ANNEX 1. DRAFT ARTICLES FOR THE COLOMBIAN NATIONAL DEVELOPMENT PLAN

Warning: Unofficial translation

Article 160. NATIONAL STATISTICAL SYSTEM. The National Statistical System, hereinafter NSS is hereby created, with the purpose of providing the society and the state with national and territorial official statistics of quality, in a coordinated manner between the producing entities and with common language and procedures, respectful of international statistical standards, which contribute to the transparency, relevance, interoperability, access, timeliness and consistency of the statistics produced in the country.

The NSS shall consist of the entities that produce and disseminate statistics or are responsible for administrative records, as follows:

- 1. Belonging to the branches of government, at all levels of the state structure, whether central or decentralized either by services or territorially; at the national, departmental, municipal and district levels.
- 2. The state bodies, agencies or entities that are independent or autonomous of control.
- 3. The legal persons, public or private, who provide public services.
- 4. Any legal person or legal person division performing public service or of public authority.
- 5. Legal persons that own produce or administer administrative records in the development of their corporate purpose or mission, which are inputs necessary for the production of official statistics.

The National Administrative Department of Statistics (DANE) shall be the lead agency and therefore the coordinator and regulator of the NSS. DANE shall establish the conditions and characteristics to be met by official statistics in Colombia, respecting the international standards used by the entities producing statistics. Such conditions and characteristics shall be recorded in the National Statistical Plan, which shall be agreed upon by all the members of the NSS.

Paragraph 1: The members of the NSS shall implement the guidelines, best practices, standards and technical standards set forth by DANE supported on international benchmarks, for the production and dissemination of official statistics and for the statistical use of administrative records. In order to ensure the quality of official statistics, in accordance with the regulations issued by the national government, the members of the NSS shall meet the obligations deriving from the assessments and statistical quality requirements established by DANE, or from the assessments performed by international organizations.

Paragraph 2: For the production and dissemination of official statistics, and in compliance with Act 1266 of 2008 and Act 1712 of 2014, the members of the NSS shall make available to DANE, immediately and free of charge, the full databases of the administrative records, which are requested by DANE, for which effect the statutory reserve shall not be effective. DANE shall guarantee the reserve and confidentiality of the information in accordance with Article 5 of Act 79 of 1993.

Paragraph 3: The NSS shall have a five-year National Statistical Plan that shall be formulated by DANE jointly with all the members of the NSS, and subject to approval by the National Advisory Council for Statistics, referred to in Paragraph 5 of this Article. The strategies and actions set forth in the National Statistical Plan shall be of mandatory compliance by the members of the NSS.

Paragraph 4: With no prejudice to what was established in Paragraph 2 of this Article and in order to contribute to the strengthening of the quality and consistency of official statistics, the members of the NSS shall exchange statistical information, up to the level of microdata, free of charge and in a timely manner, according to the regulations issued by the national government for that effect. The requirements of exchange of information up to the level of microdata shall be agreed upon in the National Statistical Plan or by means of the National Advisory Council for Statistics referred to in this Article. The entities that take part in the exchange of information shall safeguard the confidentiality and privacy thereof.

Paragraph 5: The National Advisory Council for Statistics is hereby created as a body of an advisory nature, with the purpose of promoting and facilitating the coordination of the NSS. The National Government shall regulate the composition and operation of this Council in which the state bodies, agencies or entities, that are independent or autonomous of control should be represented

Article 161: CENSUS. The National Administrative Department of Statistics - DANE - will conduct the XVIII National Population and VII Housing Census in the year 2016.

An inter-census count of population will be carried out five (5) years after the population and housing census was conducted for the monitoring and follow-up of the demographic dynamics and the update and maintenance of both the National Geo-statistical Framework and the population projections.

NATIONAL ADMINISTRATIVE DEPARTMENT OF STATISTICS

DECREE No. 1743

NOV. 1, 2016

Whereby Article 160 of Law 1753 of 2015 is regulated and Title 3 is added to part 2 of book 2 of Decree 1170 of 2015 Single Decree of the Administrative Sector of Statistical Information

THE MINISTER OF AGRICULTURE AND RURAL DEVELOPMENT OF THE REPUBLIC OF COLOMBIA, DELEGATEE OF PRESIDENTIAL FUNCTIONS, BY MEANS OF DECREE No. 1720 OF 2016

In use of his constitutional powers, and in particular those provided for in sub-section 11 of Article 189 of the Political Constitution and Article 43 of Law 489 of 1998, and

CONSIDERING:

That by means of Law 1753 of June 9, 2015, the Congress of the Republic issued the National Development Plan 2014 - 2018 "Todos por un nuevo país"¹.

