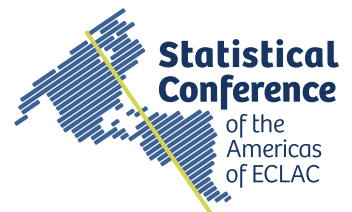# Reference framework for security

and criminal justice statistics

in Latin America and the Caribbean

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Foreword

The compilation, processing and analysis of data on security and criminal justice are fundamental for understanding the phenomenon of crime. They are also useful for designing policies and programmes to design indicators of citizen perception and public order; and mechanisms for reporting criminal acts and enabling the authorities to respond to them. In recent years, technological development and the spread of telecommunications have hastened the processes of producing, disseminating and analysing statistical data. This has fostered transparency, evidence-based policies and research. However, in Latin America and the Caribbean, which is one of the most violent regions in the world according to the United Nations Office on Drugs and Crime (UNODC, 2019a), this development has not been homogeneous, and there are differences that detract from its effectiveness and implementation.

This document sets out to review statistical information on security and criminal justice in Latin America and the Caribbean. It thus contributes to the fulfilment of Sustainable Development Goal (SDG) 16, to "promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels" (UNDP, 2015). Its use will contribute to the creation of reliable, technical, precise, independent, relevant, timely and comparable records that conform to international standards. According to the United Nations (2004), this information will improve transparency, access to information and empirical data for designing, monitoring and evaluating policies and programmes that prevent crime and strengthen the rule of law and criminal justice.

The way crime-related data is produced, analysed and disseminated faces major challenges. Social and economic changes, the appearance of new crimes, transnational organized crime, the evolution of criminal organizations and the emergence of new technologies, such as artificial intelligence (AI), require a constant flow of comparable and quality information. These changes have also transformed the monitoring of performance, strategic planning, management and operation of the different entities involved in the security and criminal justice systems.

This document sets forth an up-to-date reference framework for integrating national security and criminal justice statistics systems. It consists of six chapters that discuss this issue comprehensively, providing a detailed description of the role, components, cross-cutting and methodological issues, scopes and contents of the framework. Its postulates should be understood as recommendations and good practices, in which the national and local context will largely determine how it is applied and implemented.

The document is intended for a wide audience, ranging from users and generators of criminal justice statistics, both inside and outside government, to members of the academic community and civil society. Its contents will help improve the administration, planning, research and analysis of security policies; and it will also enable better citizen oversight, building bridges between institutions and the population and finding joint solutions to security problems in Latin America and the Caribbean.

Chapter I

Aim of the document

A. General objective

To guide national efforts to create standardized statistical information on security and criminal justice in the countries of Latin America and the Caribbean, aligned with international standards on the subject, for the purpose of improving capacities to manage statistical projects to measure crime and manage the corresponding records.

B. Specific objectives

- **Specific Objective 1.** Provide references for the structuring, organization and strengthening of systems of security and criminal justice statistics.

- **Specific Objective 2.** Disseminate and exchange elements that support the development of statistical capacities to generate and make use of administrative records and victimization surveys.

- **Specific Objective 3.** Contribute to the production of generating statistical information for monitoring the indicators of the 2030 Agenda for Sustainable Development, particularly Goals 5, 11 and 16.

- **Specific Objective 4.** Contribute to the production of more comparable and better-quality data, both within justice system institutions and national statistical offices and between them, in order to inform evidence-based decision-making and the design, supervision and evaluation of public policies.

- **Specific Objective 5.** Assist the executive and managerial staff of the criminal justice system in planning and implementing their criminal justice information systems, and keeping them technically up to date, making full use of the new information technologies.

- **Specific Objective 6.** Provide an overview of the challenges that exist in the domain of crime statistics and suggest activities to be undertaken at the international level to address them.

- **Specific Objective 7.** Promote the use of the new technologies and AI to collect, standardize and analyse information on security and criminal justice.

Chapter II

National statistical systems

National statistical systems (NSS) are the organized set of statistical agencies and units within a country that jointly compile, process and disseminate high-quality official statistics on behalf of the national government (ECLAC, 2019b). They integrate principles, functions, structures, processes and resources of the statistical function, specifying and complementing the work of different organizations through a conceptual, technological, operational and data infrastructure methodological framework, based on long-term socioeconomic planning and international best practices (ECLAC, 2005).

According to the Economic Commission for Latin America and the Caribbean (ECLAC), and as shown in diagram II.1, national statistical systems consist of the following elements (ECLAC, 2019b):

- **Producers of official statistics in each country.** These include national statistical offices which act as the main system authority, along with other stakeholders that develop, produce and disseminate official statistics.

- **Respondents.** These consist of individuals, households, and private and public entities that are asked to provide data about themselves and their activities, which are then compiled by the official statistics producers.

- **Data providers/administrative records.** These consist of national and local authorities, central banks or other entities that provide official statistics producers with data collected mainly for administrative purposes.

- **Official statistics users.** These include the general public, the media, researchers and students, businesses, national and local authorities, nongovernmental organizations (NGOs), international organizations, and authorities in other countries that receive or access official statistics.

- **The statistical council.** This comprises different categories of users and is tasked with giving guidance and advice on priority information needs.

As shown in diagram II.1, the national statistical system encompasses information at both the national and the territorial levels. In the first case, it includes official statistics consolidated at the country level; and, in the second, it gathers information from smaller geographic units and conglomerates, such as states, departments, regions, municipalities and districts, among others. It should be noted that national statistics serve to consolidate territorial statistics.

Diagram II.1
National statistical system
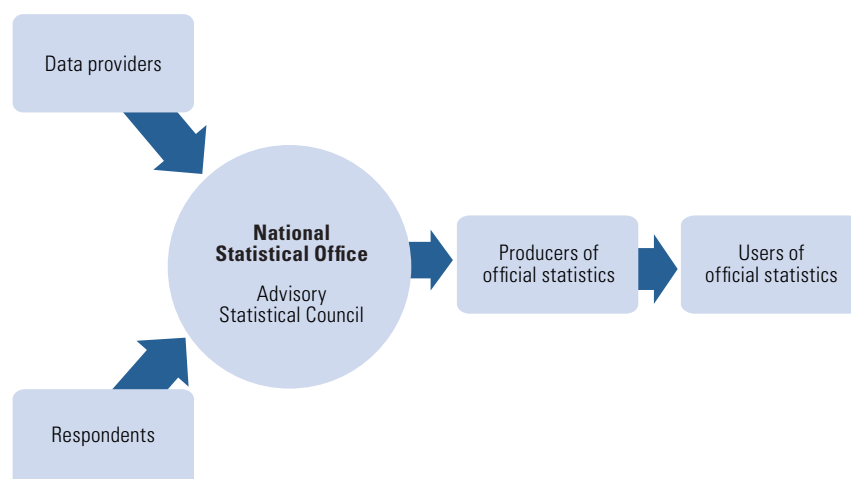
Source: Prepared by the authors.

A.   Components of national statistical systems

1.   National statistical offices

National statistical offices are tasked with coordinating and centralizing the national statistical system in each country. They provide information to strengthen the management and decision-making of governmental, non-governmental, private and civil society institutions and international cooperation and financing agencies. National statistical offices are legally mandated to collect information[1] through surveys, censuses and other instruments; they revise and elaborate it, certify the quality of statistical products[2] and publish national statistics on the population's activities in the economic, agricultural, commercial, industrial, financial, environmental, social, security and criminal justice domains. Most national statistical offices are attached to central governments and have technical, managerial and financial autonomy.[3] They also maintain offices in all departments (provinces or regions), in order to reach the municipalities in their territories and guarantee the coverage and segregation of information at the territorial level. Management of the quality of data and metadata encompasses phases of needs specification, design, construction, collection, processing, analysis, dissemination and evaluation of records.[4]

(a) Functions[5]

- Establish technical, rigorous, professional and functional statistical systems that produce and disseminate timely and quality information, and thus provide empirical data to support decision-making and appropriate public management.

- Produce and disseminate timely and quality statistics, directing, executing and adequately controlling the compilation of economic and social data, to meet territorial needs for statistical information.

- Formulate and evaluate the national statistical policy and a statistical plan.

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[1]   Through surveys, censuses and other instruments.
[2]   Refers to certification of the quality of statistical products.
[3]   In Mexico, for example, the National Statistics Office is not attached to the central government, but is a constitutionally autonomous body.
[4]   Generic Statistical Business Process Model (GSBPM) (Version 5.0).
[5]   On the basis of ECLAC (2005).

- Integrate the national statistical system, guaranteeing the information needed for making technical decisions based on empirical data, analysis of the behaviour of a country's social and economic conditions and any other statistical information needs that may arise.

- Centralize and disseminate a country's official statistics, in both print and digital media, ensuring homogeneity, standardization and data quality.

- Organize, approve and certify a country's statistics, according to the needs of each territory, with a view to achieving the Sustainable Development Goals.

- Review, approve and certify the different statistical outputs of a country's public or private institutions, according to the highest quality standards, in line with national interests and with a view to achieving the Sustainable Development Goals.

- Approve and standardize the methodological and classification norms used in national and territorial statistics.

- Coordinate and integrate the statistical methodologies of State bodies, agencies, institutions and entities, including the approval and formulation of the methodological and classification standards used at the central and territorial levels.

- Organize statistical reviews and checks, ensuring the authenticity of the information.

- Participate in statistical projects on various topics and, also, in those developed by other mechanisms and institutions of different scale or analysis.

- Provide support and assistance to other institutions that participate in national statistical systems, helping them to improve their statistical processes, administrative records, indicator creation processes and activities of analysis and dissemination of information.

- Organize and coordinate the statistical service, providing information on centralized and territorial statistics.

- Protect the confidentiality of the information produced by the national statistical system.

- Specify the duties and rights of other producers of statistics of national interest and their position in the national statistical system.

- Select governmental, cooperative, mixed and private information centres with which to coordinate, for the purpose of generating centralized statistics through the corresponding territorial network.

- Direct and execute national censuses (economic and population and housing) and surveys (economic or social).

- Create, and keep up to date State registries of firms, budget units, social and political organizations, agricultural production cooperatives and basic cooperative production units.

- Interact with users and generate information that meets their needs and priorities, promoting transparency.

2.   Information sources

Information sources are statistical tools that gather useful information to satisfy an institution's demand for knowledge or its need for information. They are classified into primary and secondary sources. Primary sources include instruments that capture information in a direct, new or original way, such as administrative records, surveys and censuses. In contrast, secondary sources contain synthesized and reorganized information from other sources; they are specially designed to facilitate and maximize access to primary sources or their contents, so they do not contain final information, but indicate where it can be obtained. Secondary sources include references, already processed third-party databases, catalogues and bibliographies. In both cases, the use of technology and AI is essential, since it facilitates data collection, processing, analysis and access, thus increasing transparency and building trust.

B. Security and criminal justice statistics systems

As national statistical offices are usually responsible for coordinating the national statistical system, for conducting surveys and censuses and, sometimes, for certifying the statistical quality of statistical projects, it is important to specify their functions in the security and criminal justice domain. It should be kept in mind that they are part of complex information ecosystems, involving different agencies and institutions (public and private and both national and local in scope) which, although they may pursue the same end, have different objectives and scopes specific to each institution or context.

As ECLAC (2005) notes, national statistical offices govern the systems of security and criminal justice statistics and provide technical standards, support and advice, based on their experience and staff trained in statistical operations. The activities they can undertake for these purposes include the following:

- Provision of assistance in the new data compilation processes undertaken by the institutions involved in security and criminal justice.

- Provision of technical assistance to improve existing administrative records and design suitable processes for generating new records in institutions that do not have adequate information.

- Provision of technical assistance to the competent institutions in the citizen security and justice area, in order to create and calculate new instruments and indicators based on data obtained from each of these entities.

- Certification of statistical projects carried out independently by the sector's institutions.

- Support to develop and implement a standardized classification of crimes for statistical purposes at the national level, which is harmonized with the International Classification of Crimes for Statistical Purposes (ICCS).

- International collaboration, interacting with other mechanisms to share information and best practices.

To conceptualize the information system, its scope and objectives, national statistical offices should ideally be supported by security and criminal justice agencies and institutions, to benefit from their accumulated experience and knowledge. The activities they can undertake for these purposes include the following:

- Provision of support to conceptualize and establish instruments that adapt their design, structure and content to the conditions of each territory, based on national goals and objectives.

- Provision of assistance in collecting data on the ground about criminal events, criminal organizations and gangs, among others.

- Provision of support to receive and systemize reports or records on criminal activities.

- Provision of assistance to incorporate operational information into the information system, reporting on performance, complaints, seizures, confiscations and records, among others.

- Development and promotion of standards for the interconnection of computer equipment and data communication between agencies of the statistical systems.

Security and criminal justice statistical systems obtain information from *data providers,* such as the police, the public prosecution service, forensic medicine agencies, the courts, the prison system, prosecutorial entities and specific observatories on gender-based violence; and from *respondents,* such as private individuals or firms that file complaints. Subsequently, under the coordination of the national statistical offices, which direct the national statistical system and act as its main authority, official statistics are prepared, produced and disseminated through channels such as censuses, administrative records and surveys. Lastly, information is disseminated to *users of official statistics,* such as the general public, the media, researchers, the academic community, businesses and civil society organizations, along with national and local authorities, such as ministries, mayoralties, governorates, and security and justice agencies, including the police, the armed forces, the public prosecution service, the courts and the prison system, among others.

Diagram II.2
Security and justice information ecosystem

Data providers: police, public prosecution service, prosecutorial agencies, forensic medicine

National statistical office and producers of official security and criminal justice statistics

Develop, produce and disseminate: censuses, surveys, administrative records on security and criminal justice, among others

Users of official statistics: general public, academic community, researchers, businesses, NGOs, municipalities, governorates, national government, police, armed forces, public prosecution service, prison system

Respondents: citizens, private firms

Source: Prepared by the authors.

Lastly, in order to broaden the scope of security and criminal justice statistical systems and collect information in different territories, the national statistical offices may coordinate nationally and locally with public institutions (municipalities, governorates or others), academic institutions (research centres or groups and universities) or private institutions (private research institutes). In this case, it will be very important to maintain optimal communication and integration with the institutions in question, striving to systemize and homogenize processes, instruments and records, in order to maintain an optimal level of quality in the information system. The functions that can be supported include:

- Support in reviewing information on complaints or administrative records.

- Assistance in systemizing information.

- Support for the security and criminal justice agencies in strengthening their processes of measurement and analysis, in accordance with the fundamental principles of official statistics and the national guidelines issued by the national statistical office.

- Assistance to complement the system with other local sources and types of information.

Good practices

National Subsystem of Information on Government, Public Security and the Administration of Justice, Mexico[6]

Approved in 2008 by the Board of Directors of the National Institute of Statistics and Geography (INEGI), this subsystem produces, integrates, administers, stores and disseminates information of national interest on the management and performance of the public institutions that make up the State, and its powers with respect to the functions of government, public security, and the administration and pursuit of justice. It thus supports the processes of design, implementation, monitoring and evaluation of public policies in these areas.

The board has an executive committee, consisting of the Secretariats of the Interior, Defence, Maritime Affairs, Security and Civilian Protection, and Finance and Public Credit, along with the Department of Public Administration, the Federal Police and the Federal Judiciary Council. It also has seven specialized

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6   For further information, see SNIEG/INEGI (2008).

technical committees, dealing with information on: (i) government; (ii) public security; (iii) delivery of justice; (iv) pursuit of justice; (v) the prison system; (vi) human rights; and (vii) corruption. Through these committees, it compiles and generates governmental statistical information at the federal, state and municipal levels, using instruments such as censuses and surveys.

Inter-Agency Technical Commission on Coexistence and Citizen Security Statistics (COMESCO), Costa Rica[7]

The mandate of COMESCO is to permanently promote the inter-agency management of information on security and citizen coexistence, in order to contribute to the prevention of violence and crime, by ensuring the timely availability of quality data, information and knowledge for the formulation of public policies based on empirical data. It has participation from the Judicial Investigation Department, the Judiciary, and the Ministries of Public Security, Public Education, and Justice and Peace. It also has collaboration from the National Institute of Statistics and Census.

1.   Characteristics of systems of security and criminal justice statistics

Security and criminal justice are among the social processes that form the national statistical system. According to UNODC (2007), these functions are based on the authorities' commitment to protect human rights, prevent and combat crime and administer justice. In order to establish their measurement framework, they analyse social phenomena with changing dynamics such as crimes against life and property and corruption, among others. These highly variable and complex phenomena require a system of criminal justice statistics that consolidates information from a variety of sources.

According to ECLAC (2014), a security and criminal justice statistical system is the set of institutions and agencies, which are mutually linked and coordinated through a homogeneous methodological framework, conceptual foundations and definitions, that produce, manage, analyse and disseminate information obtained from censuses, administrative records or surveys, to support public policy monitoring, evaluation and decision-making processes. To function properly, the system requires reliable, complete and unbiased statistics that gather valuable information in an organized and compiled manner, to provide high-quality and homogeneous data that enable comparisons to be made in time and space. A system of security and criminal justice statistics has several objectives, including: administration, planning, research and analysis. In terms of administration, it organizes and manages resources to set objectives and achieve goals and purposes, in accordance with the principles of efficiency and effectiveness. In terms of planning, it functions as a management tool to support decision-making on current and future activities, taking into account the changes and demands imposed by the environment (ECLAC, 2011).[8] Lastly, in terms of research and analysis, it operates as a common factor in government policy and decision-making; and it conducts internal or external evaluations and analyses on specific topics. These include the organization, operation and development of a programme or project in relation to the objectives and the population's expectations, with the aim of formulating or influencing policies (Echegoyen, 2003).

