter registration list:** files, available to the public, that contain voter name, residence address, mailing address if different, race, gender, registration date, and last voting date, and that enable a person to vote.

**Voter roll:** *See voter registration list.* 

**Voting registration:** the list of people lawfully registered to cast vote. *See also voter registration list*.

**VPN:** acronym for Virtual Private Network, which is a restrained access site that employs part of the resources of a public network.

**Vulnerability:** the risk of the function of a biometric system being compromised by intent (fraudulent activity), design flaw (including usage error), accident, hardware failure, or external environmental condition. *See also threat*.

# W

**Watchlist:** a term sometimes referred to as open-set identification that describes one of the three tasks performed by biometric systems. Answers the questions: Is this person in the database? If so, who are they? The biometric system determines if the individual's biometric template matches a biometric template of someone on the watchlist. The individual does not make an identity claim, and in some cases does not personally interact with the system at all. *See also closed-set identification, identification, open-set identification, verification, biometric system.* 

Wavelet Scalar Quantization (WSQ): an FBI-specified compression standard algorithm that is used for the exchange of fingerprints

within the criminal justice community. It is used to reduce the data size of images.

**Web application:** a computer program that is executed on an Internet server and that can be managed through a browser.

**Weight at birth:** the weight determined immediately after a child's birth, regardless of whether he or she was born alive.

Western Hemisphere Travel Initiative (WHTI): requires that all travelers from areas within the Western Hemisphere present a passport or other secure WHTI compliant document that denotes identity and citizenship, when entering the United States.

**Whorl:** a fingerprint pattern in which the ridges are circular or nearly circular. The pattern will contain two or more deltas. *See also arch, delta point, loop, minutia(e) point.* 

**WHTI:** See Western Hemisphere Travel Initiative.

**Witness:** 1) One who has personal knowledge of certain events or facts by direct experience. This person, in the legal context, is considered qualified to present this knowledge in a court of law. 2) To observe some event or action. In the legal context, the event is the execution of a written instrument, such as an agreement or contract.

**Witness known to the notary:** a witness whom a notary can identify and who can testify on the identity of the claimant.

**Women to children rate:** the number of children younger than five years old for every 1,000 women of reproductive age during a given year.

**WSQ:** See Wavelet Scalar Quantization.



**Xenophobia:** attitudes, prejudices, and behaviors that reject, exclude, and often vilify persons, things, or institutions, based on the perception that they are outsiders or foreigners to the community, society, or national identity.

**Xenophobic:** fearful of what is foreign and especially of people of foreign origin.



Yearly registered deaths attended by a physician proportion: the number of death certificates for deaths due to natural causes (excluding those due to an external cause), issued during a given period and signed by an authorized physician, expressed as the percentage of deaths registered due to natural causes for the same year, in a given country, territory, or geographic area.

**Young population:** a population with a relatively high proportion of children, adolescents, and young adults, a low median age, and thus a high growth potential.

Z

**Zero population growth:** in demographics, this occurs when a population is in balance (i.e., when births and immigration equal deaths and emigration).

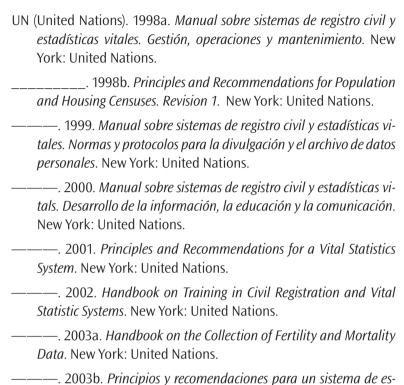
## **BIBLIOGRAPHY**

- Amor, Daniel. 2000. *La (R)evolución E-business*. Buenos Aires, Argentina: Pearson Educación.
- Banco de España. 2004. Glosario de términos: Billetes y monedas. Banco de España, Spain. Available at: http://www.bde.es/bille-mone/glosario/glosario.htm#k.
- Bank for International Settlements. 2003. A Glossary of Terms Used in Payments and Settlement Systems. Committee on Payment and Settlement Systems, Bank for International Settlements. Available at: http://www.bis.org/publ/cpss00b.pdf.
- Barker, Elaine. 2008. Recommendation for Digital Signature Timeliness. National Institute of Standards and Technology, NIST Special Publication 800-102. Available at: http://csrc.nist.gov/publications/drafts/800-102/Draft\_SP800-102.pdf.
- Bayardo, Rubens, Mónica Lacarrieu, et al. 1997. Globalización e identidad cultural. Buenos Aires, Argentina: Ciccus.
- Burr, William E., Donna F. Dodson, and W. Timothy Polk. 2006. Electronic Authentication Guideline. National Institute of Standards and Technology, NIST Special Publication 800-63. Available at: http://csrc.nist.gov/publications/nistpubs/800-63/SP800-63V1 0 2.pdf.
- Cabanellas, Guillermo. 2000. *Diccionario enciclopédico de derecho usual*, Tomo VII, 21a edición, Buenos Aires, Argentina: Heliasta.
- Cantero Martínez, Josefa and Punzón Moraleda Jesús. 2005. *Administraciones públicas y nuevas tecnologías*. Valladolid: Lex Nova.
- Caplan, Jane and John Torpey. 2001. *Documenting Individual Identity: The Development of State Practices*. New Jersey: Princeton University Press.
- Caridad Sebastián, Mercedes. 2001. *Teletrabajo y comercio electróni-co en la sociedad de la información*. Madrid: Centro de Estudios Ramón Areces.