That Article 43 of Law 489 of 1998 establishes that the National Government may organize national administrative systems in order to coordinate state and private activities, and that for this purpose it shall provide for the bodies or entities responsible to develop the management, programming, execution and evaluation activities.

That Article 160 of the National Development Plan created the National Statistical System (NSS) and designated the National Administrative Department of Statistics (DANE) as the governing body and therefore coordinator and regulator of the NSS; Likewise, in order to promote and facilitate the coordination and exchange of information for statistical purposes, it created the National Advisory Council of Statistics as a body of an advisory nature.

That such article establishes that it is the responsibility of the National Government to regulate aspects related to the operation of the NSS, in order to fulfill the objective of providing the society and the State with quality official national and regional statistics, by virtue of the standards contained in Article 160.

That, in accordance with the above, it becomes necessary to regulate Article 160 of Law 1753 of 2015.

DECREES:

Article 1. Be it that Title 3 is added to part 2 of book 2 of Decree 1170 of 2015 Single Decree of the Administrative Sector of Statistical Information, in the following terms:

¹ All for a new country

Title 3 National Statistical System

Chapter 1. Organization of the national statistical system

Article 2.2.3.1.1. Definitions. For the purposes of this Decree the following definitions are adopted:

Statistical process: The systematic set of activities aiming toward the production of statistics, including, among others, the detection of needs, the design, collection, processing, analysis and dissemination.

Statistical operation: The application of a statistical process on an object of study that leads to the production of statistical information.

Statistical information: The set of results and the documentation that supports them, which are obtained from statistical operations and which describe or express characteristics with respect to an element, phenomenon or object of study.

National Statistical System: The coordinated set of components, which in an organized and systematic manner, ensures the production and dissemination of official statistics at the national and regional level required by the country. Its components are the entities or organizations that integrate it, users, processes and technical instruments for the coordination, policies, principles, sources of information, technological infrastructure and human talent.

Official statistics: Statistics produced and disseminated by the entities that make up the National Statistical System (NSS), which allow knowing the economic, demographic, environmental and social situation at the national and regional levels to be taken into account for decision-making and that meet the conditions and characteristics established in Article 2.2.3.2.1 of this Decree.

Administrative Record: A set of data that contains information collected and kept by entities or organizations in the fulfillment of their mission-related functions or competencies.

Statistical register: A database resulting from the transformation or integration of one or more administrative records that are prepared to satisfy statistical needs.

Anonymisation of microdata: A technical process that consists of transforming the individual data of the observation units, so that it is not possible to identify the subjects or individual characteristics of the source of information, thus preserving the statistical properties in the results.

Microdata: Each element of the data with respect to the characteristics of the units of study of a population (individuals, households and establishments, among others) that are consolidated in a database.

Article 2.2.3.1.2. Objectives of the national statistical system (NSS). In the development of Article 160 of Law 1753 of 2015, the NSS shall have the following objectives:

- 1. To ensure the production and dissemination of official statistics in accordance with internationally accepted standards.
- 2. To promote knowledge, access and use of official statistics as well as the associated information.
- 3. To foster the strengthening as well as the extensive and intensive use of administrative records as a source for the production of official statistics and the improvement of their quality and consistency.
- 4. To foster innovation in the production and dissemination of official statistics and in the statistical use of administrative records in the country.
- 5. To promote, among the members of the NSS, the access to and use of microdata for the production and dissemination of official statistics, and for the strengthening of the quality and consistency thereof.
- 6. To foster the integration of statistical frameworks and geo-spatial information in the production and dissemination of official statistics.
- 7. To promote the timely dissemination of official statistics.
- 8. To foster the preservation of official statistical series and of associated databases.
- 9. To promote the coordination and cooperation among the members of the NSS and with international organizations for the production and dissemination of official statistics, the statistical use of administrative records as well as to facilitate the exchange of statistical information, including at the micro-data level.
- 10. To foster the cooperation among the members of the NSS in the design and development of methodologies and the integration and interoperability mechanisms for the exchange of information, which contribute to the generation of official statistics and to the strengthening of the quality and consistency thereof.