2.   Principles of a security and criminal justice statistical system

Recognizing the complexity of the information they analyse, and the difficulty of coordinating different agencies and institutions, it is recommended that systems of security and criminal justice statistics be founded on certain basic principles, which are shown in diagram II.3 and further described below:

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[7]   For further information, see Violence Observatory (2021).

[8]   According to Echegoyen (2003), the planning process involves the following stages: (a) understanding the existing situation; (b) clearly formulating the objective to be achieved; (c) identifying other possible methods for achieving the objective and the advantages and disadvantages of each; (d) establishing criteria for selecting the best method; (e) implementing the method chosen for achieving the objective; and (f) setting up a system for providing information on whether the plan is achieving its objectives efficiently. Normally, each of the steps in the planning process requires information, including of a statistical type.

Diagram II.3
Principles of systems of security and criminal justice statistics
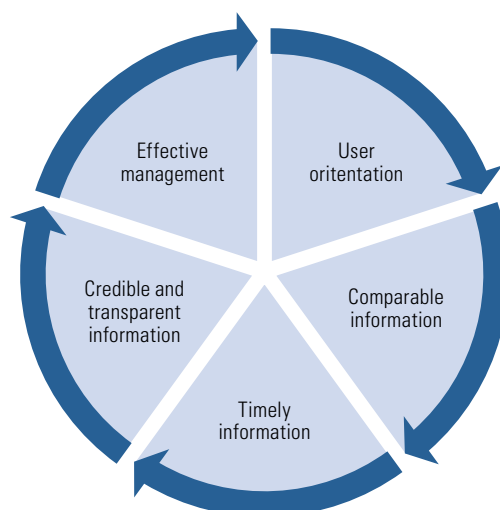
Source: Prepared by the authors, on the basis of United Nations, "Manual for the development of a system of criminal justice statistics", *Studies in Methods*, series F, No. 89, New York, 2004

- **User-oriented.** Systems of security and criminal justice statistics are not an end in themselves, but a means to make decisions, investigate, monitor and evaluate the performance and management of security and justice institutions and agencies. They provide a service to the user or, if possible, to numerous users, in different ways.

- **Comparable.** They must be comparable over time, which guarantees their continuous improvement, both within and outside a territory. They must also be able to relate to other statistics, whether on the same subjects or different ones; so they need to be homogeneous, unbiased and coordinated, and include harmonized concepts, definitions, classifications, methods and procedures.

- **Timely.** They must gather, process and provide information from different complementary sources, with the greatest possible technical rigour and in an easy-to-understand manner. This information must also be generated in short periods of time and serve as a relevant and up-to-date input for decision-making.

- **Credible and transparent.** They should be impartial and objective, based on technical criteria, rigorous methodologies, best statistical practices and international recommendations. They should also be available to society, in open and microdata formats, safeguarding confidentiality, in order to generate trust and transparency.

- **Efficient.** The production of good quality statistics is a complex and potentially costly process, and, therefore, requires effective management of human and fiscal resources.

3. Fundamental requirements of a system of security and criminal justice statistics

To ensure their proper functioning and long-term sustainability, systems of security and criminal justice statistics need to satisfy a number of key requirements, as described below:

- **Obtain and maintain the commitment of stakeholders.** In order to function optimally, they must embrace all stakeholders through a legislative framework which constitutes the legal basis of the system and defines the legal obligations of its administrators towards their users. Moreover, when structuring the system, it is essential to rely on the senior staff of each institution to establish indicative and compatible policies and to communicate with different national entities.

- **Evolution of the statistics programme.** Security and criminal justice encompass complex social phenomena that are changing constantly, both in time and in space, and can be affected by external variables and technology. The system must therefore adjust and evolve to adapt to the needs and contexts of crisis in order to meet its users' needs.

- **Political neutrality and objectivity.** Impartiality must be a premise of the systems of security and criminal justice statistics, since, irrespective of the government in power, they must reflect reality through objective analysis and data. This requires them to operate with a high level of technical and statistical rigour, far removed from political ideologies or the interference of those in power. Although this factor may be difficult to achieve, since these systems form part of the government structure, they can promote good practices and integrate with the academic world and the private sector, in order to guarantee their neutrality and continuity through time. They can also promote open data and reports and thus enhance their autonomy, independence and impartiality.

- **Efficient use of analytical and technical resources.** To ensure technical rigour, the systems of security and criminal justice statistics need experts in crime and victimization, criminal justice policies and programme administration,[9] to design the statistical series, develop concepts and definitions, plan and conduct analyses, and prepare outputs. They should also have experts on statistical issues and the generation of standardized instruments, so as to ensure that unbiased data with the best possible estimators are obtained. Lastly, for processing and analysis, the systems must be equipped with information technology infrastructure, such as statistical, spatial and visualization software, which must protect security, as well as provide for ongoing maintenance, updates and training.

- **Clear articulation of scope and content.** One of the first steps in systems of security and criminal justice statistics, prior to data collection and processing, is to consider that criminal dynamics change from one territory to another in terms of scope and structure. Consequently, the system cannot be the same for all users. Following prioritization, therefore, the system needs to decide on which information packages to focus. The outcome of this activity will depend on the amount of resources available; the degree of commitment of the data providers; their willingness to provide the necessary data; and the hierarchy of the key stakeholders' information needs.[10]

- **Integrated approach.** Although systems of security and criminal justice statistics differ between countries in their level of statistical development or accessibility, given the current state of their instruments and the availability of information, they should tend to be integrated to enable communication and comparability with other countries, both regionally and globally. As a starting point, the different components of the criminal justice system should share common concepts and classifications.

- **Maintenance of a high level of public visibility.** Systems of security and criminal justice statistics should be accessible, open and transparent; and they should foster accountability and the participation of citizens and the media. The publication of information will not only help to inform and share knowledge and research that can strengthen governance, but will also build trust and increase public awareness, which in turn will improve perceptions.

- **Complementary information.** To satisfy the requirements of the different agencies and institutions, security and criminal justice statistical systems should include complementary information that provides inputs to clarify hypotheses, compare findings and deepen analyses. Accordingly, they require an operational, filing or registry system that compiles qualitative and quantitative information and is distinguished from conventional statistical instruments. They should also be complemented with different sources and types of information, including on social, economic or public health issues; and they should incorporate a gender and intersectional perspective to generate broader and more robust analyses.

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[9]   These experts should come from the police, the armed forces, the courts and prisons, among other institutions.

[10] According to the United Nations (2004), experience suggests that the following four broad categories of information should be given the highest priority in determining the content of a national criminal justice statistics programme: (a) crime data that indicate the prevalence of victimization in society by type of victimization; crimes reported and not reported to the authorities and reasons for not reporting; and the degree of fear of crime; (b) caseload data, which indicate the number and types of cases handled by the different components of the criminal justice system (police, courts, prison system); and the characteristics of persons processed through the system, such as age, sex, education, language and marital status; (c) resource data regarding the number of persons employed in the criminal justice services; expenses; and the distribution of services; (d) qualitative descriptions of the justice services, outlining organizational structures, responsibilities and jurisdictions, and programmes operated.

4. Sources of official security and criminal justice statistics

In order to gather, process and analyse criminal events in a rigorous and technical manner, systems of security and criminal justice statistics need to produce primary information, directly capturing the number of criminal and public security events occurring in their jurisdictions. With this information, they will be able to keep records of criminal acts and follow up on criminal conduct and offenders for strategic and operational planning purposes. They will also have inputs to prepare technical reports, analysis and documents that account for the security situation and serve as evidence for the investigation. The new technologies and AI make it possible to analyse larger databases in real time. So it is essential to modernize and integrate official statistical sources, and thus provide efficiency, timeliness and transparency, as well as citizen confidence.

Considering the availability of different sources for collecting security and criminal justice data, diagram II.4 shows those most commonly used for statistical analysis. Although they respond to different analytical purposes or objectives, the sources can be integrated through a security and criminal justice statistical system to complement each other and provide reliable evidence of the security and criminal justice situation in a given territory.

Diagram II.4
Sources of information for security and criminal justice statistics systems
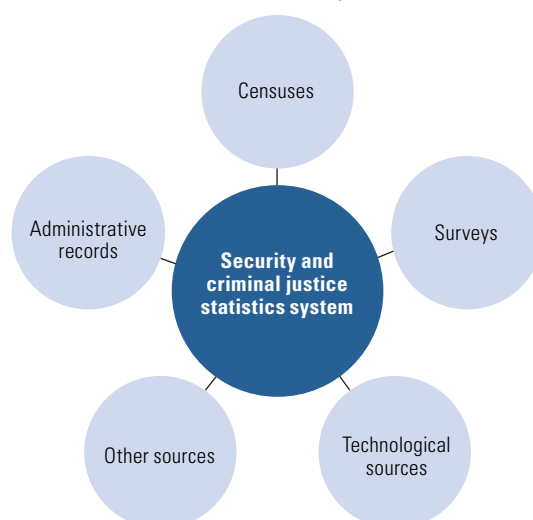
Source: Prepared by the authors, on the basis of United Nations, "Manual for the development of a system of criminal justice statistics", *Studies in Methods*, series F, No. 89, New York, 2004.

(a) Administrative records

Administrative records are data sources that stem from the actions and functions of the various national institutions in the security and criminal justice system. They combine identities and data to obtain variables for analysis, thereby generating efficiency and enabling comparability and the correction of errors and inconsistencies. The quality, data sources and statistical results are key elements in decision-making on the use of administrative data in statistical production. This means that they require joint efforts to develop and implement standard models that enhance the use of administrative data for official statistics, to complement, contrast or simply replace other sources of lower quality and coverage (ECLAC, 2003).

According to Moris (2018), administrative records are a lower-cost source of official statistics; they improve timeliness in the delivery of results, and make it possible to generate more granular indicators. They also offer a series of attributes, such as: technical controls, coverage, integration of records, measurement, accuracy, completeness, time-related dimensions, clarity, integrability, comparability, unique identification keys, use of standard codes and classifiers (national or international), data timeliness, multiple records, and other controls.

In terms of security and criminal justice, administrative records gather information, at a cumulative or microdata level, on operational activities, complaints, investigations, criminal acts and procedural stages, including sentencing; as well as information on detained persons from different institutions and agencies such as the police, the armed forces, the public prosecution service, the judiciary, and prison or social reintegration centres, among others.[11] Each of these institutions has records adapted to its own objectives, so they have not been designed as data sources that can be integrated. To make this possible, they need to be harmonized and made interoperable within the systems of security and criminal justice statistics.

Table II.1
Advantages and disadvantages of administrative records

Advantages	Disadvantages
They cover all agencies and institutions related to security and criminal justice.	They generate disadvantages because they depend on information that is only known and possessed by each entity, which is limited, since data is only collected on the conduct being reported.
They gather information from different institutions.	They may be incomplete and suffer from underreporting and low levels of comparability, standardization and correspondence between data and systems.
They have low data production costs.	Information may change depending on laws, policies or classification procedures.
They are less exposed to errors from other sources.	There may be shortcomings in the processing or measurement of the records.
They can be disaggregated into subpopulations.	They are highly dependent on political and administrative cycles.
They enable information to be obtained in short periods of time.	They only capture crimes reported and registered by the authorities.
Their dissemination facilitates the integration of statistical systems.	Difficulties in harmonizing the registration methodologies of entities.
	They may contain weak administrative records.[a]

Source: Prepared by the authors.
[a] Weak administrative records stem from problems in the types of units used, the scope and coverage of the system, data content, data processing procedures and potentially high processing costs.

Good practices

Sistema David, Ecuador[12]

This is a digital platform that consolidates data generated by the Office of the Attorney General of the State and the National Police on reports of 63 types of crime. It prioritizes crimes of greater social connotation, such as cases of homicide, robbery or microtrafficking or with a large number of persons detained. The Ministry of the Interior of Ecuador developed this system in 2014, to obtain statistics on citizen security and record information in real time at the level of the country, provinces, cantons, parishes, districts, areas and circuits, broken down into periods of years, months, weeks, days and hours. The information is compiled through the Crime Data Analysis Department and different subsystems included in the Ministry of the Interior's platform., These include the register of deaths from external causes and the identification of those involved,[13] and the characteristics of the facts according to the type of crime committed.[14]

The system has a multidisciplinary team that not only generates data, but also adds value to their use. Its objective is to gather information that will lead to better strategies and guidance, and a greater satisfaction of needs, in order to solve security problems in the 20 places with the highest crime rates.

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[11] This encompasses a wide range of types of crime, generally reflecting the broad legal categories covered by the courts, but sometimes excluding certain less serious offences. They may also record attempts.
[12] For further information, see Ministry of Interior of Ecuador (2014).
[13] The platform contains homicide statistics dating from 2014.
[14] These events are investigated and recorded by specialized agents of the National Directorate of Crimes against Life, Violent Deaths, Disappearances, Extortion and Kidnappings (DINASED), through the National Police Management Model.

Public Security Management System (SGSP), Uruguay[15]

This is a tool based on information and communication technologies (ICT), which is used to manage and provide services in relation to public security in Uruguay. It collects and analyses data on homicides, as the key variable of public interest, in addition to policing procedures,[16] medical diagnoses of injured or deceased persons, communications from courts and public prosecution services, and other complementary information.[17] The system is administered by the Ministry of the Interior, which, through its Information Systems Division, is responsible for functional maintenance, the help desk service, training and data quality control. The importance of the system stems from its remote and electronic handling of criminal complaints and police actions for the benefit of citizens, which facilitates communication and the face-to-face transfer of persons to the relevant institutions.[18]

National Police Crime Observatory, Colombia[19]

The National Police of Colombia is an armed civilian agency of the government with responsibility for the country's public security, exercising its authority through the Ministry of Defence. Its main purpose is to maintain coexistence as a necessary condition for the exercise of public rights and freedoms, and to ensure that the inhabitants of the country live in peace, based on the police code of ethics.

The Crime Observatory of the Directorate of Criminal Investigation and Interpol (DIJIN) is a subdivision of the National Police, tasked with conducting criminological research in the country. Through the documentation, study, research, investigation, reports and statistics on crimes committed, it aims to understand theory through research, in order to prevent and reduce cases of insecurity. The administrative records and analyses relate to homicides, deaths and injuries in traffic accidents, personal injuries, shoplifting, vehicle thefts, thefts from motor vehicles, thefts from individuals, burglaries, motorcycle thefts, land piracy, cattle thefts, thefts from financial institutions, terrorism, sexual crimes, domestic violence and threats. The data are broken down by time, mode and place.

(b) Census

According to ECLAC (2019a), censuses are the most important and comprehensive primary source of government statistical information and are designed to collect information from the entire universe of study. Censuses are essential for security and criminal justice, as they project each territory's population for the purpose of defining rates and sample frames. They also provide information on the prison and public security systems and the administrative aspects of each institution or government.

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15 For further information, see Ministry of the Interior of Uruguay (2011).
16 In this regard, the system records the following information: personal data and addresses of all persons involved or participating in public security events; the physical description and court or police records of persons questioned under caution (*indagado*); material objects or elements used or participating in the event, including registration of all possible attributes of each object or element; the exact location of the event in time and space, as well as noting the attendance of the public authority that takes responsibility for the procedure; a detailed and meticulous narrative description of all circumstances that led to the outcome of the incident, with testimonies from third parties that contribute to or fill out data collection forms.
17 Includes complementary information on crimes of domestic violence or those associated with it, road engineering data on traffic accidents, complementary data on crimes of cattle rustling and complementary data on suicides.
18 It includes the Internet reporting system, the police station management system, mobile devices in patrol vehicles in Montevideo, and the registration of guests in hotels or tenement buildings.
19 For further information, see Colombian National Police (2021).

Table II.2
Advantages and disadvantages of censuses

Advantages	Disadvantages
They identify the general behaviour of the population.	They are very costly, since they require a large amount of financial, material and human resources.
They generate robust and unbiased indicators.	They require a vast organization that covers the entire universe to be investigated, so as to avoid omissions and duplications.
They make it possible to present the information obtained by administrative or other stratification units, whatever their size, so that data can be obtained for small areas.	Delays in obtaining results may occur.
They are a benchmark for continuous statistics.	In some cases, the information obtained may be of lower quality if it is impossible to persuade all relevant institutions to send the information in a timely manner.
They are the only usable procedure for obtaining information on infrequent phenomena.	They have broad time frames, which makes them reliant on population projections.
They encourage the systemization of statistically oriented and standardized information, which has a positive impact on organizational practices.	The quality of the information obtained depends on the internal organization of the institutions involved.

Source: Prepared by the authors.

Good practices

National censuses of state governments, Mexico[20]

The national censuses of state governments, prepared by INEGI, aim to generate statistical and geographical information on the management and performance of the institutions that comprise the public administration of each state, specifically in the functions of governance, public security, pursuit and administration of justice, the prison system, and civil justice. The aim is to associate this with the government's work on the design, implementation, monitoring and evaluation of public policies of national scope in the aforementioned areas.

Their analytical coverage is national, with a breakdown by administrative entity, age and sex. As regards their time frame, the censuses record information for 2019 and 2020, and their target population is government (federal, state and municipal), for the purpose of producing information to support decision-making. In terms of security and criminal justice issues, they collect data on public security, pursuit and administration of justice, the prison system and civil justice.