- Centro de la Mujer Peruana. 2005. *Glosario de derechos humanos, género, políticas públicas y salud sexual y reproductiva*. Centro de la Mujer Peruana, Lima, Peru.
- Chen, Yan and Xin Li. 2006. Group Identity and Social Preferences. *American Economic Review* 99(1): 431–57. Available at: http://www.aeaweb.org/articles.php?doi=10.1257/aer.99.1.431.
- Daniels, John, et al. 2007. *Negocios internacionales: ambientes y operaciones*. Tenth edition. Mexico: Pearson Education.
- Esquivel, Edwin Chaves. Centro Centroamericano de Población. Capacitación a distancia. Curso Análisis Demográfico. Universidad de Costa Rica. Available at: http://ccp.ucr.ac.cr/cursos/demografia\_03/glosario.html.
- European Commission, Eurostat. 2000. Eurostat Glossary on Demographic Statistics. Luxembourg.
- European Commission. IDABC. Glossary. Available at: http://ec.europa.eu/idabc/en/chapter/6001.
- Gálvez Miranda, Galo. 2002. Aspectos procesales de la Ley sobre Documentos Electrónicos, Firma Electrónica y los Servicios de Certificación de Dicha Firma (Ley 19.799).
- García Más, Francisco Javier. 2004. Comercio y firma electrónicos: análisis jurídico de los servicios de la sociedad de la información. Second edition. Valladolid: Lex Nova.
- Garner, Bryan. 2009. Black's Law Dictionary, 9th Edition.
- ICAO (International Civil Aviation Organization). 2007. *Regulations* and *Procedures for the International Registry*. Second Edition. International Civil Aviation Organization.
- IDManagement.gov. Available at: http://www.idmanagement.gov/drilldown.cfm?action=icam.
- ISO (International Organization for Standardization). 2004. *Standardization and Related Activities: General Vocabulary, ISO/IEC Guide*. ISO. Switzerland.
- Lathi, B. P. 1998. *Signal Processing and Linear Systems*. Carmichael, CA: Berkeley-Cambridge Press.

- Ley 19.799: Ley sobre documentos electrónicos, firma electrónica y los servicios de certificación de dicha firma. 2002. Chile.
- Ley 27269: Ley de firmas y certificados digitales. 2000. Peru.
- Macció, Guillermo A. 1985. *Diccionario demográfico multilingue*. Spanish version, 2nd edition. Liège, Belgium: Ordina Editions.
- MacGregor, William, William Dutcher, and Jamil Khan. 2006. An Ontology of Identity Credentials. NIST Special Publication, 800-103. Draft. NIST, Gaithersburg, MD. Available at: http://csrc.nist.gov/publications/drafts/sp800-103-draft.pdf.
- Maldonado, Cruz Pedro. 2006. *Demografía: conceptos y técnicas fundamentales*. Oaxaca, México: Plaza y Valdés.
- Martínez, Josefa Cantero and Punzón Moraleda Jesús. 2005. *Administraciones públicas y nuevas tecnologías*. Spain: Lex Nova.
- Martínez Nadal, Apol-lònia. 1998. Aproximación al borrador de Propuesta de Directiva para un marco común en materia de firma electrónica y proveedores de servicios relacionados.
- McCallister, Erika, Tim Grance, and Karen Scarfone. 2009. Guide to Protecting Confidentiality of Personally Identifiable Information: Recommendations of the National Institute of Standards and Technology. Special Publication 800–122. NIST, Gaithersburg, MD. Available at: http://csrc.nist.gov/publications/drafts/800-122/Draft-SP800-122.pdf.
- MondinisIDM European Commission. 2005. Mondinis Study on Identity Management in eGovernment, Common Terminological Framework for Interoperable Electronic Identity Management. Consultation paper. MondinisIDM European Commission.
- NIST (National Institute of Standards and Technology). 2002. Federal Information Processing Standards Publication 180-2, Secure Hash Standard. NIST, Springfield, VA. Available at: http://csrc.nist.gov/publications/fips/fips180-2/fips180-2withchangenotice.pdf.
- ——. 2008. Federal Information Processing Standards Publication 186-3, Digital Signature Standards. NIST, Gaithersburg, MD. Available at: http://csrc.nist.gov/publications/fips/fips186-3/fips\_186-3.pdf.