Article 2.2.3.1.3. National Advisory Council of Statistics (CANE). The National Advisory Council of Statistics shall consist of:

- 1. The Minister of Finance and Public Credit or a deputy minister duly delegated;
- 2. The General Manager of the Central Bank or a deputy manager duly delegated;
- 3. The Director of the National Planning Department or the Deputy Director of Sectors or the Deputy Director of Territories and Public Investment, duly delegated by the former;
- 4. The Director of the National Administrative Department of Statistics;

- 5. The National Registrar or a Delegate Registrar duly delegated for this purpose;
- 6. A Governor delegated by the National Federation of Departments;
- 7. A mayor delegated by the Colombian Association of Capital Cities;
- 8. The Executive Director of the Colombian Observatory of Science and Technology;
- 9. The Accountant general;
- 10. A representative of the universities elected by the other members of the National Advisory Council of Statistics (CANE), of a group of three sent by the Colombian Association of Universities (ASCUN);
- 11. A delegate of the Trade Council.

The National Advisory Council of Statistics (CANE) will meet at least twice a year or extraordinarily when required, it will be chaired by whoever is established in its regulations and DANE will exercise the role of Technical Secretary.

Paragraph. The National Advisory Council of Statistics (CANE) may invite to its meetings representatives from both the public and private sectors, when their presence is required, who will have a voice and will be able to present the aspects that they consider relevant regarding the topics to be discussed. Likewise, the Council may set up technical working groups when they are required for the production and dissemination of official statistics.

Article 2.2.3.1.4. Functions of the CANE. The following are functions of the Council:

- 1. To issue general guidelines for the preparation of the National Statistical Plan and approve said Plan and its modifications.
- 2. To issue technical opinions with respect to the National Code of Good Practices for official statistics.
- 3. To Issue guidelines that facilitate the coordination between members of the NSS and compliance with their obligations in accordance with Article 160 of Law 1753 of 2015.
- 4. To promote in the National Statistical System the efficiency, coherence and comparability in the production and dissemination of official statistics as well as the statistical use of administrative records.
- 5. To issue recommendations on the requirements that will be part of the quality assessments of official statistics.
- 6. To agree upon the exchange of information at the microdata level in accordance with the provisions set forth in paragraph 4 of Article 160 of Law 1753 of 2015.

Paragraph. The National Advisory Council of Statistics (CANE) will issue its own regulations.

Article 2.2.3.1.5. Technical Statistical Committee. The National Advisory Council of Statistics (CANE) shall have a Statistical Technical Committee whose function will be to prepare and review the different issues that will be presented to the Council.

It shall consist of one delegate from each of one of the entities that are part of the Council.

Article 2.2.3.1.6. Obligations of the members of the national statistical system (NSS)

The members of the NSS shall:

- 1. Participate in the formulation processes of national statistical plans.
- 2. Implement the strategies and actions established in the National Statistical Plan.
- 3. Comply with the principles and good practices, in accordance with Articles 2.2.3.2.2 and 2.2.3.2.3 of this Decree.
- 4. Ensure the production and timely dissemination of official statistics, as well as the maintenance of administrative records in the area of competence of the entities responsible for them and in accordance with the National Statistical Plan.
- 5. Prepare and develop in coordination with DANE, the diagnoses and plans to strengthen administrative records that will be transformed into statistical records or have potential statistical use. The foregoing shall not imply modifications to the primary purpose of the Administrative record.
- 6. Make available to DANE, free of charge, the complete databases, with a detailed description of their characteristics and fields, of the administrative records that are requested by DANE for the production and dissemination of statistics, for which the legal reserve would be exercisable in accordance with the terms set forth in Article 27 of Law 1437 of 2011 and paragraph two of Article 160 of Law 1753 of 2015. In any case, DANE shall guarantee the reserve and confidentiality of the information when it is of a reserved nature, as well as the terms provided for in Titles II, III and IV of Law 1266 of 2008, Law 1581 of 2012 and Law 1712 of 2014.
- 7. Implement the guidelines, good practices, norms and technical standards defined by DANE, supported in international benchmarks, for the production and dissemination of statistics and for the statistical use of administrative records in order to ensure the quality of official statistics.
- 8. Document and disseminate the methodologies used for the generation of official statistics according to the guidelines established for this purpose.
- 9. Meet the obligations stemming from the evaluations and quality requirements established for the NSS and the Annual Statistical Quality Evaluation Plan in accordance with Article 2.2.3.2.6 of this Decree.
- 10. Share statistical information that is required for the production and dissemination of official statistics and for the permanent updating of the national geo-statistics

framework.