Sixth National Census of Police Stations 2017, Peru[21]

In 2017, in coordination with the Ministry of Finance and Economy and the Ministry of the Interior, the National Institute of Statistics and Informatics (INEI) of Peru carried out the Sixth National Census of Police Stations 2017 to obtain information on the state of the premises, infrastructure and equipment of the police stations of the National Police of Peru. The census measured variables including the tenure of the premises, the number of police officers assigned, the availability of computer and communication equipment and the availability of police vehicles. The census also provides data on the main characteristics of traffic accidents that occurred in 2016, based on the physical sources of information and the Police Complaints Computer System (SIDPOL) at the police stations. This information is presented through simple statistical analyses, broken down by department and gender (the latter in the case of traffic accidents). It also contains a spatial analysis, which is presented in the form of thematic maps and quantiles for each department.

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[20]   For further information, see INEGI (2020b).
[21]   For further information, see INEI (2018a).

(c) Sample surveys

Sample surveys are a research design procedure that collect data through tools such as questionnaires or surveys. In principle, sample surveys do not analyse the entire population, but a duly selected subset (sample) which should be random and representative. This mode of operation makes it possible to obtain faster, better-quality results at a lower cost, since sample surveys collect detailed information on a smaller number of people than interviews or studies of the population at large.

According to UNODC/CEPE (2010), sample surveys primarily analyse victimization, corruption or governance, and they are a scientifically supported tool that is internationally recognized. They are used to help governments and the general public understand problems of criminality and decide how best to address them.

If these surveys are conducted on a regular basis, mainly through national statistical offices, they provide individual and household data and capture perceptions of insecurity and experiences of victimization (irrespective whether they have been reported to the authorities) — especially in respect of crimes against property and the physical, psychological and sexual integrity of individuals, and also the causes of non-reporting.[22] For this purpose, telephone or face-to-face interviews are conducted using the PAPI,[23] CAPI,[24] CATI[25] or CASI[26] methodologies. These may include multiple or repeat instances of victimization, and they exclude minors.[27]

Household victimization surveys make it possible to gather statistical information on the progress made towards several of the 2030 Agenda indicators, including the following:

- 11.7.2: Proportion of persons who were victims of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months.

- 16.1.3: Proportion of population subjected to (a) physical violence, (b) psychological violence and (c) sexual violence in the previous 12 months.

- 16.1.4: Proportion of the population that feel safe walking alone around the area they live.

- 16.3.1: Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms.

- 16.5.1: Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official or were asked for a bribe by those public officials, during the previous 12 months.

The United Nations Office on Drugs and Crime (UNODC) is the custodian of these indicators and provides technical assistance to the countries of the region for their measurement through the Centre of Excellence for Statistical Information on Governance, Victims of Crime, Public Security and Justice (a joint UNODC-INEGI project) following the development of the Latin America and the Caribbean Crime Victimization Survey Initiative (VICLAC).

It is essential to arouse interest among the institutions involved and to secure their commitment to promote this type of survey and maintain its sustainability.

In order to collect information on violence against women, there are also specialized surveys that, in addition to considering the methodological and statistical design elements of victimization surveys, incorporate other strategies ranging from the selection of female interviewers to data management, including the support and back-up that must be guaranteed to the women interviewed, to prevent revictimization and to safeguard their integrity and anonymity.

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[22] Regardless of whether they are also included in the administrative records of the police, the public prosecution department or other related agencies.

[23] PAPI: *paper and pencil interviewing*. This is an interview that uses a paper questionnaire, in which the data are obtained through a paper form that the interviewee or the interviewer completes by hand.

[24] CAPI: *computer-assisted personal interviewing*. This is a face-to-face interview in which the interviewer uses software that navigates through the questionnaire, generates flows and may even have consistency validations (which do not accept outliers or contradictory values in the responses).

[25] CATI: *computer-assisted telephone interviewing*. This is an interview that uses software similar to CAPI, but adapted to telephone interviewing. These applications also manage the calls themselves and make it possible to distribute the work among the team of interviewers.

[26] CASI: *computer-assisted self-interviewing*. This refers to data collection systems that require a personal computer, and to surveys that are answered autonomously through that computer. It does not require an Internet connection (*computer-assisted web interviewing* (CAWI)).

[27] However, there will normally be a limit to the number of such incidents recorded, in order to prevent anomalies from affecting the calculations unduly.

Table II.3
Advantages and disadvantages of sample surveys

Advantages	Disadvantages
They have a high coverage rate.	They cover a small number of crimes and only incidents that have an identifiable victim.
They are comparable in time and space.	They may present inconsistencies due to underreporting, sampling or imputation errors and non-response.
	The continuity of the surveys is unstable.
	They are highly vulnerable to budgetary decision.
They complement administrative records by uncovering the hidden figure of crime and make it possible to investigate the reasons for non-reporting.	They may present sampling errors due to selection biases.
They collect information about the victim, the offender and the context of the crime in much greater detail than other sources.	They require knowing the total size of the population to be more accurate.
They investigate not only crimes, but also conducts of interest to society that have not yet been criminalized and punished by law.	They have a higher standard error than other techniques, although this depends on the sample design.
They seek people's opinions on their safety and the performance and effectiveness of criminal justice authorities.	Methodologically they are highly complex.
They obtain more accurate estimates.	The continuity of the surveys is unstable.
	They are highly vulnerable to budgetary decision.

Source: Prepared by the authors.

Good practices[28]

The Latin America and the Caribbean Crime Victimization Survey Initiative (LACSI), Centre of Excellence for Statistical Information on Governance, Victims of Crime, Public Security and Justice (INEGI-UNODC)[29]

This initiative responds to a diagnostic assessment performed by the Centre of Excellence, which used different methodologies to measure crime victimization and other associated indicators in the countries. The need was identified to develop a standardized methodology to harmonize the measurement of victimization in the region and generate comparable and robust data based on international standards. The initiative has participation from 11 countries and support from other institutions, such as the Organization of American States (OAS), the Inter-American Development Bank (IDB) and the United Nations Development Programme (UNDP).

The initiative makes it possible to quantify criminal activity and monitor the progress of one indicator of Goal 11 of the 2030 Agenda for Sustainable Development; four indicators of Goal 16, specifically, crime prevalence, crime incidence, the dark figure of crime and perceptions of security (16.1.3, 16.1.4, 16.3.1 and 16.5.1). In addition, it includes 12 core crimes, including different types of property crime, theft, threats, fraud, injury, extortion and bribery. Lastly, it includes seven non-core crimes, including crimes against life, kidnapping, vandalism, harassment, possession of firearms, cybercrime, theft of objects inside vehicles and bicycle theft.

National Victimization Survey, Argentina[30]

The National Victimization Survey aims to produce comparable indicators at the national and provincial levels on the prevalence and incidence of crime, to provide information on the characteristics of crime and the context of victimization, and to ascertain perceptions of insecurity and the performance of the security forces, judicial institutions and assistance to victims.

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[28]   The practices described in this document are only a few examples. For a complete list of victimization surveys that have been conducted, see the Atlas of Victimization Surveys contained in UNODC (2021).

[29]   For further information, see United Nations Office on Drugs and Crime (UNODC), "*Victimización en la región*" [online]. https://www.cdeunodc.inegi.org.mx/index.php/viclab1/ .

[30]   For further information, see INDEC (2018).

Led by the National Institute of Statistics and Censuses (INDEC) and the Ministry of Security, the National Victimization Survey promotes the production and analysis of data on citizen security issues, in order to expand and strengthen capacity to implement and monitor public policies on the subject. This survey, which was last conducted in 2017, takes into account the recommendations made by the Centre of Excellence for Statistical Information on Governance, Victims of Crime, Public Security and Justice.

Survey on Coexistence and Citizen Security (ECSC), Colombia[31]

The Survey on Coexistence and Citizen Security, which has been conducted since 2012, includes representative data from 13 of the country's large cities, as well as the national total, urban centres, population centres and dispersed rural areas. It generates information on the characteristics, victimization and perception of security among Colombians over 15 years of age who have suffered from some criminal act, such as theft (residential, cattle and other livestock, people and vehicles), quarrels and brawls. Although it only gathers information on three crimes, it delves deeper into the modality of each one and inquires about people's perceptions regarding trust in institutions. It also constructs indicators on rates of victimization, crime reports, quarrels and brawls, theft and extortion, and the perception of insecurity, which reveal the hidden number of crimes and characterize aspects of crime. The aim is to inform decision-making by the authorities and strengthen crime control, prevention and monitoring, particularly in the case of unreported or hidden crime.

National Urban Citizen Security Survey (ENUSC), Chile[32]

Since 2003, through the National Urban Citizen Security Survey, a methodology has been consolidated to measure levels of victimization and insecurity in Chile and its regions. The aim of the survey is to obtain information on perceptions of insecurity, reaction to crime and victimization among persons over 15 years of age and households. Data are collected from a sample drawn from urban areas that is representative at the national and regional levels. Interviews are conducted face-to-face; in the most recent version of the National Urban Citizen Security Survey (2020), the effective sample consisted of 23,656 households.

National Crime Victimization Survey (JNCVS), Jamaica[33]

The Jamaica National Crime Victimization Survey seeks to obtain an accurate and up-to-date measure of the number and types of crimes committed in Jamaica, together with information on the incidence of crimes that are not reported to the police. The survey takes account of demographics, victim data and type of crime, to allow for national and community comparability, as well as good social intervention in security issues.

The survey collects data from persons over 16 years of age in their own communities[34] and inquires about perceptions of crime, disorder, security measures, and judgments about community problems that may impact migration and visits to their own neighbourhood. This survey takes into account the recommendations of the Centre of Excellence for Statistical Information on Governance, Victims of Crime, Public Security and Justice.

National Survey on Victimization and Perceptions of Citizen Security (ENVIP), Panama[35]

The National Integrated System of Crime Statistics (SIEC) and the National Institute of Statistics and Censuses (INEC) implemented the National Survey on Victimization and Perceptions of Citizen Security, once only in 2016, with a view to obtaining relevant information for the design and implementation of public policies on security. The conceptual and statistical design of the survey is based on the best practices and standards of the Caribbean Crime Victimization Survey Initiative (VICLAC) of the Centre of Excellence for Statistical Information on Governance, Victims of Crime, Public Security and Justice.

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[31]   For further information, see DANE (2020).
[32]   For further information, see INE (2021).
[33]   For further information, see Barnes and others (2021).
[34]   From 2006 to 2016, the year of the last survey.
[35]   For further information, see National Institute of Statistics and Census [online] https://www.inec.gob.pa/.

Saint Lucia National Crime Victimization Survey (SLNCVS)[36]

The Central Statistical Office of Saint Lucia conducted this survey in 2019 with the aim of collecting relevant information for the design and implementation of public policies on security, and the prevention of and response to crime. It estimated the number of victims of any crime that had been reported, the characteristics of the perpetrator, the characteristics of the crime, sexual harassment, perceptions of public security, the performance of the authorities and the possession of firearms. This survey takes into account the recommendations of the Centre of Excellence for Statistical Information on Governance, Victims of Crime, Public Security and Justice.

Victimization in Peru, 2010–2019, Peru[37]

The National Survey of Budgetary Programmes (ENAPRES) includes a citizen security module among its many research topics, the main purpose of which is to determine whether the population over 15 years of age in urban areas has been the victim of a criminal act in the last 12 months. It also seeks to gauge the population's perception of insecurity, the existence and classification of surveillance in the areas or neighbourhoods, the security measures adopted by the organized community, and confidence in the government institutions in charge of security.

National Business Victimization Survey (ENVE), 2018, Peru[38]

The purpose of the National Business Victimization Survey is to gather up-to-date, timely and reliable statistical information that is representative at the national and departmental levels, as well as by economic activity and firm size, and that makes it possible to estimate the rate of victimization and the security measures available to private sector firms. It also seeks to obtain information on unreported cases and the perception of insecurity in the business sector.

National Survey of Urban Public Security (ENSU), Mexico[39]

The National Survey of Urban Public Security provides estimates of public security perceptions among the population over 18 years of age in urban areas. It is designed to measure perceptions of public security, based on various factors and themes, such as social expectations, testimonies of criminal or antisocial behaviour, or the sense of insecurity owing to the fear of crime.

The information allows for quarterly estimates to be made that are representative of the general public at the national level, in order to provide inputs for decision-making that impact the perception and performance of the institutions in question. The survey uses a three-stage, stratified, clustered sample of 25,500 households in 70 cities, which is used to analyse institutional performance in terms of effectiveness in their work.

National Survey on the Dynamics of Household Relationships (ENDIREH), Mexico[40]

The National Survey on the Dynamics of Household Relationships measures the dynamics of relationships between couples in households, as well as the different types of violence (including psychoemotional, physical, sexual, economic, financial, and even obstetric care violence) experienced by women in different settings (such as school, work, community, family and as a couple).

(d) Sources based on new technologies

Digital technologies have been integrated into global dynamics and are used as platforms to conduct economic and social activities. According to ECLAC (2019c), the digital dynamic is based on telecommunications infrastructure, ICT-related industries (software, hardware and services), big data and Internet-based activities.

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36 For further information, see Central Statistical Office of Saint Lucia, "Crime" [online] https://www.stats.gov.lc/subjects/society/crime/.
37 For further information, see INEI (2020).
38 For further information, see INEI (2018b).
39 For further information, see INEGI (2021).
40 For further information, see INEGI (2016).

In terms of security, the heterogeneity of the methodologies for measuring and presenting information, which include reporting applications or risk maps, among others, has served to increase the authorities' response capacity, while also facilitating more direct communication with citizens and promoting open data and transparency. However, such heterogeneity also poses a variety of challenges, such as improving efficiency, connectivity, visualization or electronic security. The main sources of information based on new technologies, and their main uses and limitations, are described below.

(i) Information and communication technologies

According to ECLAC (2003), information and communications technologies (ICT) are defined as technological systems through which information is received, manipulated and processed, and which facilitate communication between two or more interlocutors. They are also fundamental tools for facilitating access to knowledge and enhancing countries' innovation capabilities, and support integration in a globalized world.

According to UNODC (2019a), the appropriate use of ICT in the domain of security and criminal justice makes it possible to:

- Ensure permanent and secure communication between operational elements, as well as digitalize and systemize records, complaints, minutes, investigations and sentences;

- Build standardized and accessible databases to support planning, monitoring and analysis by the police, the armed forces, attorney general offices and public prosecution services, justice agencies and prisons or social reintegration centres;

- Supply information to distance professionalization and updating programmes targeting the members of the different security institutions, throughout national territory, thereby extending the boundaries of the agencies, governments and entities; and

- Encourage transparency and participation through greater use of data and information.

At the same time, ICTs facilitate the capture of metadata, photographs, orthophotos, audiovisual material, including certain characteristics such as time, date and coordinates, among others, which consolidate information and minimize the possibility of irregularities. They also help automate the creation of geospatial maps of criminal incidents or "hotspots"[41] and support the operational investigation and planning of security and justice agencies. Lastly, they can be integrated into command, control, computing and communications centres[42] to maximize both operational efficiency and preventive and territorial control activities.

(ii) Social networks and security applications

The use of social networks and web applications is another source of data for compiling information on records, complaints and threats, which can contribute to the consolidation of statistics on security and criminal justice, rapidly, with precision and in real time. To make the most of this, *web scraping* tools can be used, which extract the results of text mining and analysis (UNODC, 2020) and store various types of data such as contact information, email, telephone numbers, searches or URLs, location or description of events, among others. However, the right to *habeas data*[43] must be protected and the right to privacy must not be violated.

Reporting applications and risk maps can be used to record information on the offender, and on the place and the description of the georeferenced crime event. Criminological research is moving towards the study of small geographic areas, and crime and the perception of it are influenced by environmental characteristics and contextual conditions (more common in some places than in others) (Buil-Gil and others, 2021). Accordingly, such

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[41]   The term "hot spots" is used in criminology to geographically locate areas where most crimes are committed.
[42]   C4s or C5s are designed to coordinate and monitor security plans and programmes through computer technology and communications infrastructure. Their key objective is to improve the response of security agencies and emergency responders in crisis situations, by enabling an efficient and rapid response by providing information on a timely basis.
[43]   *Habeas data* is a mechanism that can be used by all individuals to protect the security and veracity of personal information and data provided to financial and telecommunications firms, among other entities, which, in the course of their business, collect data from their customers and users. In other words, *habeas data* aims to make sure that personal data are handled correctly (Flórez Ruiz, 2011).

tools can facilitate the visualization of criminal activity with small area maps, incorporating spatially and temporally correlated random effects to make the estimates more reliable. This will give government agencies information to design specific strategies to reduce crime and enhance public security.

Table II.4
Advantages and disadvantages of sources based on new technologies

Advantages	Disadvantages
They collect data in real time.	They are vulnerable to computer attacks. They are highly complex for statistical use.
They allow for faster notification and transmission of information.	The relationship with the public is weak.
They facilitate the systemization of processes to produce products.	Errors may occur in the digitalization process, and the level of bias may be high.
There is information transparency.	Its implementation has a high cost.

Source: Prepared by the authors.

Good practices

Integrated System of Statistics on Violence against Women (SIESVIM), Mexico[44]

This is a consultation tool that encompasses a broad range of statistics derived from a variety of data sources. It makes it possible to characterize violence against women, as well as the economic, demographic and sociocultural contexts in which it occurs and its magnitude and intensity.

(e) Other sources

In addition to the criminal justice and security statistical system and national statistical offices, there are other agencies and institutions, both public and private, that produce and collect information on public security and justice. According to UNODC (2010a), since the availability of statistics on policing varies considerably, including in terms of statistical reliability and completeness, statistics provided by a government agency should be validated, whenever possible, with statistics from other sources, such as NGOs or international bodies. Examples include the vital statistics system, the financial system, insurance companies, tax authorities and crime victim support associations.