- NSTC (National Science and Technology Council). 2003. *Biometric Catalog*. Subcommittee on Biometrics, U.S. Government.
- OECD (Organisation for Economic Co-operation and Development). 2001. *E-government: Analysis Framework and Methodology*. OECD Public Management Service, Public Management Committee, OECD, France.
- ———. 2002. OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data. OECD, France.
- ——. 2007. Glossary of Statistical Terms. OECD, France. Available at: http://stats.oecd.org/glossary/index.htm.
- Ossorio, Manuel. Diccionario de ciencias jurídicas, políticas y sociales. Electronic edition. Guatemala.
- PAHO (Pan American Health Organization). Mejorando la salud de los pueblos de las Américas. *Boletín Epidemiológico* 21(4). Available at: http://www.paho.org/Spanish/SHA/CoreData/Tabulator/glossary.htm.
- RAE (Real Academia Española). 2009. *Diccionario de la Lengua Española*. 22nd edition. Available at: http://www.rae.es/rae.html.
- RENIEC (Registro Nacional de Identificación y Estado Civil). 2004. Plan Nacional de Restitución de la Identidad. RENIEC, Peru.
- Reglamento de la Ley de Firmas y Certificados Digitales. 2007. Regulations and Procedures for the International Registry. International Civil Aviation Organization. 2nd edition.
- Rincón Cárdenas, Erick. 2006. Manual de derecho de comercio electrónico y de internet. Spain: Universidad del Rosario.
- SEGOB (Secretary of Government). 2006. *Instructivo normativo para la asignación de la clave única de registro de la población*. Dirección General del Registro Nacional de Población e Identificación Personal, SEGOB, Mexico.
- Taylor, Donald M., and Fathali M. Moghaddam. 1994. *Theories of Intergroup Relationships: International Psychological Perspectives*. 2nd edition. Portsmouth, NH: Praeger.
- Border Control. Available at www.cbp.gov.



- tadísticas vitals. Division of Statistics. New York: United Nations.
- UN, EC, IMF, OECD, UNCTAD, and WTO. 2002. Manual on Statistics of International Trade in Services. New York: United Nations Publications. Available at: http://www.oecd.org/dataoecd/23/11/31670 189.pdf.
- UNICEF (United Nations Children's Fund). 2005. The 'Rights' Start to Life: A Statistical Analysis of Birth Registration. New York: UNICEF.
- U.S. Government. Department of Homeland Security. Available at http://www.dhs.gov.
- USLegal. Legal Definitions. Available at: http://definitions.uslegal. com.
- WHO (World Health Organization). 2005. Informe sobre la Salud en el Mundo: ¡cada madre y cada niño contarán! Switzerland: WHO.

Today, in the interconnected and interdependent world in which we live, the constant innovations and emergence of terminology demand a common and harmonic language among the authorities in charge of civil registration, identification, biometric systems, and vital statistics in Latin America and the Caribbean. This Glossary of Civil Registration and Identification has its origin in this growing demand and seeks to strengthen the communication and increase the knowledge of the valuable vocabulary in this field. The Inter-American Development Bank accompanies the initiatives of the region's governments to modernize their civil registries and to ensure that they are capable of facing the challenges of the twenty-first century.

In a world that day-by-day becomes more interconnected with technological advances, the same cannot be said of unification of related terms. This glossary will help reach a common understanding of terminology and concepts. It is a fundamental tool for the modernization of registry institutions in the countries of Latin America, bringing coherence to our daily activities.

### Rúben Amato,

Director, National Department of Civil Identification of Uruguay

This glossary is a key effort and constitutes an instrument of permanent consultation on concepts pertaining to civil and identification registries.

### Martín Salcedo Vargas

Registrador Delegado para el Registro Civil y la Identificación de Colombia

Civil registration and identification are important individual rights, as well as important tools for better governance. A common understanding of language and of basic concepts across agencies and national borders will be helpful.

### Erik Solheim

Minister of the Environment and International Development, Norway