- 11. Submit to the National Advisory Council of Statistics, through its Technical Secretariat, the requirements for the exchange of information at the microdata level in accordance with Article 2.2.3.3.4 of this Decree.
- 12. To summons DANE, in its capacity as the governing and coordinating body of the NSS, when commissions, committees, working groups or other inter-institutional scenarios for technical agreement, involving any aspect of the production and dissemination of statistics, in order to promote the coordination and the application of statistical guidelines.
- 13. Delegate an area or division as the official interlocutor of the entity with the NSS, in charge of interacting with DANE for the execution of the activities required to fulfill the objectives of the National Statistical System.

Article 2.2.3.1.7. Functions of DANE as the governing body of the NSS. In its capacity as the governing body of the NSS, DANE, an entity with professional independence, shall perform the following functions with respect to the NSS according to Article 160 of Law 1753 of 2015:

- 1. To formulate the National Statistical Plan, in coordination with the members of the NSS, and submit it to the National Advisory Council of Statistics for approval.
- 2. To follow up on the execution of the National Statistical Plan and the implementation of guidelines, norms, technical standards and good statistical practices and report annually to the National Advisory Council of Statistics.
- 3. To prepare the National Code of Good Practice for Official Statistics and issue it per the prior opinion of the National Advisory Council of Statistics.
- 4. To develop, in coordination with entities of the NSS, diagnoses and strengthening plans with respect to administrative records for their statistical use.
- 5. To formulate, in coordination with the members of the NSS, strategies for innovation in the development of administrative records and in the production and dissemination of the official statistics required in the country that will be part of the National Statistical Plan.
- 6. To define the guidelines, norms and technical standards for the production and dissemination of official statistics and for the statistical use of administrative records, taking into account international benchmarks. DANE may request comments and suggestions from CANE on guidelines, norms and technical standards.
- 7. To advise members of the NSS in the implementation of guidelines, norms and technical standards for the production and dissemination of official statistics and for the statistical use of administrative records.
- 8. To develop and disseminate the Annual Quality Evaluation Plan for Statistics.

- 9. To establish and make available to the general public the National Geo-Statistical Framework for the production and dissemination of official statistics.
- 10. To create coordination scenarios such as national and regional inter-institutional statistical working groups in order to coordinate the actions that the members of the NSS develop for the fulfillment of their obligations.
- 11. To take part in the inter-institutional scenarios where statistical matters of the national level are discussed.

CHAPTER 2

Pertaining to the production and dissemination of official statistics

Article 2.2.3.2.1. Conditions and characteristics of official statistics. In development of Article 160 of Law 1753 of 2015 and within the framework of the National Statistical System, Official Statistics shall meet the following requirements:

- 1. That the statistical operation that generates the official statistics is incorporated in the National Statistical Plan.
- 2. That the statistical operation that generates the official statistics has passed the statistical quality evaluation established for the NSS.

Paragraph. When available, official statistics shall be of mandatory use by government entities in documents pertaining to policy, plans, programs, and projects as well as for the transmission of information of the country to international organizations. The foregoing, without prejudice to the provisions of regulations of a special nature governing aspects related to official statistics.

Article 2.2.3.2.2. Principles governing official statistics. Be it that the Fundamental Principles of Official Statistics issued by the United Nations Organization and their updates are adopted.

Article 2.2.3.2.3. Good practices for the production of statistics. DANE, per the prior opinion of the National Advisory Council of Statistics, shall issue the National Code of Good Practices for Official Statistics applicable to the production and dissemination of official statistics.

Article 2.2.3.2.4. National Statistical Plan. The national statistical plan shall be the document that establishes the strategic guidelines and actions for the development of the statistical production and dissemination taking into account the information needs of the country, including differential approaches. The Plan will include the provision of statistical operations, demand for information, information exchange requirements between the members of the NSS and strategies with respect to the results of the statistical operations.