Table II.5
Advantages and disadvantages of other sources

Advantages	Disadvantages
They are complemented by other sources of information.	Poorly integrated with the security and criminal justice statistical system.
They allow for more robust and comprehensive analyses.	Incompatibility of sources and data.
They have a stronger relationship with the public.	They can generate inefficiency in terms of cost and time.

Source: Prepared by the authors.

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44   For further information, see National Institute of Statistics and Geography (INEGI), "Sistema Integrado de Estadísticas sobre Violencia contra las Mujeres (SIESVIM)" [online] https://sc.inegi.org.mx/SIESVIM1/.

Chapter III

Security and criminal justice statistics in national statistical systems

As noted in the previous chapter, systems of security and criminal justice statistics establish the framework for national coordination and integration between respondents and the providers, producers and users of information on security and criminal justice to develop guidelines and standards for the treatment, processing and dissemination of official statistics on the subject. Diagram III.1 illustrates the flow of information in systems of security and criminal justice statistics and some of their possible outputs. The national statistical office acts as the lead agency and national coordinator of the institutions that produce official statistics to establish guidelines and good practices for instruments such as administrative records, censuses, surveys and others that gather information on individuals and organizations.

Diagram III.1
Flow of collection and production of information from systems of security and criminal justice statistics
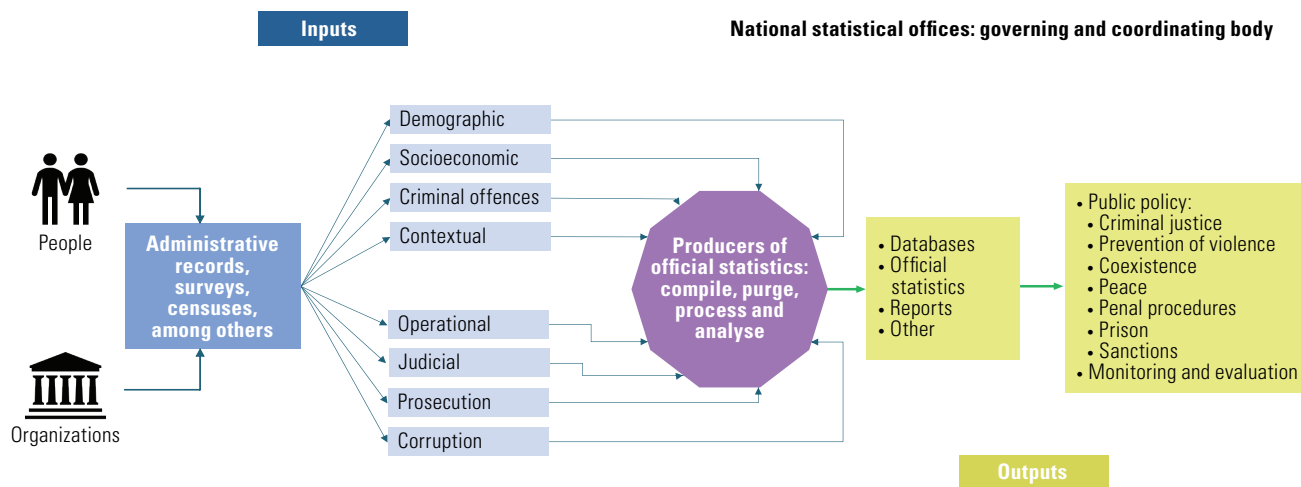
Source: Prepared by the authors.

According to ECLAC (2019b), security and criminal justice statistical systems are governed by the following principles:

- **Professional independence**, meaning that producers of official statistics shall decide, independently and free from any pressures or interference from political or other external sources, on the development, production and dissemination of statistics, including the selection of data sources, concepts, definitions, methods and classifications to be used, and the timing and content of all forms of dissemination.

- **Impartiality and objectivity**, meaning that official statistics shall be developed, produced and disseminated in a neutral, reliable and impartial manner according to professional standards and free from any political statements or considerations. Equal and simultaneous access to official statistics shall be provided to all users.

- **Accuracy and reliability**, meaning that official statistics shall reflect reality as faithfully, accurately and consistently as possible and be based on scientific criteria used for the selection of sources, methods and procedures.

- **Coherence and comparability**, meaning that statistics shall be consistent internationally and comparable over time and across regions and countries.

- **Clarity and transparency**, meaning that official statistics shall be presented in a clear and understandable way, and the methods and procedures applied shall be transparently communicated to users to facilitate proper interpretation.

- **Statistical confidentiality and exclusive use for statistical purposes**, meaning that individual data collected or obtained by Producers of Official Statistics that refer to natural or legal persons shall be strictly confidential, and shall be used exclusively for statistical purposes and accessed only by those authorized to do so by the present Law.

- **Relevance**, meaning the degree to which official statistics shall meet current and emerging user needs and honour citizens' right to public information.

- **Cost-effectiveness**, meaning that the best possible use shall be made of all available resources to achieve the desired result. The results of statistical work shall be planned taking full advantage of technological advances and weighed up against the efforts required of the National Statistical System and the burden on suppliers of inputs for statistical work.

A. Regulations

It is essential to establish a body of laws to form the legal basis of the systems of security and criminal justice statistics and specify the legal obligations of persons tasked with the development, production and dissemination of official statistics in this area, to ensure that it functions well over the long term. According to ECLAC (2005), regulations should support the generation of statistical information and the relationships between information production units, users and respondents. It should also define the rights and obligations of the agencies that comprise the national statistical system, the principles and procedures applied in the production and dissemination of official statistics, the organizational model of national statistical offices, the rights and obligations of respondents and access to the various data sources by the agencies producing official statistics (ECLAC, 2019a).

For this reason, it is essential that the regulations specify minimum standards for the correct functioning of systems of security and criminal justice statistics and delineate their scope:

- **Statistical activity:** What sources exist and what data do they collect?

- **Organizational model:** Which institutions are involved and what are their functions?

- **Structure:** What structural relationships exist?

- **Responsibilities:** What are the responsibilities of each institution?

- **Rules and methodologies:** What guidelines and methodologies are applied to collect, process, exchange, analyse, integrate and disseminate information?

This will make it possible to compile security and criminal justice statistics in accordance with the highest quality standards, regulating interoperability and communication, and establishing channels for the exchange and dissemination of information to support national and international decision-making.

Good practices

> ### National Institute of Statistics and Geography (INEGI), Mexico[45]
>
> A decree, published in the Official Gazette of the Federation in 2006, granted INEGI autonomy and defined the bases on which the national statistical and geographic information systems are organized and operate. This includes the National Subsystem of Information on Government, Public Security and Justice Administration.
>
> ### National Institute of Statistics and Informatics (INEI), Peru[46]
>
> The creation of Peru's National Statistical System (SEN) was announced in December 1975; and it was decided that national statistical activities would be directed by INEI acting as governing body. In 1990, the Law on the Organization and Functions of the National Institute of Statistics and Informatics was passed, declaring the institute to be a decentralized public agency, with legal personality under domestic public law and technical and managerial autonomy, reporting to the President of the Council of Ministers. On the basis of this, a regulation designated INEI as the central and governing body of the national statistical and informatics systems,[47] tasked with regulating, planning, directing, coordinating and supervising Peru's official statistical and informatics activities.

B. Stakeholders

The analysis requires interaction and collaboration between different institutions and actors that participate actively in the design and appropriation of statistical products, including instruments and mechanisms for the collection, processing and dissemination of information. To achieve this, systems of security and criminal justice statistics (as a whole) and the national statistical offices have a central role to play in coordinating actors and establishing methodologies, processes and quality standards to produce information in a timely, efficient and effective manner.

- **Central government entities, decentralized entities and national statistical offices.** Central government consists of entities that perform a political function, including ministries, departments and superintendencies, and special administrative units without autonomous legal status. Decentralized entities are the public establishments, the industrial and commercial enterprises of the State that have mainly administrative functions, provide public services or perform industrial or commercial activities, and which have legal personality, administrative autonomy and their own capital. The most important of these include the Ministries of National Defence and Justice, the high-level security councils and advisors, among others.

- **Security and justice agencies.** These are the institutions tasked with directing a country's security, defence and justice policies, with different degrees of specialization,[48] including the operational, coordination and planning dimensions. They comprise institutions responsible for national defence, maritime, river, air and land defence, justice, prisons, citizen security and coexistence. They are divided into national, regional (departmental or provincial) and local levels. The most important include the army, the armed forces, the air force, the police, the public prosecution service, ombudsperson offices, forensic medicine offices, courts, prisons or social reintegration centres[49] and environmental security organizations, among others.

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[45]   For further information, see Chamber of Deputies (2006).

[46]   For further information, see INEI (2001).

[47]   The National Statistical System is in charge of the technical and scientific tasks undertaken to quantify the country's economic and social statistics. These include census surveys, continuous statistics, sample surveys, population statistics, indicators and indices in general, national and regional accounts, macro-statistical frameworks, data analysis and research. The National Informatics System is tasked with the systematic planning of processes, methods and techniques for the use, processing and transmission of information. It is also responsible for the legal instrumentation and technical mechanisms for the organization of IT resources, the State's informatics activity and the operation and exploitation of data banks and magnetic data files for public management. The Inter-agency Coordination Committee for Statistics and Informatics is responsible for coordinating and agreeing on the development of policies and the formulation and execution of the plans of its member bodies.

[48]   Specialties include family violence, cybercrime, crimes against women, organized crime, terrorism, investigation, technology, the police, environment, tourism, family, among others.

[49]   These consist of remand facilities, prisons for sentenced offenders, juvenile remand centres and maximum security prisons, together with other probation and parole agencies.

- **Regional and local entities.** These entities are the closest to citizens and have the greatest of interaction with them. They are responsible for managing resources, establishing the fees needed for the fulfilment of their functions, sharing in national revenues and exercising the powers that correspond to them by law at the territorial level. They are divided into regional (departmental, provincial or state) and municipal levels. The most important include mayoralties and governorates.

- **Other actors.** These include academic institutions, citizen security or crime observatories, specific observatories on gender violence, public health or traffic accidents, international and regional organizations, cooperation agencies and NGOs, among others, which provide and consolidate complementary information on security and criminal justice.

C. Coordination mechanisms

To ensure that systems of security and criminal justice statistics have processes for compiling, processing and disseminating information that is comparable with those of other countries (or at least related to them), coordination mechanisms are needed to promote the effective and efficient management of resources (United Nations, 2004). Thus, irrespective of the organizational model of the security and criminal justice statistical system, it is necessary to:

- Synchronize the institutions by forging agreement on concepts, definitions, sampling frameworks and classifications, facilitating the information collection process and providing useful and continuous information.

- Adopt international crime classifications, such as the International Classification of Crime for Statistical Purposes.

- Establish methodological, analytical and process strategies that facilitate data processing and analysis.

- Define methods of dissemination, transparency and accountability that democratize information and stimulate citizen participation.

- Forge institutional management and coordination agreements that ensure the proper functioning and sustainability of the system and are supported by the formal creation of committees or working groups.

1. Technical coordination mechanisms

These establish protocols or technical guidelines to regulate the various stages of the statistics production process, such as: designing and applying measurement instruments; processing and analysing data; and disseminating, visualizing and integrating information into operational plans and public policy at the national and local levels. The most commonly used instruments include:

- Identification and harmonization (data capture and processing software).

- Standardization of measurement instruments (questionnaires, administrative records, and surveys on victimization, corruption or prison operations).

- Constant periodicity of data collection.

- Use of the same calculation methods on sample representativeness and indicator production.

- Use of similar methodologies to display and disseminate results (tabulations, cartographic outputs, interactive graphics, automatic reports and open data, among others).

According to the United Nations (2004), these controls can be applied either formally or informally, depending on tradition and the most effective way to ensure compliance. Formal controls include laws, norms and manuals that standardize procedures and allow them to be easily replicated in other institutions. In contrast, informal controls include workshops, debates and training activities that promote knowledge development and procedural standardization. It is also possible to create an inter-agency commission to approve data collection instruments

and control the respondent workload. The national statistical office would be responsible for establishing such a commission, while remaining independent from it.[50]

Advantages	Disadvantages
They standardize technical procedures for the design of instruments and the capture, processing and dissemination of information.	Their applicability depends on the degree of maturity and technical robustness of the institution that will apply them.
They are easy for other institutions to adopt, because they are based on technical rather than political criteria.	They entail a higher cost, as they need to be accompanied by training activities, manuals and standards, among other items.
They generate quality, clean, relevant and timely information.	They require investments in technology and digital integration, to be applicable by all institutions and agencies belonging to the systems of security and criminal justice statistics.

Source: Prepared by the authors.

2.   Administrative coordination mechanisms

Administrative coordination is important to ensure standardized, timely and relevant statistical products that are adapted both to the context of the countries and institutions, and to the maturity stages of the systems of security and criminal justice statistics. The key mechanisms include:

- Leadership of the methodological work.

- Identification and implementation of international best practices.

- Support for institutions in data collection processes.

- Training for the personnel involved.

- Provision of budgets to facilitate the statistical work in the security and criminal justice area.

- Procurement and supply of computer equipment and software to ensure easy intercommunication and compatibility.

The exchange of staff between national and local offices can also be enhanced, which, according to the United Nations (2004), enables officials to become acquainted with a wider range of concepts and practices, thus strengthening their prestige, position and coordination capacity.

Advantages	Disadvantages
They standardize procedures in terms of deadlines, methodologies, technology and staff training.	They have to be supported by technical teams and good leadership at the local level, to be optimally and efficiently harmonized with national mechanisms.
They maximize and coordinate budgets to execute processes.	They can slow down processes, because they require good administrative coordination in the different levels and institutions.
They generate timely and relevant information, in an harmonized manner in all institutions registered in the national systems.	They must be supported by rules, agreements, communiqués and resolutions, and also by the provision of ongoing training for staff members, which uses up additional time and resources.

Source: Prepared by the authors.

3.   Financial coordination mechanisms

According to United Nations (2004), a tool that is very important for ensuring coordination is to estimate a budget for all statistical activities and give coordinators the authority to administer it in an equitable manner and according to quality and response burden.[51] This makes it possible to:

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[50]   According to the United Nations (2004), this would enable the agency to be seen as an ally in the role of a friendly coordinator, rather than as an unfriendly supervisor.
[51]   Nonetheless, an integrated statistical system is clearly better for users, and for the system itself, than the maintenance of non-comparable datasets (United Nations, 2004).

- Give additional facilities to agencies and institutions that coordinate processes.

- Impose and implement rules, procedures and agreements, adapting them to their territories, personnel availability and human resources.

Estimating the budget requires identifying the different needs of the agencies and institutions and differentiating them by territory, since there may be divergences in terms of the availability of resources and human, technical or technological equipment, and even in security conditions which hinder data capture. It is also important to stimulate participation in these mechanisms, forging agreements and promoting integration between institutions in order to maximize processes, resources and results.

Table III.3
Advantages and disadvantages of financial coordination mechanisms

Advantages	Disadvantages
They maximize budgets and human, technical and time resources.	They require a high degree of coordination at the national and local levels, in order to include the requirements of the institutions and agencies on the different territorial scales.
They centralize the procurement of supplies, staff hiring, and technical and technological requirements.	They restrict the development of local and territorial institutions, including their personnel.

Source: Prepared by the authors.

4.   National committee on security and criminal justice statistics

The existence of a national committee acting as an advisory body can help steer statistical processes, provide recommendations and generate input to improve the coordination and standardization of processes, while seeking to meet national objectives in security and criminal justice statistics. According to the United Nations (2004), regardless of the degree of centralization of the national statistical service, national statistical councils, committees or commissions may be composed of representatives from the private sector, the academic community or governments and have the following functions:

- Issue recommendations on instruments, processes, methodologies, indicators and protocols for the dissemination of security and criminal justice statistics.

- Defend the national statistical office, protecting it from attacks to which it cannot respond appropriately owing to the restrictions applicable to public officials.

- Safeguard certain fundamental values, such as the protection of privacy.

- Ensure that the security and criminal justice statistical programme maintains the best possible balance between all statistical service stakeholders, between national and regional details, and between reliability and timeliness.

- Support the dialogue with the ministries to enable a group of impartial experts to validate the professional opinion of the chief statistician.

Table III.4
Advantages and disadvantages of national committees on security and criminal justice statistics

Advantages	Disadvantages
They are consultative, independent and apolitical bodies.	As consultative bodies, their decisions are not binding; they act in an advisory capacity.
	Suitable profiles have to be negotiated for their formation, along with precise operating rules with a view to safeguarding legitimacy.
They guarantee the continuity of processes in the long term, independently of the government of the day.	Owing to the plurality of stakeholders, it can be difficult to reach consensus.
They encompass private, public and academic stakeholders, which increases plurality of opinions and technical foundations that improve the processes.	They require strong leadership from the national statistical office in order to maintain coordination.

Source: Prepared by the authors.

5. Decentralized mechanisms

According to United Nations (2004), the more decentralized the security and criminal justice statistical system is, the more important coordination and flexibility will become; so it is important to establish instruments that allow closer interaction, such as:

- Establishment of inter-agency protocols for the collection of inputs, where this stage is considered crucial for the production of statistics.

- Standardization of nomenclatures, analytical processes and dissemination of the statistical system.

- Control of the budgets of statistical agencies or, at least, influence over them.

- Consideration of whether a given agency should undertake data collection and integration activities.

Formal or informal agreements can be promoted to implement these instruments. There may be an informal agreement between several agencies and the coordinating agency (or a separate coordinating body) that enables the agency to implement these instruments; and, in addition, legislative measures, decrees or manuals may be adopted to delimit the responsibilities of the members of the statistical system.

Table III.5
Advantages and disadvantages of decentralized mechanisms

Advantages	Disadvantages
They afford greater autonomy and flexibility to decentralized agencies, allowing them to adapt policies to the specific context.	There may be differences in the decentralized entities' human and technical equipment, which hinders the standardization and comparability of the products.
They enable processes to be implemented more rabidly.	Economic efficiencies can be lost in budgets.

Source: Prepared by the authors.

Good practices

Specialized technical committees on security and justice issues, Mexico[52]

Specialized technical committees are collegiate participation and consultation bodies, created at the behest of the INEGI Board of Governors. They consist of representatives of the State Units and the Institute itself. Their function is to prepare and review the technical standards, guidelines, methodologies and other projects and processes required for inclusion in the National Statistical and Geographical Information System (SNIEG). They also promote their knowledge and application among the units.

These committees may be thematic, special or regional; and they may be either temporary or permanent. In any event, they are composed of the State Units appointed by the Board of Governors following a proposal by the President or the Vice President in charge of the National Information Subsystem, the representatives of social and private institutions designated by the specialized technical committee itself (who may attend them as guests) and a Technical Secretary.

Integrated National System of Criminal Statistics (SIEC), Panama[53]

This is a strategic tool that facilitates decision-making by providing global, accurate and timely knowledge of security problems. It reports to the Ministry of Public Security and functions as an online application that receives the flow of information from partner agencies; processes the data; generates maps that georeference illegal activities; and prepares statistical studies on this subject. It also offers participating agencies the possibility of an alternative source for the constant follow-up of registered cases, protecting the information provided by implementing strict access protocols.

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[52] For further information, see Sistema Nacional de Información Estadística y Geográfica (SNIEG) [online] https://snieg.mx/.
[53] For further information, see Sistema Nacional Integrado de Estadísticas Criminales [online] https://www.siec.gob.pa/.

National Inter-Agency Committee on Crime (CEIC), Peru[54]

Created in 2013, this committee is chaired by INEI. Its objective is to secure reliable and timely statistics on violence and crime, which enable the design of appropriate public policies, with participation by the judiciary, the public prosecution service, the Ministry of the Interior, the Ministry of Justice and Human Rights, the National Police of Peru and the National Prison Institute.

Among its activities, it coordinates the compilation of crime statistics in the country, including statistics on femicides validated by comparing the victims recorded in the records of the National Police of Peru and the Ministry of Women and Vulnerable Populations, with the Registry of Femicides of the public prosecution service. The latter's main input consists of prosecutorial investigations that encompass the characteristics of the victims and perpetrators, along with the facts and the legal status of the event.

Integrated Crime Statistics and Citizen Security System (Data-Crim), Peru[55]

This system aims to contribute to the formulation of public policies that help reduce criminal activity and enable the Peruvian population to exercise their citizenship rights. It appeared as an INEI initiative in 2016, with the objective of designing a system that compiles cartographic information and statistical data on insecurity and on social, economic and demographic conditions in Peru.

The system has a publicly accessible crime map, which contains the most detailed georeferenced information in Latin America (it contains approximately 1 million crime statistics). This information is broken down by crimes, misdemeanours, victims, offenders, household victimization, business victimization, municipal security, money laundering, area under coca leaf cultivation, governance, police units, crime targeting and the international classification of crimes for statistical purposes. It also makes it possible to study the population over 15 years of age that has been victim of a criminal act at the national, departmental, provincial and district levels, and presents heat maps on crimes, with different layers and by poverty groups (high, medium and low) covering different years.

D.   Purpose of security and criminal justice statistics

Information, data and evidence-based knowledge are necessary to detect and anticipate changes in criminal activity and to identify the respective causes and effects. They are also needed to establish efficient ways to invest public resources, adapt strategies and evaluate the impact of policies, plans and projects. However, in recent years the available information has been greatly underused, especially in developing countries. Producing and using information in security and justice issues is a complex challenge, mainly because criminal activity operates clandestinely and under cover; and also because information systems require technical equipment and high-quality technology to capture and process information and for the purpose of generating data and knowledge.

1.   Planning

According to the United Nations Office on Drugs and Crime (UNODC, 2013), strategies, policies, programmes and measures that prevent and control crime must have a broad multidisciplinary knowledge base on crime and its multiple causes and effects. To overcome victimization problems, governments, law enforcement and justice agencies and other actors in systems of security and criminal justice statistics must formulate policies based on conclusive evidence. These have two objectives: first, to make efficient and optimal decisions that optimize resource use and results and ensure long-term sustainability; and second, to generate knowledge and information that allows for the monitoring, evaluation and accountability of the results obtained.

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[54]   For further information, see INEI (2019).
[55]   For further information, see Sistema Integrado de Estadísticas de la Criminalidad y Seguridad Ciudadana (Data-Crim) [online] https://datacrim.inei.gob.pe/.

2. Management

Irrespective of the type of structure in which a country's statistical system is set,[56] it is essential to generate management mechanisms that provide useful and continuous information to institutions, promoting effective and efficient resource management. It is also essential to define roles and functions that avoid duplication of tasks and work overload, and to report on how the human and financial resources allocated to the tasks of public security and the pursuit and administration of justice have been used.

3. Monitoring and evaluation

For monitoring purposes, statistical information provides stakeholders with indicators that represent the development of activities, revealing the state of progress and possible effects, so that adjustments can be made to achieve the initial objectives. The indicators also make it possible to identify the levels of security in a territory, by comparing different time periods and places,[57] in order to account for the effectiveness of the strategies, plans and operations proposed by the security and justice agencies.

However, for evaluation and monitoring to be performed systematically and transparently, systems of security and criminal justice statistics need to be matured by improving the systems for capturing, processing, analysing and disseminating information, so as to produce robust and reliable data.

4. Gender perspective in systems of security and criminal justice statistics

Strengthening national capacity to collect crime statistics from a gender perspective has significant benefits. Crime and criminal justice statistics need to be gender sensitive, because there is conclusive evidence on how men, women and persons of diverse gender identity, as well as different age groups and persons of diverse ethnicity, are affected differently. Identifying possible biases in criminal behaviour and in the functioning of the criminal justice system is a necessary condition for reversing structural gender inequalities.

The available evidence shows that gender-based violence affects women and girls disproportionately. As women and girls represent half of the world's population, adapting crime prevention policies could protect nearly 4 billion people. More effort is required from governments to nurture a system that provides the information needed to overcome the challenges presented by each group according to their particular characteristics.

E. Users of the information

Given the strategic importance of their topics and contents, the data and information disseminated by systems of security and criminal justice statistics are needed by a variety of users, both within and outside the system, who have different purposes and interests. Therefore, information should be prepared for them with different access levels and language, seeking to meet their needs and democratize information, while promoting the design and implementation of public policies, transparency and accountability.

Diagram III.2 displays the users of security and criminal justice statistics, which are divided into three categories, present a systemic approach in their interaction, reinforcing complementarity between the different sources of information: (i) the government, including ministries, security and justice agencies and local or regional governments; (ii) the general public, the press and businesses; and (iii) the academic sector, private institutions and civil society organizations that undertake research activities.

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[56] Centralized, decentralized or mixed.
[57] For example, by using rates that make it possible to compare indicators by year, city or country.

Diagram III.2
Users of security and criminal justice information
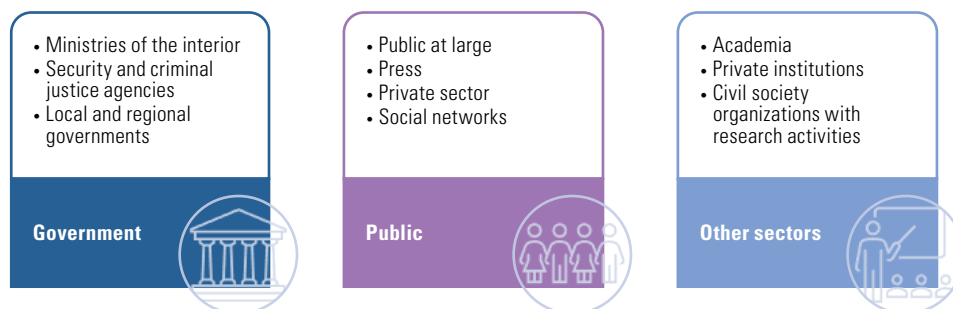
Government	Public	Other sectors
• Ministries of the interior • Security and criminal justice agencies • Local and regional governments	• Public at large • Press • Private sector • Social networks	• Academia • Private institutions • Civil society organizations with research activities

Source: United Nations, "Manual for the development of a system of criminal justice statistics", *Studies in Methods*, series F, No. 89, New York, 2004.

Considering the heterogeneity of users, security and criminal justice statistical systems should:

- Develop versatile programmes that respond to a wide variety of concerns and worries.

- Promote capacity building, training activities and manuals, among other items, to improve understanding of the issues and facilitate access to the information, while ensuring the adaptation to specific objectives and needs of each territory, agency and institution.

- Focus efforts on creating open data platforms that enable the regular capture and integration of data, and their publication.

Good practices

Academic Advisory Council, Mexico[58]

This is a collegiate participation and consultation body that is tasked with providing opinions, recommendations and advice to INEGI, as coordinator of the National System of Statistical and Geographical Information (SNIEG), on matters related to human resource training, research, dissemination and outreach. It consists of the Office of the President, the Office of the Vice-President, the Executive Secretariat and a number of external and internal members such as the Vice-Presidents of the Governing Board and the heads of the General Directorates of Government, Economy and Environment, among other entities.

One of its main functions is to serve as a consultation forum for cooperation between the academic sector and INEGI, formulating opinions and recommendations on activities related to the statistical sector, which strengthen training programmes and improve the technical capabilities of INEGI's civil servants and the State Units that make up the SNIEG.

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[58] For further information, see National Institute of Statistics and Geography (INEGI), "Consejo Consultivo Académico" [online] https://www.inegi.org.mx/inegi/cca/.

Chapter IV

Components of the criminal justice system and their role in the production of statistics

A. Stages of the criminal justice process

Recognizing the different stages of a criminal process makes it possible to identify the different types of data generated by the institutions of the criminal justice system. It also makes it possible to differentiate the actors involved, distinguishing their functions, contributions and needs in the production of statistics. Diagram IV.1 displays the cycle of the criminal justice process, which is divided into four stages, ranging from the filing of the complaint to the execution of sanctions and the reintegration of persons deprived of their freedom.

Diagram IV.1
The criminal justice process

Report	Investigation	Sentencing	Penalty enforcement and reintegration
• The procedural act whereby a person relates, either in writing or verbally, facts potentially constituting a crime to the Public Prosecutor's Office or the police under its direction. The complaint will specify the circumstances of time, manner, place and alleged perpetrators or participants, if known by the complainant. This is inherently informative and is limited to informing the authority responsible for investigating the perpetration of a presumably criminal conduct.	• The objective of investigation is to administer justice through analysis and the application of techniques, methods and procedures supported by various sciences that make it possible to obtain and process information, in order to identify the characteristics of a crime, by collecting evidentiary material to ascertain the ancillary facts.	• The manner in which the State prosecutes a judicial action against a law breaker. This may take various forms, such as the imposition of a fine, restriction on visiting or transiting through certain places, or the deprivation of freedom. The sentence must safeguard the dignity of the sanctioned persons and must therefore be applied in accordance with the provisions of the Constitution of each country, international human rights treaties and local laws.	• The enforcement of penalties and security measures follows from the rulings of the competent courts under national legislation. • Reintegration is the process of social and psychological integration into the social environment, through custodial measures aimed at re-education, and social intervention programmes that prevent law breakers from reoffending.

Source: Prepared by the authors.

B. Systemic approach to the components of the criminal justice process

To the extent that the criminal justice components constitute a system, the outputs of each agency are inputs to another one, giving rise to a systemic approach that facilitates communication and interoperability between institutions. For example, cases that the police refer to a prosecutor should be included in the output statistics of the police and the prosecutor's office. Similarly, cases resolved by the courts should be part of the inputs of the prison system. However, this is limited, since each institution has some degree of independence (United Nations, 2004). Table IV.1 provides a summary of security and criminal justice statistics from a systemic approach.

Table IV.1
Illustrative framework for a systemic approach to criminal justice statistics

Justice component	Type of statistical indicator			
	Input statistics	Process statistics	Input statistics	Resource statistics
Police	- Calls for police service - Criminal incidents reported to police - Suspects - Suspects detained	- Incidents investigated - Officers deployed - Incidents founded	- Crimes cleared by charge - Crimes cleared otherwise - Persons charged - Cases filed with the prosecutor	- Staff complement - Authorized strength - Budget/expenditure
Prosecution	- Person-cases initiated[a] - Charges initiated, differentiating as to whether or not there is recidivism[b]	- Court appearances, by type of court hearing	- Person-cases disposed, by type of disposition - Number of persons convicted	- Number of staff - Authorized strength - Budget/expenditure
Courts	- Person-cases initiated - Charges initiated - Recidivism rate (persons reappearing) - Appeals initiated	- Court appearances - Court hearings - Case elapse time (first appearance to disposition)	- Person-cases disposed, by type of disposition - Sentences, by type of case - Length of sentence, amount of fine, etc.	- Staff complement - Authorized strength - Budget/expenditure - Average cost per trial
Prisons	- Admissions - Parole and probation revocations - Recidivism rate (offenders readmitted)	- Average inmate count (on-register and actual) - Infractions and violations	- Releases by type	- Staff complement - Authorized strength - Prison capacity - Budget/expenditure
Non-custodial	- Admissions - Recidivism rate (offenders readmitted)	- Average offender count - Infractions and violations	- Releases by type	- Staff complement - Authorized strength - Program capacity - Budget/expenditure

Source: United Nations, "Manual for the development of a system of criminal justice statistics", *Studies in Methods*, series F, No. 89, New York, 2004.
[a] A "person-case" comprises all charges against an individual.
[b] "Recidivism" refers to the fact that a person is proven to have committed the same offence or is convicted of an offence similar to one he or she committed previously.

A systemic approach is an indispensable element in preventing crime, delivering justice and strengthening the rule of law. Accordingly, it is necessary to coordinate all relevant institutions and actors from different sectors that produce or use information, in order to ensure that it is generated in an optimal and coordinated manner and with the highest quality standards. Only through a systemic approach can questions such as the following be answered:

- What is the relationship between police forces in different parts of the country?
- What relation exists between the number of police officers and crime?
- How long does the process of reporting a crime take?
- How many people are arrested in a base year and for what offences?
- What percentage of offences result in an arrest?
- How many arrests result in prosecution?

- How many cases culminate in a guilty verdict?

- How many people are subject to some form of custodial supervision?

- What proportion of the population is detained in custody?

- How much does the government spend on security and criminal justice?

- How much does it cost to keep a person in custody, on probation[59] or under house[60] arrest?

- How many people are under house arrest or on probation?

- What are the relations that exist between per capita spending on security and justice and a country's crime rate? And between its per capita spending on justice and its degree of urbanization?

C. Components of the criminal justice process

The following is a description of the different types of institution, their roles in this process and a general characterization, which may not necessarily fit all countries owing to their specific local context, but which represents an approach to each one of them.

1. Public security

The different institutions that make up the public security system seek to preserve freedom, order and peace, safeguard people's rights and integrity, prevent the committing of crimes and develop public security policies, among other functions.[61] They may include hierarchical institutions with different subnational levels and different areas of expertise, such as the following:

- Police force

- Armed forces

- National public security academies

- Ministries of defence

- Public security secretariats.

- Public security councils

Statistical information plays a fundamental role for this type of institution, as it provides inputs for strategic, tactical and operational planning, aimed at reducing victimization and improving security indicators. It also facilitates the monitoring and evaluation of plans, policies and programs, making it possible to identify their progress, effects and results. Table IV.2 shows the type of information and the frequency with which it is generated, as well as the general contents and possibilities for standardization, visualization, analysis, relevance and usefulness.

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[59]   Probation consists of subjecting the convicted person to a regime of conditional liberty, seeking his or her social reintegration through an individualized intervention, under the permanent supervision and guidance of a delegate.

[60]   House arrest allows the individual to serve the sentence in his or her home, or in a place specified by the judge, as long as it does not affect the victim. It is applicable when the convicted party satisfies certain conditions, particularly if the sentence is short (in the case of Colombia no longer than five years, although this varies by country).

[61]   Information obtained from Georgetown University (2008).