Article 2.2.3.2.5. Evaluation of the quality of statistics. DANE shall establish, upon submission to the National Advisory Council of Statistics, the requirements for the quality evaluation of the statistics, which will be oriented exclusively to the statistical process.

Moreover, DANE shall establish the methodology for evaluating the quality of statistics, which shall be transparent, objective and impartial. The methodology shall always include the opinion of a commission of independent experts. DANE may request comments and suggestions on the evaluation methodology to the CANE.

In no case shall the evaluation of the quality of statistics interfere in the purposes for which the statistical operation was created nor shall it alter the data obtained by the members of the NSS in the statistical processes that they develop.

Paragraph One. The evaluation of the quality of the statistics shall include the diagnosis of the administrative record when it is used as a source for their production.

Paragraph Two. Statistical operations performed in the country only once prior to the date of issuance of this decree, for a specific purpose and whose results remain inputs for Public Policies, shall be considered to be official statistics. In the event that the Statistical Operation is to be performed again, its status as Official Statistics shall be maintained provided that it meets the conditions indicated in sub-sections 1 and 2 of Article 2.2.3.2.1 of this decree.

Transitory paragraph. As long as the requirements of the quality evaluation of statistics are presented to the National Advisory Council of Statistics, DANE shall continue to apply those established in accordance with the current methodology.

Article 2.2.3.2.6. Annual plan for the evaluation of the quality of statistics. DANE shall formulate the Annual Plan of Evaluation of the Quality of Statistics, in which the statistical operations, including those produced by DANE, shall be defined, whose process will be evaluated in the following term. The entities responsible for statistical operations that are included in the Annual Evaluation Plan shall be informed once such Plan is formulated and issued.

Article 2.2.3.2.7. Costs of quality evaluation of statistics. The cost of the evaluations included in the Annual Statistical Quality Evaluation Plan shall be defined and published by DANE and assumed by each entity charged to its budget; the foregoing in order to comply with the obligation established in paragraph one of Article 160 of Law 1753 of 2015, according to which the members of the NSS "will meet the obligations derived from the evaluations and statistical quality requirements established by DANE".

CHAPTER 3

Administrative records and exchange of statistical information

Article 2.2.3.3.1. Access to administrative records: DANE may request of the members of the NSS the administrative records required for the production of the official statistics or the strengthening of the quality and consistency thereof. Such request shall contain at least the variables, period and associated documentation required and the purpose for which the information will be used.

The databases of administrative records statistically enriched by DANE, may be returned by the latter to the responsible entity or administrator of the former, with the restrictions provided for in the law, if the responsible or administrator so requests.

Article 2.2.3.3.2. Making statistical records available. The databases of the statistical records produced by DANE, resulting from the use or integration of administrative records, which by their nature do not have any type of reserve, may be disseminated by the latter. In the event in which they are reserved, DANE may make them available to the public after anonymization, from transformed databases that preserve the same characteristics as the originals.

Paragraph. DANE will prepare a report with respect to the publication of the databases of administrative records that it has used statistically. This report shall be brought to the attention of those responsible or administrators of said databases.

Article 2.2.3.3.3. Exchange of statistical information: The exchange of statistical information between members of the NSS shall be carried out in accordance with the provisions set forth in Article 227 of Law 1450 of 2011 amended by Article 159 of Law 1753 of 2015 and pursuant to Article 45 of Law 1753 of 2015.

Article 2.2.3.3.4. Exchange of statistical information at the microdata level. In the case of confidential statistical information at the microdata level, and provided that the purpose of the exchange is the production of official statistics and / or the strengthening of the quality and coherence thereof, the exchange request shall be submitted by the member of the NSS to DANE, who will take it to the National Advisory Council of Statistics for enquiry. The application shall contain the following:

- 1. The detail on the statistical information required.
- 2. The need for which statistical information is required.
- 3. The mechanisms available to the requesting party in order to safeguard the confidentiality and reserve of information.
- 4. The benefits of the project where the information will be used for the statistical development of the country.

For the agreement, the National Advisory Council of Statistics shall analyze the need supporting the request, the mechanisms of the requesting party to safeguard the confidentiality and reserve of information and the benefits of the project where the information will be used for the statistical development of the country. The National Advisory Council of Statistics shall determine the procedure for processing and agreeing upon the exchange of information, which shall be part of its regulations.