Table IV.2
Classification of information by public security institution

Institution	Type of information	Periodicity	General contents	Standardization	Visualization	Analysis	Relevance
Police force	Victimization and coexistence records	Daily	Theft in all forms, robbery in all forms, homicides, injuries and domestic violence, among other crimes. Disaggregated by sex, age, location, etc.	Standardize conventions and results using percentage and absolute rates and values	Dashboards, reports	Operational reports, scientific research	High. Facilitates planning, monitoring and evaluation
	Surveys	Quarterly/ semi-annual/ annual	Perception, security, crime rate, victimization rate, confidence and well-being of members of the police. Disaggregated by gender, age, location, etc. Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms (SDG 16.3.1)	Standardize conventions and both percentage and absolute values	Dashboards, reports	Operational reports, scientific research	High. Facilitates planning, monitoring and evaluation
	Activity and operating results	Daily	Service management, innovations, captures, seizures (weapons, drugs, explosives and other items)	Standardize conventions and both percentage and absolute values	Dashboards, reporting, command and control centres	Operational reports	High. Identifies the effectiveness of the police service and its results
	Identification of risk factors and threats	Quarterly/ semi-annual/ annual	Urban and rural threats and risks, identified through social mapping and work organized with the community	Standardize conventions and both percentage and absolute values	Geographic information system (GIS) file	Operational reports	High. Facilitates planning, monitoring and evaluation, as well as service effectiveness
	Specialized thematic cartography: urban and rural	Daily	Urban and rural threats and risks. Areas of high levels of conflict and victimization	Standardize conventions and both percentage and absolute values	GIS archive	Operational reports	High. Facilitates planning, monitoring and evaluation, as well as service planning
Armed forces	Victimization records	Daily	Confrontations with organized criminal groups, theft in all forms, homicides and injuries, among others	Standardize conventions and both percentage and absolute values	Dashboards, reports	Operational reports, scientific research	High. Facilitates planning, monitoring and evaluation
	Surveys	Quarterly/ semi-annual/ annual	Confidence, well-being of the members of the armed forces and identification of risks	Standardize conventions and both percentage and absolute values	Dashboards, reports.	Operational reports, scientific research	High. Facilitates planning, monitoring and evaluation
	Operational activity	Daily	Service management, innovations, captures, seizures (weapons, drugs, explosives and other items)	Standardize conventions and both percentage and absolute values	Dashboards, reporting, command and control centres	Operational reports	High. Identifies the effectiveness of the armed forces and its results
	Specialized thematic cartography: area, rural, maritime and fluvial	Quarterly/ semi-annual/ annual	Threats, risks and presence of organized criminal gangs in urban and rural zones. Areas of high levels of conflict and victimization	Standardize conventions and both percentage and absolute values	Geographical information system (GIS) file	Operational reports	High. Facilitates planning, monitoring and evaluation

Source: Prepared by the authors.

Good practices

Online Police Statistical System (SEPOL), Honduras[62]

Acting through the Directorate of Planning, Operational Procedures and Continuous Improvement, the National Police of Honduras has a statistics department that compiles data and consolidates information at the national level through SEPOL. It also participates in working groups on criminality, violent deaths and the incidence of crime, among other things, so its contribution facilitates decision-making, both internally and in other civil society institutions responsible for public security.

The Online Police Statistical System provides information on homicides (infographic, annual balance, by department and municipality, daily, monthly and seasonal patterns, cumulative monthly, annual rate); and on crime incidence, municipalities without incidence, registration of deaths, incidence by department and municipality, municipalities with greatest incidence and monthly behaviour, arrests (for domestic violence, intrafamily violence, arrest warrants, drug possession and trafficking, extortion) and seizures (weapons, firearms, prohibited weapons, drugs, vehicles, motorcycles).

2.   Prosecution

According to United Nations (2019), prosecution is the activity carried out by the State to ensure compliance with the law and respect for the rights of citizens, through the investigation of crimes and the exercise of criminal action. Given that access to justice is a basic principle of the rule of law, its delivery must be impartial and non-discriminatory, based on unambiguous principles, procedures and documents that ensure the law is understood by citizens and officials. It is generally composed of the following:[63]

- **Attorney General's Office or Public Prosecution Service:** autonomous and hierarchical agency with exclusive responsibility for directing the investigation of facts constituting a crime and public penal action, and determines the punishable participation or innocence of the accused (UNODC, 2010b).

- **Public defence service:** autonomous agency of the judiciary tasked with guaranteeing full and equal access to justice for persons who, due to their lack of defence or economic, social or cultural situation, cannot afford to hire legal defence services to protect their rights.[64]

- **Private defence attorneys:** legal defence service contracted and paid for by the user for the protection of rights.[65]

The following table summarizes the information collected by the institutions involved in the pursuit of justice and its relevance to the security and justice statistical system:

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[62]   See Sistema Estadístico Policial en Línea (SEPOL) [online] https://www.sepol.hn/index.php.
[63]   Information obtained from Public Prosecutor's Office (2016) and Mexico, Government of (2017b).
[64]   Information obtained from Office of the Ombudsman (2021).
[65]   Information obtained from Office of the Ombudsman (2021).

Table IV.3
Classification of information on security and criminal justice matters by institutions involved in prosecution

Institution	Type of information	Periodicity	General contents	Standardization	Visualization	Analysis	Relevance
Office of the Attorney General or Public Prosecution Service	Case volume data	Daily	- Administrative records on criminal activity - Data on cases handled by the police, the public prosecution service, the courts and prisons - Number of victims of intentional homicide per 100,000 population, by sex and age (indicator 16.1.1)	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports, thematic mapping, etc.	Operational reports, scientific research	High. Facilitates planning, monitoring and evaluation of security and criminal justice agencies
	Data on case characteristics	Daily	- Cases handled by the Police, the public prosecution service, the courts and prisons - Cases associated with non-custodial programmes	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports	Operational reports, scientific research	High. Facilitates the procurement of evidence to support court rulings
	Data on criminal justice resources	Monthly/ quarterly/ semi-annual/ annual	- Number of employees, functions, wage and salary expenses, etc.	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports, thematic mapping, etc.	Operational reports	High. Facilitates the planning, monitoring and evaluation of human and fiscal resources of entities
	Efficiency indicators	Monthly/ quarterly/ semi-annual/ annual	- Police, prosecution service, courts, correctional system, violence prevention and juvenile justice services	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports, thematic mapping, etc.	Operational reports	High. Facilitates programme monitoring and evaluation
Public defence service	Data on case characteristics	Daily	- Administrative records on crime - Case characteristics	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports, thematic mapping, etc.	Operational reports, scientific research	High. Facilitates planning, monitoring and evaluation of security and criminal justice agencies
	Data on criminal justice resources	Monthly/ quarterly/ semi-annual/ annual	- Number of employees, functions, salary and wage expenses, material resource expenses, etc.	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports, thematic mapping, etc.	Operational reports	High. Facilitates planning, monitoring and evaluation of human and fiscal resources of entities
	Efficiency indicators	Monthly/ quarterly/ semi-annual/ annual	- Number of employees, functions, salary and wage expenses, material resource expenses, etc.	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports, thematic mapping, etc.	Operational reports	High. Facilitates planning, monitoring and evaluation
Private defence attorneys	Data on case characteristics	Daily	- Administrative records on crime - Case characteristics	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports, thematic mapping, etc.	Operational reports, scientific research	High. Facilitates planning, monitoring and evaluation of security and criminal justice agencies
	Data on criminal justice resources	Monthly/ quarterly/ semi-annual/ annual	- Number of employees, functions, salary and wage expenses, expenditures on tangible goods, etc.	Standardize conventions and results, using rates and both percentage and absolute values	Dashboards, reports, thematic mapping, etc.	Operational reports.	High. Facilitates the planning, monitoring and evaluation of the entities' human and fiscal resources

Source: Prepared by the authors.

Good practices

Public Prosecution Service, Argentina[66]

The Public Prosecution Service is an independent body within Argentina's justice administration system, headed by the Attorney General. It is tasked with defending the general interests of the nation in matters of security and justice, as enshrined in the Constitution.

As a government body, its purpose is to prosecute crimes and, according to their relevance, to prioritize their follow-up, paying special attention to crimes against life and humanity, drug trafficking, institutional violence, money laundering and theft, among others.

3.   Administration of justice

The court component may range from local courts with limited jurisdiction, to trial courts, appellate courts and courts with specialized jurisdictions, such as those dealing with tax and juvenile cases. It is the courts that determine the sentences or penalties for criminal conduct investigated by the institutions involved in the pursuit of justice. Generally comprising courts of various jurisdictions, justice administration is composed of:

- Sectional Councils of the Judiciary
- Inter-agency Commission of the Judicial Branch
- Sectional Inter-agency Commission
- Executive Directorate of Judicial Administration
- Special jurisdictions: military criminal, indigenous and peace jurisdictions

The process of delivering justice relies on a judge's interpretation of the law as a whole (De los Ríos, 2018). Accordingly, the compilation of objective, standardized security and criminal justice information with high quality standards supports this work by generating empirical data that facilitate the impartial resolution of court cases and give effect to the rights, obligations, guarantees and citizen freedoms pursuant to the Constitution. Table IV.1 shows the type of information, periodicity and general contents, among other aspects, that can be generated by institutions that administer justice, and indicates their relevance for the rest of the security and criminal justice statistical system.

Table IV.4
Classification of information on security and criminal justice by justice institutions

Institution	Type of information	Periodicity	General contents	Standardization	Visualization	Analysis	Relevance
Courts	Information on criminal activity, judges and court reports	Daily/ monthly/ semi-annual	Number of courts, number of judges (authorized and on the bench) by category, number of court officials, total caseload (including criminal cases), cases assigned per judge, percentage of criminal cases disposed of, backlog of cases, appeals, statistics per judge, complaints to judges	Standardize conventions, calculation methodologies and presentation of information in forms and tables	Dashboards, reports	Operational, monitoring and evaluation reports	High. It identifies bottlenecks and inefficiencies in the justice administration process. It also facilitates the planning and evaluation of the courts

Source: Prepared by the authors.

However, on certain occasions, the judicial system may not maintain any statistics at all (UNODC, 2010c). In these cases, it is important to move towards the consolidation of court information systems that have the capacity to collect data on case backlog and workload.

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[66]   For further information, see Public Prosecution Service [online] https://www.mpf.gob.ar/.

Good practices

Judicial Council, Ecuador[67]

The Judicial Council is the government body in charge of the disciplinary administration of the Judiciary in Ecuador. It therefore manages and supervises the other institutions and bodies that administer justice, such as the Constitutional Court, magistrate courts *(juzgados)* and provincial courts. Accordingly, it evaluates judges and civil servants, oversees merit-based competitive processes for the selection of new staff for judicial bodies and imposes sanctions for poor performance by officials.

It has a Subdirectorate of Statistical Information, which is responsible for designing methodologies for the collection and compilation of primary data for jurisdictional and justice system statistics required by the institution. In so doing, it applies a gender, intercultural and disability-sensitive approach, in addition to carrying out computerized processes to extract information based on jurimetrics and georeferencing study systems.

4.   Prison system

According to UNODC (2010d), the prison system is considered the final component of the criminal justice process, where persons convicted of criminal conduct serve their sentences. It generally consists of the following:

- Pre-trial remand facilities

- Prisons for inmates already sentenced

- Remand centres for minors

- Maximum security prisons

- Non-custodial mechanisms for alternative sentencing

Information from the prison system is important because it can provide data and records that are useful both for public policy decision-making and for improving prison operations, resources, services and outcomes (Russo and others, 2020). However, most systems do not view prisons as information processing centres; and, as a result, the potential they can offer on justice, crime and security issues is wasted.

As a result, most prisons do not maintain an organized record of their data or have a thorough understanding of their data needs. To address this situation, the RAND Corporation, in collaboration with the University of Denver,[68] demonstrated that organizational leadership is essential to making prisons data-driven. Leaders of these institutions who choose this approach must understand and commit to a data-driven approach to decision-making. This requires them to develop and nurture an organizational culture that values data, through the necessary investments in staff and technology and the encouragement of information sharing with relevant justice, public health, and social service organizations. Table IV.5 shows the type of information that can be generated by the institutions of the prison system, and indicates its relevance.

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[67]   For further information, see Judicial Council [online] https://www.funcionjudicial.gob.ec/.
[68]   Prison administrators and experts were surveyed, as well as representatives of associations.

Table IV.5
Classification of information on security and criminal justice according to the institutions of the prison system

Institution	Type of information	Periodicity	General contents	Standardization	Visualization	Analysis	Relevance
Prison system	Judicial reports, official statistics and overview of prisons, prison population, human rights, information on alternative dispute resolution methods, information on adolescents	Daily/ monthly/ semi-annual	- Total prison population (number and proportion) - Unsentenced detainees as a proportion of the overall prison population (SDG indicator 16.3.2) - Number of prisons, remand facilities (including for juvenile offenders), women's prisons, etc. - Status of prisons, capacity of the prison system (disaggregated by type), number of guards, by rank, age, gender, etc. - Prison population profile: pretrial detainees, sentences of less than two years, sentences of less than ten years, life sentences (if applicable in the country), number of men, women, minors, foreign nationals, etc. - Crimes: classify the prison population by crimes committed (violent, non-violent, drugs, terrorism, others)	Standardize conventions, calculation methodologies and presentation of information in forms and tables	Dashboards, reports	Operational, monitoring and evaluation reports	High. Identifies and monitors the functioning of the system, facilitating the collection of information to gauge the effectiveness of prisons and establish improvements that facilitate resolution and reintegration, as well as a better management of human rights

Source: Prepared by the authors.

Good practices

Prison Statistics, Plurinational State of Bolivia[69]

The prison statistics registry has collected annual information from 2006 to 2019, in order to consolidate the prison regime information system, aimed at the social and labour reintegration of persons held in custody. The registry aims to improve the living conditions of persons deprived of their freedom within the framework of human rights and current regulations.

The following dimensions were taken into account for the study and its subsequent report: prison population by department, sex, age group, nationality, type of crime, legal status, child population living with their parents in prisons, number of prisons, type of prison, foreign prison population, population deprived of freedom, incarceration rate per 100,000 inhabitants, prison capacity and prison overcrowding.

National Census of the Federal Penitentiary System (CNSPEF), Mexico[70]

This census is the second statistical programme developed on the issue by INEGI. Its purpose is to generate statistical and geographical information on the management and performance of the Federal Penitentiary System (federal prisons), particularly with regard to the functions of government and the prison system. The aim is to link this information with government work in the phases of design, implementation, monitoring and evaluation of public policies of national scope in the aforementioned topics of national interest.

National System of Statistics on the Execution of Sentences (SNEEP), Argentina[71]

The National System of Statistics on the Execution of Sentences collects data every year on the prison population and detention centres throughout the country. Its main objective is to systemize and analyse periodic information on prison matters, based on a census carried out every year in all detention units. It is the country's official prison statistic (Law No. 25.266) and has been carried out continuously since 2002. It is published annually through reports for each jurisdiction, and the freely accessible database is kept up to date.

[69]   For further information, see National Institute of Statistics (INE), "Registros administrativos" [online] https://www.ine.gob.bo/index.php/registros-administrativos seguridad/.
[70]   For further information, see INEGI (2019).
[71]   For further information, see Ministry of Justice and Human Rights (2021).

Some amendments have been made to the data collection instrument with regard to the gender variable (expansion) and the crimes charged (expansion). It is worth noting the decision to unify criteria on gender variables in all statistical systems of the Directorate (and of the Ministry of Security), in order to adapt this category to legislative standards and international treaties.

5.   Other key stakeholders

In addition to the security and justice agencies, other actors participate in the criminal justice process, both formally and informally, providing or complementing information, analysing it or disseminating it to the community. These institutions interact periodically and tangentially, providing data from sectors such as the following:

- Health: traffic accidents, injuries, domestic violence, poisoning and assaults.
- Legal or forensic medicine: violent deaths or deaths from external causes, such as suicides, traffic accidents or accidental death.
- Security: observatories on citizen security, homicides, thefts, threats, antisocial acts and victimization in general.
- Financial system: financial institutions, insurance companies, and tax and customs authorities.
- Armed conflict: victims, human rights, resolution or aspects of armed conflict.

Table IV.6 presents the type of information, periodicity and general contents that can be generated by other relevant actors and its relevance for the rest of the security and criminal justice statistical system.

Table IV.6
Classification of information on security and criminal justice matters according to the other relevant actors

Institution	Type of information	Periodicity	General contents	Standardization	Visualization	Analysis	Relevance
Health	- Records of violence, accidents or deaths reported to the health system	Daily	- Traffic accidents, injuries, domestic violence, poisonings and assaults - Disaggregated by gender, age, location, etc.	Standardize conventions, calculation methodologies and presentation of information in forms, tables and thematic cartography	Dashboards, reports	- Operational, monitoring and evaluation reports - Academic research	- High. Complements the monitoring and evaluation of security strategies and plans
Legal medicine	- Records of deaths due to external causes	Daily	- Deaths, suicides, traffic or accidental accidents - Discriminate by sex, age, location, etc.	Standardize conventions, calculation methodologies and presentation of information in forms, tables and thematic cartography	Dashboards, reports	- Operational, monitoring and evaluation reports - Academic research	- High. Complements the monitoring and evaluation of security strategies and plans
Security	- Victimization records and surveys - Processed information	Daily	- Homicides, thefts, robberies (including aggravated robberies), threats, acts contrary to coexistence and victimization in general - Disaggregated by gender, age, location, etc. - Surveys of security perception and victimization	Standardize conventions, calculation methodologies and presentation of information in forms, tables and thematic cartography	Dashboards, reports	- Operational, monitoring and evaluation reports - Academic research	- High. Complements the monitoring and evaluation of security strategies and plans - Facilitates the dissemination of information to the community

Table IV.6 (concluded)

Institution	Type of information	Periodicity	General contents	Standardization	Visualization	Analysis	Relevance
Financial system	- Records of financial crimes, occurring in virtual environments	Daily	- Financial crime, insurance, money laundering, tax authorities, tax authorities, etc.	Standardize conventions, calculation methodologies and presentation of information in forms, tables and thematic cartography	Dashboards, reports	- Operational, monitoring and evaluation reports - Academic research	- High. Supports the management, monitoring and evaluation of tax, cyber and smuggling crimes
Armed conflict	- Armed conflict-related information records - Systemization of qualitative information on experiences related to the conflict, including interviews and focus groups, among others	Monthly/ Quarterly/ semi-annual	- Victims, human rights, conflict resolution or aspects of the armed conflict - Disaggregated by gender, age, location, etc.	Standardize conventions, calculation methodologies and presentation of information in forms, tables and thematic cartography	Dashboards, reports	- Operational, monitoring and evaluation reports - Academic research	- High. Provides inputs for analysing and assessing armed conflict and rural and transnational violence - Generates information to support the armed forces, victims' groups and the public

Source: Prepared by the authors.

Good practices

National Institute of Legal Medicine and Forensic Sciences, Colombia[72]

The National Institute of Legal Medicine and Forensic Sciences is a public scientific-technical agency, which directs and controls the system of legal medicine and forensic sciences in Colombia. It offers forensic services to the community and justice administration based on scientific research and the suitability of human talent within a framework of quality, impartiality, competitiveness and respect for human dignity.

Its functions consist of providing medical and forensic services requested by prosecutors, judges, the police or the ombudsperson's office; developing assistance and advisory functions to resolve legal medicine consultations; and acting as a verification and control body for expert evidence and forensic examinations performed in judicial cases and cases involving civil servants, among others. It also serves as a source of information on public security issues by through the statistical publication "Forensis", which compiles data on the behaviour of externally caused injuries, through descriptive analysis and takes into account temporal, demographic, social and mode variables. Through annual historical data collected from 1999 to 2019, it compiles cases of homicides, suicides, accidental deaths, interpersonal violence, domestic violence, deaths and injuries in traffic accidents, legal medicine examinations in sexual crimes, accidental injuries and missing persons throughout the Colombian territory.

Health Care Benefits Information System, Colombia[73]

This is minimum and basic dataset required by the General System of Social Security in Health of Colombia for processes of management, regulation and control, and as a support for the sale of the service. Its purpose is to facilitate commercial relations between the management entities (payers) and the institutions and independent professionals (providers), through the presentation of details of the invoice for the sale of services on magnetic media. Its standardized structure facilitates communication and data transfer and account review processes, irrespective of the IT solutions used by each provider.

The system makes it possible to formulate public policies, evaluate service coverage, allocate resources, establish regulatory mechanisms, and obtain national data on morbidity and mortality. Its uses include comparing cases of violence against women, injuries and attempted homicides.

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[72]   For further information, see National Institute of Legal Medicine and Forensic Sciences [online] https://www.medicinalegal.gov.co/.
[73]   For further information, see Ministry of Health and Social Protection (2015).

National Institute of Forensic Sciences (INACIF), Guatemala[74]

The institute is tasked with providing forensic scientific research services based on both science and art, and with issuing expert opinions useful to the justice system, through legal medicine studies and scientific-technical analysis, in accordance with the principles of objectivity and transparency. Created in 2006 as a result of the need to unify and strengthen expert forensic services in Guatemala, the institute has functional autonomy and guarantees the impartiality and reliability of the technical investigation, thus contributing to the justice system. It also provides a nationwide database on causes of death broken down by five-year age groups and gender, from 2008 to 2020, on a daily, monthly and annual basis.

Women Observatory, Guatemala[75]

This observatory contributes to the promotion of women's human rights and the improvement of their access to justice. It also supports social monitoring that allows for greater transparency in criminal prosecution processes. It seeks to provide a mechanism that systemizes and supports the actions undertaken by the Office of the Public Prosecutor of Guatemala, seeking to address and investigate cases of gender violence processed by the Office of the Prosecutor for Women's, the Office of the Prosecutor for the Crime of Femicide and the Office of the Prosecutor for Children and Adolescents.

It has a centralized portal that has been collecting data on gender violence since 2019, as well as statistics on reports of sexual assault,[76] rape, other sexual crimes, femicide and violent deaths and cases of violence against women and abuse against children and adolescents.

Inter-American Security Observatory (OAS)[77]

The Organization of American States (OAS) has produced a map of security and justice observatories in the region, classifying them into those that are attached to security institutions, those that form part of civil society and those that are mixed. The observatory's main objective is to collect annual data on the incidence of reported crimes and the functioning of criminal justice systems, in order to improve the analysis and dissemination of such information globally, in collaboration with UNODC, which produces the annual United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, as mandated by the Economic and Social Council of the United Nations.

The data provide an overview of trends and interrelationships between different parts of the criminal justice system in order to promote decision-making in government administration, both nationally and internationally. This information is aligned with the International Classification of Crime for Statistical Purposes to enable countries to report data for the SDG indicators, for which UNODC is the custodian by virtue of the appointment by the Inter-Agency and Expert Group appointed by the United Nations Statistical Commission.

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[74]   For further information, see National Institute of Forensic Sciences (INACIF) [online] https://www.inacif.gob.gt/.
[75]   For further information, see Women Observatory [online] http://observatorio.mp.gob.gt/.
[76]   They create a response path (*ruta de atención*) for each type of crime. In the case of a sexual assault or rape, upon receiving the call or complaint, they register the information and arrange for a patrol to go to the crime site; support is provided to the victim and the aggressor is arrested (*flagrante delicto*). The victim is taken to a hospital and her condition is assessed. All of this occurs within a maximum of 72 hours; when the crime report has been generated, support is provided, and the case is followed up with the Prosecutor's Office.
[77]   For further information, see Inter-American Security Observatory [online] http://www.oas.org/ios/default.aspx?lang=en.

D.   Challenges for systems of security and criminal justice statistics

1.   Traceability of information

In criminal matters, the traceability of information is important because it allows justice operators to know the full origin and purpose of the complaint; that is, each complaint or case, identified with a unique code, must be susceptible to examination throughout the process, from the filing of the complaint at the police station to the offender's detention in a prison.

This interoperability and the use of technology promote interaction between the institutions of the criminal justice and public security system, to provide standardized, timely, consistent and quality statistics. In this way, they contribute to the design of appropriate public policies and programmes on crime and insecurity.

Statistical information is a fundamental tool for strategic and operational planning, which must be targeted on reducing crime and victimization, and on improving indicators. It also contributes to the evaluation of plans, policies and programmes to be implemented.

In the current global situation, where economic transactions through the Internet have become more prevalent, and where young people, adolescents and children have greater access to social networks, cybercrime needs to be studied. As noted above, this is a type of crime that crosses borders, so it is important to respond to the challenge of demonstrating these new criminal conducts.

2.   Use of technology and artificial intelligence to produce information on the criminal justice process

One of the most important inputs enabling different institutions and actors to produce information is technology. According to the Institute for Comparative Studies in Criminal and Social Sciences and the Justice Studies Center of the Americas (INECIP/JSCA, 2012), as a result of a set of factors that go beyond the purely judicial domain, the use of technological tools and artificial intelligence has increased enormously in the last decade in Latin American countries, both in the private sector and in public institutions. This is due to the important role played by technologies in making the collection, production and analysis of information more efficient, and in simplifying processes, reducing costs, achieving greater proximity to citizens and increasing dissemination. However, Leslie (2019) argues that the use of technologies must involve a series of ethical considerations, values, principles and practices that promote transparency, security and accountability, since, like any new and rapidly evolving element, there will be a learning curve where mistakes will be made, in both calculation and processes, which will produce unforeseen or harmful impacts.

To minimize these impacts, manage them responsibly, and direct the development of AI systems towards maximum public benefit, ethical and safety considerations must be taken into account. Artificial intelligence ethics consists of a set of values, principles and techniques that employ widely accepted standards of right and wrong to guide moral conduct in its development. It thus seeks to maintain a culture of accountability, in addition to deploying a governance structure that adopts ethically sound practices in all phases of innovation and implementation. In this sense, all projects should be:

- **Ethically permissible:** they must take account of their effects on the welfare of all involved.

- **Fair and non-discriminatory:** they must take account of possible discriminatory effects on certain individuals or social groups, and mitigate possible biases and equity issues.

- **Justifiable:** they must prioritize transparency in the processes and the interpretation of conducts and decisions.

- **Worthy of public confidence:** they must demonstrate the certainty, accuracy and robustness of the results.

- **Respectable, connected and protected:** they should aim to provide a frame of reference that takes account of the social perspective and ethical impacts of the project, and adequately establish criteria for evaluation and permissibility.

- **Equitable, sustainable and transparent:** they must provide the practical and moral tools that people need, ensuring that the project mitigates biases of non-discrimination and fairness, as well as safeguarding public confidence in the project's capacity.

- **Subject to governance, process-based:** they should operationalize or combine the "SUM values" and actionable principles throughout the AI project, to ensure transparency in the design and implementation processes and to justify the outputs obtained.

(a) Technical aspects of the design, implementation and selection of interpretable artificial intelligence systems

- Consider AI systems as mathematical models that perform stepwise calculations, transforming sets of independent inputs into statistical outputs, based on probability theory and logical validation with rigorous methodology.

- The logical and formal explanation of AI systems can be seen as a "glass box", where transparency is the formal explanation of the results.

- The semantic explanation provides an interpretation of the functions of the individual parts of the algorithmic system in generating the outputs. It helps in understanding the purpose of procedures and rules when creating maps of system inputs and outputs, in other words the role that computational models play in determining certain results.

(b) Guidelines for designing and implementing a sufficiently interpretable artificial intelligence system

- Consider the context, potential impact, and need for the specific domain when determining project interpretability requirements.

- Apply standard interpreting techniques where possible.

- Consider transparency as foundational; if it is decided to omit this, the corresponding impacts and risks must be taken into account; and supplementary interpretation tools must be provided to guarantee an appropriate level of semantic explanation.

- Consider interpretability in terms of human comprehensibility.

3.   New criminal conducts: cybercrime

It is also crucial to have statistical systems in place to monitor the occurrence of emerging crimes, such as information technology crime or cybercrime, mindful that the range of crimes that can be committed using technology and the Internet is ever-changing, both in terms of technological change and in terms of social interaction with new technologies (Clough, 2012). However, many governments are not yet in a position to collect information on this phenomenon systematically, nor to disseminate consistent metrics on the magnitude and cost of cybercrime.

There are numerous measurement challenges to be considered when formulating a system to help generate reliable and timely data to understand and combat this phenomenon. The most important include the following:

(i)   Lack of a cybersecurity culture and awareness among individuals, businesses and organizations. This results in a low rate of reporting by victims.

(ii) In several countries, the lack of legislation defining cybercrime or protecting its victims means that cybercrime is not recorded in any statistics, and victims cannot obtain justice.

(iii) Even in countries where legislation exists, security and investigative staff are not trained or qualified to deal with cybercrime. Furthermore, the changing nature of the crime outpaces legislative progress in the area, again resulting in underreporting.

(iv) Perpetrators may be located outside the geographic-political jurisdiction of the competent authorities, which poses a challenge when considering whether or not to count an incident in national registries and their investigation of it.

Uncounted and unrecorded cybercrime continues to have a major impact on victims, the economy and society. It is essential to establish mechanisms to understand its effects by adopting data collection tools adapted to this reality for example, by conducting victimization surveys that include the measurement of cybercrime, and by adapting administrative data collection mechanisms to be able to detect crimes of this type. When creating or improving a system, it is necessary to consider reforming the data collection system to make cybercrime visible.

Lastly, the transnational nature of cybercrime and the interdependence of systems and digital devices connected to the Internet within countries and beyond, requires statistical information on cybercrime to be exchanged across borders. The creation of strategic alliances for data exchange, research and analysis will allow for the development of a system that more accurately reflects the current crime landscape.
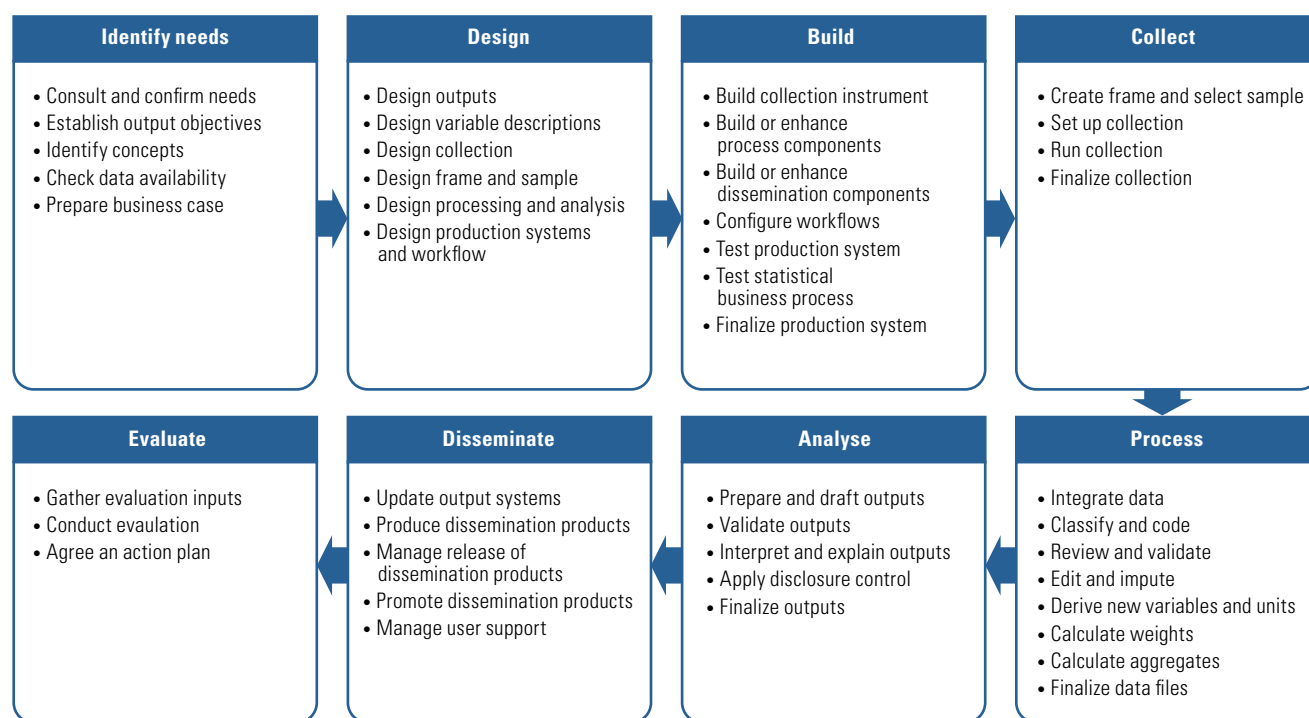
Chapter V

Cross-cutting methodological and technical issues

A. Statistical production

Statistical production can be understood as consisting of eight phases, which are not necessarily linear or have a fixed structure but may even run simultaneously (see diagram V.1).[78]

Diagram V.1
Generic model of statistical processes

Identify needs	Design	Build	Collect
• Consult and confirm needs • Establish output objectives • Identify concepts • Check data availability • Prepare business case	• Design outputs • Design variable descriptions • Design collection • Design frame and sample • Design processing and analysis • Design production systems and workflow	• Build collection instrument • Build or enhance process components • Build or enhance dissemination components • Configure workflows • Test production system • Test statistical business process • Finalize production system	• Create frame and select sample • Set up collection • Run collection • Finalize collection

Evaluate	Disseminate	Analyse	Process
• Gather evaluation inputs • Conduct evauation • Agree an action plan	• Update output systems • Produce dissemination products • Manage release of dissemination products • Promote dissemination products • Manage user support	• Prepare and draft outputs • Validate outputs • Interpret and explain outputs • Apply disclosure control • Finalize outputs	• Integrate data • Classify and code • Review and validate • Edit and impute • Derive new variables and units • Calculate weights • Calculate aggregates • Finalize data files

Source: Economic Commission for Europe (UNECE), Generic Statistical Business Process Model (GSBPM) (version 5.0) [online] https://statswiki.unece.org/display/GSBPM/GSBPM+v5.0.

The technical and methodological processes involves in statistical production are designed to be implemented or applied to obtain consistent and quality figures. This needs appropriate planning, instrument design, information integration, analysis and dissemination of results.

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[78] The information presented synthesizes different stages of production in different countries of the region. However, the main stages of development depend on the official guidelines in each country, since their agencies in charge of producing statistical indicators already work with a regulation that, although following a similar macrostructure, shows slight variations in the development processes.

When information is analysed in a cross-cutting manner, more elements are available to obtain reliable and comparable results, since different characteristics or variables can be observed and analysed at a single point in time.

Statistical production requires standardized concepts, definitions, classifications and methodologies, in order to harmonize the statistics and guarantee the quality, consistency and comparability of the data in question. Accordingly, the International Classification of Crime for Statistical Purposes should be adopted, as a tool that provides a common conceptual framework for systematically producing and comparing statistical information from different criminal justice institutions. National and international production standards should also be deployed to safeguard the quality, transparency and credibility of the information.

B. Standardization of information

1. International Classification of Crime for Statistical Purposes

The standardization of concepts, definitions, classifications and methodologies is essential for statistical harmonization, standardization, comparability and uniformity, to ensure quality, consistency and efficiency,[79] without altering the legal definition of individual criminal offences. To this end, several countries in the region have started to adopt the International Classification of Crime for Statistical Purposes, thereby making it feasible to compare information from different data producers at the national level. To facilitate this process, it is important to involve the governing bodies as a reference in statistical production.

2. Other classifications

The use of other classifications, such as the International Classification of Diseases,[80] and also conventions, protocols and covenants, can complement statistics on security and criminal justice, allowing for the identification of other criminal conducts and the possible effects of crime in different sectors such as the economy, the labour market, education, health, mobility, the environment and human rights. To this end, and in order to safeguard the quality, transparency and credibility of the information, statistical production standards must be followed, and the same measurement scale and time frame must be used.[81] To ensure these objectives are achieved, it is advisable to provide intensive and continuous training to those responsible for managing or collecting data or inputs related to the production of statistics.

3. Counting rules

Given that different types of crime require specific counting rules, to ensure that the overall panorama of crime incidence is not lost when analysing aggregate data, it is recommended to employ counting techniques that accurately quantify events. For example, crimes against the State or against public order that do not have a specific victim are often not routinely recorded as crimes. To avoid this, police and investigative bodies should be trained in data recording and protection techniques, without relying on operational pressures or performance appraisals. In addition, it is recommended to include data quality audit or assessment processes, command and control systems, support from specialized authorities and linkage with IT systems (Home Office of the United Kingdom, 2020).

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[79]   These issues are the subject of principle 9 of the United Nations Fundamental Principles of Official Statistics: "The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels".
[80]   See WHO (2019).
[81]   At the national, state or municipal level, for example.

Diagram V.2
Phases of statistical production

Classification	• At the time of reporting, data should be recorded pursuant to the counting rule. If there is doubt about the crime to be recorded, follow the balance of probabilities test. In the event of error, reclassify.
Elimination of registered offences	• If additional truthful information is available, the record is found to be duplicated, an error is detected, self-defence is claimed or it is from another jurisdiction.
Crime per victim	• If a household is a victim, the crime should be recorded only once for one person, except in the case of homicide. If a person is the victim of more than one crime, these should be counted separately.
Rules for completed incidents	• If an incident involves a sequence of crimes involving the same criminal and victim, these should be counted as a single offence if they are reported at the same time. If the crimes resume after being recorded, they should be recorded separately.
Most serious offense rule	• If the sequence of crimes in an incident contains more than one crime, the most serious crime will be recorded if it involves the same victim and the same aggressor, so the most serious violent crime will be prioritized. However, it would be best to count all crimes that have occurred.
Location of the crime	• The crime scene will be registered according to the location of the suspect at the time of the incident, to have geographic information about the incident. It is advisable to classify the sites by type of location and thus be able to identify the highest-risk locations.
Registration results	• Murder: homicide, manslaughter, infanticide, traffic accident, causing or permitting the death of a vulnerable person. • Rape: assault, incitement, threat, deception or sexual activity with minors or persons with mental disorders.
Other investigating authorities	• The police will take precedence when investigating and recording the crime. However, if other authorities are involved, the most powerful agency will take the lead in the investigation and will be responsible for recording the crime, although this depends on the regulatory guidelines prevailing in each country.

Source: Prepared by the authors, on the basis of Home Office of the United Kingdom, "Home Office statistical work programme 2020 to 2021", 2020 [online] https://www.gov.uk/government/publications/home-office-statistical-work-programme--2020-to--2021/home-office-statistical-work-programme--2020-to--2021.

4. Georeferencing

Georeferencing is key to performing in-depth and detailed analyses. According to Weisburd and McEwen (2015), georeferencing makes it possible to demonstrate the spatial distribution of variables related to crime, to analyse spatial agglomerations and autocorrelations, their dispersion, and the social conditions in which they are immersed. Map V.1 presents cartography that is recommended for crime analysis, which takes behavioural,[82] cognitive or perceptual processes as a starting point.[83]

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[82] This shows where criminal events have occurred in the territory.
[83] This reveals how users of the space perceive insecurity or social unrest in the territories.

Map V.1
Colombia: cartography recommended for crime analysis: quantiles, heat maps and spatial
autocorrelations of homicides in Cali, 2018
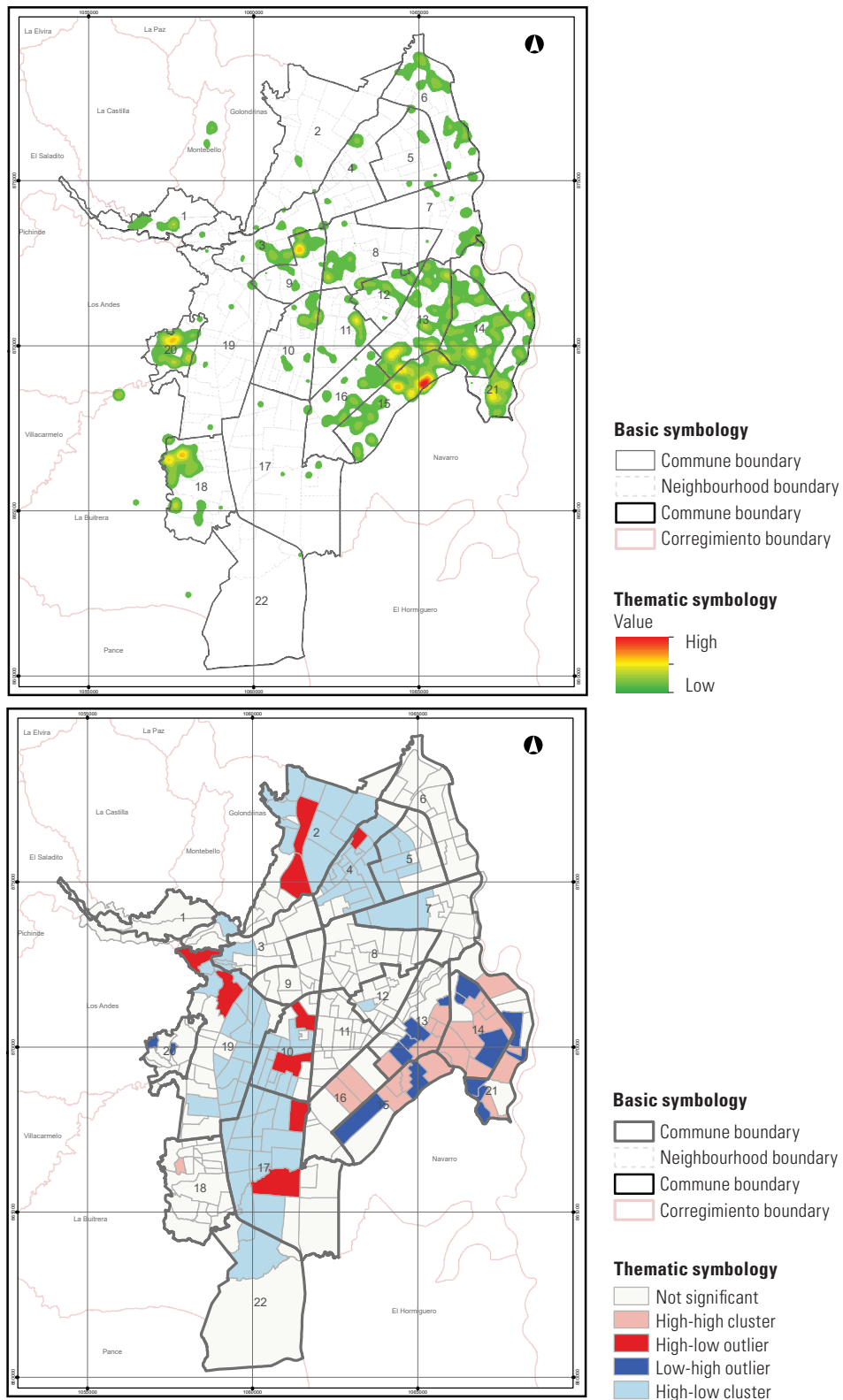
Source: Prepared by the authors, on the basis of Cali Security Observatory.
Note: The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

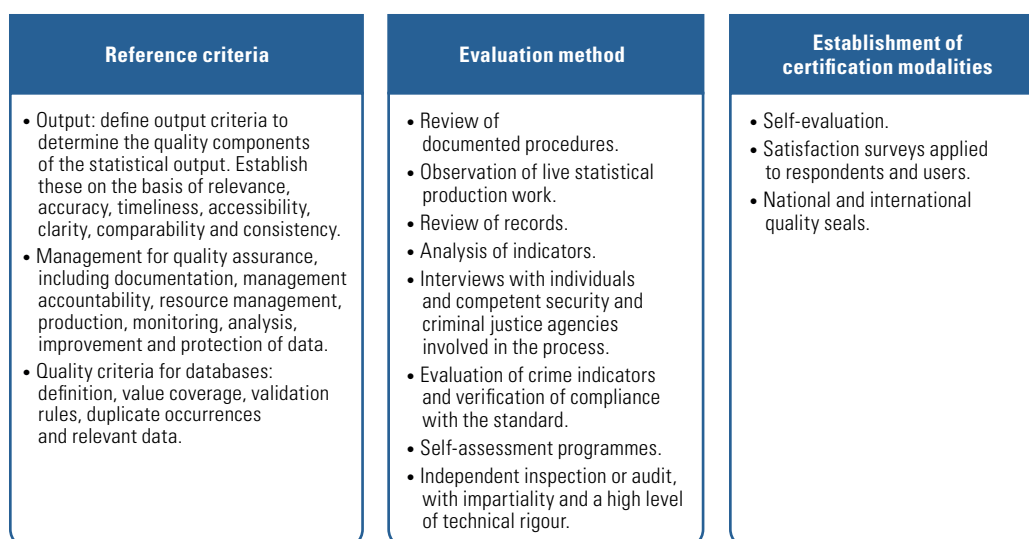These maps identify critical crime zones (or hot spots that generate heat maps), crime trends in space and time, and risk factors and threats, through which crime prevention and control measures can be targeted. Similarly, the displacement of criminal variables can be evaluated, and the effectiveness of policies and plans in the intervened sectors can be analysed.

5. Information quality control

To ensure the quality, relevance and credibility of security and justice statistical products, it is important that systems of security and criminal justice statistics adhere to the United Nations Fundamental Principles of Official Statistics.[84] It is also essential to have technical standards and regulations in place to enable the statistical authority in each country to periodically assess the aforementioned issues. [85] Diagram V.3 displays three fundamental aspects that need to be taken into account for this purpose:

Diagram V.3
Fundamental aspects to ensure the quality of statistical information on security and criminal justice

Reference criteria	Evaluation method	Establishment of certification modalities
• Output: define output criteria to determine the quality components of the statistical output. Establish these on the basis of relevance, accuracy, timeliness, accessibility, clarity, comparability and consistency. • Management for quality assurance, including documentation, management accountability, resource management, production, monitoring, analysis, improvement and protection of data. • Quality criteria for databases: definition, value coverage, validation rules, duplicate occurrences and relevant data.	• Review of documented procedures. • Observation of live statistical production work. • Review of records. • Analysis of indicators. • Interviews with individuals and competent security and criminal justice agencies involved in the process. • Evaluation of crime indicators and verification of compliance with the standard. • Self-assessment programmes. • Independent inspection or audit, with impartiality and a high level of technical rigour.	• Self-evaluation. • Satisfaction surveys applied to respondents and users. • National and international quality seals.

Source: Prepared by the authors on the basis of United Nations, "Manual for the development of a system of criminal justice statistics", *Studies in methods,* Series F, No. 89, New York, 2004.

C. Use of statistics

1. Systems interoperability

Systems interoperability is essential for optimizing information exchange between all statistical processes (ECLAC, 2019c). To this end, the Global Partnership for Sustainable Development (González Morales and Orrell, 2018) recommends that the set of institutional processes for producing official statistics should have a legal framework and harmonized terminology to facilitate dialogue between different institutions, following a continuous cycle of eight phases (see diagram V.4).[86]
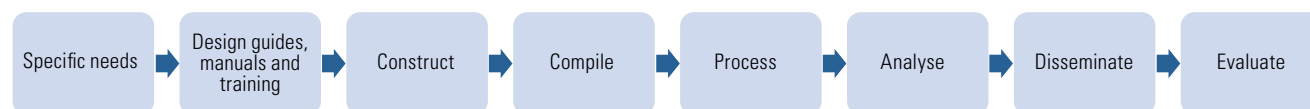
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[84] The United Nations Fundamental Principles of Official Statistics relate to the following: (1) relevance, impartiality and equal access; (2) professional standards, scientific principles and professional ethics; (3) accountability and transparency; (4) prevention of misuse; (5) sources of official statistics; (6) confidentiality; (7) legislation; (8) national coordination; (9) use of international standards; (10) international cooperation. (United Nations, 2014).

[85] Although different national and international certification bodies may be involved in the statistical quality assessment.

[86] United Nations (2020) recommends the specialist guide on interoperability titled *Data Interoperability: A Practitioner's Guide to Joining Up Data in the Development Sector*.

Diagram V.4
Model for achieving system interoperability

| Specific needs | Design guides, manuals and training | Construct | Compile | Process | Analyse | Disseminate | Evaluate |

Source: Prepared by the authors, on the basis of L. González Morales and T. Orrell, *Data Interoperability: A practitioner's guide to joining up data in the development sector*, Global Partnership for Sustainable Development Data, 2018 [online] https://www.data4sdgs.org/resources/interoperability-practitioners-guide-joining-data-development-sector.

The first three phases, and the eighth, are classified as change work and are responsible for planning and promoting the technological infrastructure for the other phases to transform the data inputs into statistics that are fit-for-purpose.[87] Phases 4 to 7 are classified as continuous work and are responsible for breaking down the processes into smaller, interconnected components that receive data inputs in the statistical production chain (González Morales and Orrell, 2018).

2. Disaggregation

Disaggregations make it possible to put into practice the premise of the 2030 Agenda for Sustainable Development to leave no one behind, as they shed light on the characteristics of groups and their differences. Different dimensions must be taken into account for disaggregation, for example by sex, age or disability. It is also important to categorize these dimensions, for example by male or female, age group, and even create multidimensional disaggregations, such as older persons with chronic illnesses or victims of domestic violence.

3. Access to microdata

Providing access to security and criminal justice microdata through open access formats will foster greater trust and engagement with respondents, by enabling them to learn about criminal behaviour and the main threats of interest to them. It also stimulates the production of academic or specialized research to analyse crime.

It is advisable to encourage the use of platforms that facilitate access to real-time data, such as dashboards, with interactive maps, statistical indicators and comparative graphs that show crime trends in time and space, with filters for relevant variables. In addition, in the case of open access data, personal information must be made anonymous, respecting the respondents' right to privacy and the ethical commitments of the institutions that collect the information in question. In any event, microdata should be used for statistical purposes and not to implement targeted policies or specific measures that may harm specific groups of the reporting population.

4. Research

The development of academic or specialized research aimed at understanding crime and measuring the effects of public policies, security plans and strategies will add value and purpose to security and criminal justice data. The study of the economics of crime, pioneered by Gary Becker in 1968 and refined over the ensuing decades, has emphasized the importance of reliable, evidence-generating data for use in decision making, ranging from economic to social and environmental impacts. This research, which may use descriptive, epidemiological, econometric or other analytical techniques, can inform the design of a specific public policy and determine its effect on crime trends, or to perform a comparative analysis to establish baselines and develop future prospects, among other purposes. However, it is important to complement this with qualitative analyses that provide a more thorough understanding of the criminal context.

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[87] These phases can help to identify practices that facilitate data interoperability, steering them towards common statistical production processes at the national and international levels with a view to reaching a wider public.

In addition to sharing information through open data portals, it is recommended to establish agreements with specialized research and academic institutions so research findings can be shared and used to guide public policies on security and crime prevention more effectively.

5.   Confidentiality of information

Maintaining the confidentiality of the data collected is crucial for ensuring respect for respondents, not violating their rights and preserving their privacy[88] and confidentiality,[89] and protecting them from possible harm, whether psychological or physical. With a view to safeguarding respondents' privacy, UCI (2021) recommends defining the limits within which people are willing to share information, based on the cultural norms and age of the population groups to be interviewed. It also recommends clearly explaining the purpose of the research to the respondents or interviewees and requesting their consent to make use of their data.[90] Lastly, with regard to confidentiality, it is advisable to minimize the need to obtain and record individually identifiable information by gathering data anonymously.

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[88]   Privacy refers to an individual's right to decide the time, depth and circumstances in which they choose to provide information. This affects how the evaluator obtains the data so the interviewee's boundaries are not violated. Strategies need to be put in place that allow access to information or contact with participants.

[89]   Confidentiality relates to how the information provided by respondents is treated. There should be a process of informed consent, informing the respondent of the precautions that will be taken to protect the confidentiality of the data and who (individuals or organizations) will have access to the data.

[90]   When specifying data collection methods, researchers should be guided by the following questions: Would the subjects feel comfortable giving information in this way? Would the subjects have any expectation of privacy regarding the subject under study? Will the researcher have to collect information from a third party if the subject of interest is unable to provide the information? If so, is informed consent from this third party necessary?

Chapter VI

Implementation path

A. International cooperation

Establishing technical and financial assistance agreements with different international institutions and cooperating agencies will facilitate implementation of the recommendations made in this document, allowing sustainability over time. In particular, the Regional Collaborative Platform (RCP) for Latin America and the Caribbean[91] brings together all United Nations development entities working in the region to jointly respond to the challenges of implementing the 2030 Agenda for Sustainable Development; and it addresses key challenges that transcend country borders. The platform is currently prioritizing joint efforts in seven domains, including criminality and violence, as well as gender and youth as cross-cutting themes.

Building the technical capacity of the staff of national statistical offices and security and justice institutions to coordinate and improve data design, capture, purging, analysis and visualization will make it possible to generate more reliable and comparable information, useful for public policy decision-making and the formulation of strategies for reducing all types of violence and crime. In addition, financial resources can drive the acquisition of strategic assets, such as specialized software and hardware to analyse large volumes of data, producing real-time information and leveraging AI and new technologies.

B. Partnerships with the private sector and academia

The promotion of partnerships between the Government and academia will help develop greater technical capacities among local teams. This will make it easier to build the knowledge, skills and capacities needed to implement the recommendations of this document. In addition, it will allow for greater and better use of data and information, facilitating analyses and research to deepen studies on the dynamics of crime and the effectiveness of measures to address it. At the same time, interaction with the private sector will facilitate the dissemination of evidence on which to base decisions aimed at reducing threats and risks, in conjunction with the authorities. Such partnerships can also support governments with technical or financial assistance, so that their teams can have the resources needed to fulfil their functions under optimal conditions.

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[91] For further information, see United Nations (2021).

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