When the request of exchange obeys to a recurrent need of the requesting entity, once the exchange of information is agreed upon in the National Advisory Council of Statistics, the exchange can be done from that point on without having to submit a new request.

The members of the NSS who have access to the statistical information referred to in this article are responsible for safeguarding the confidentiality and reserve thereof and ensuring the use that was agreed upon in the National Advisory Council of Statistics, subject to legal action as appropriate.

Paragraph. DANE may establish alternative models of access to the data to be exchanged when they are in the custody or administration of a private entity.

Article 2.2.3.3.5. Confidentiality. The entities that make up the NSS, as well as their public servants and other natural or legal persons who participate in the production and dissemination of official statistics, access information or participate in the exchange of information, shall keep the confidentiality of the data that allows the identification and / or spatial location of the sources, where they were collected exclusively for the production of official statistics and for statistical purposes; subject to legal action as appropriate.

Paragraph. DANE shall submit, for recommendations of the National Advisory Council of Statistics, the guidelines for the safeguarding of confidentiality and the reserve of information to be implemented by all the entities of the NSS.

Article 2.2.3.3.6. Transitory one. The first National Statistical Plan referred to in paragraph three of Article 160 of Law 1753 of 2015 shall be prepared and issued in a term no longer than 6 months as of the publication of this decree.

Article 2.2.3.3.7. Transitory two: As of the issuance of the first National Statistical Plan referred to in the previous article, official statistics will be considered those that comply with the requirement established in sub-section 1 of Article 2.2.3.2.1. As of the issuance of the second National Statistical Plan, Article 2.2.3.2.1 shall apply in its entirety.

Article 2.2.3.3.8. Field of application. The provisions contained in this title apply to the members of the NSS defined in Article 160 of Law 1753 of 2015.

Article 2. Repeal. The present decree repeats the sub-section g of Article 2 and sub-section 6 of Article 6 of Decree 262 of 2004, Chapter 2 of Title 1 of Part 2 of Book 2 of Decree 1170 of 2015, Single Regulatory Decree of the Administrative Sector of Statistical Information.

Article 3. Term. This Decree governs from the date of its publication.

BE IT HEREBY PUBLISHED AND EXECUTED

Given in Bogotá on the day 1st of November, 2016

THE TECHNICAL VICE-MINISTER OF THE MINISTRY OF FINANCE AND PUBLIC CREDIT, IN CHARGE OF THE FUNCTIONS OF THE MINISTRY OF FINANCE AND PUBLIC CREDIT

ANDRÉS ESCOBAR ARANGO

THE DIRECTOR OF THE NATIONAL PLANNING DEPARTMENT

SIMÓN GAVIRIA MUÑOZ

THE DIRECTOR OF THE ADMINISTRATIVE DEPARTMENT OF PUBLIC SERVICE

LILIANA CABALLERO DURÁN

THE DIRECTOR OF THE ADMINISTRATIVE DEPARTMENT OF STATISTICS

MAURICIO PERFETTI DEL CORRAL

NATIONAL ADMINISTRATIVE DEPARTMENT OF STATISTICS

RESOLUTION No. 1418 OF 2017

(AUG. 14, 2017)

Whereby the *Technical Standard for the Quality of the Statistical Process: Quality requirements for the generation of statistics* is issued, in compliance with Article 160 of Law 1753 of 2015 and Article 2.2.3.2.5 of Decree 1743 of 2016

THE DIRECTOR OF THE NATIONAL ADMINISTRATIVE DEPARTMENT OF STATISTICS- DANE

In the exercise of his constitutional and legal powers, and in particular those conferred by Article 160 of Law 1753 of 2015, Article 6 of Decree 262 of 2004 and Articles 2.2.3.2.1, 2.2.3.2.5 and 2.2.3.2.6 of Decree 1743 of 2016 and

CONSIDERING:

That Article 160 of Law 1753 of 2015 created the National Statistical System (NSS) with the purpose of providing to society and the State, in a coordinated manner among the producing entities, official national and regional statistics of quality, with common languages and procedures that are consistent with international statistical standards, which contribute to the transparency, relevance, interoperability, access, timeliness and consistency of the statistics produced in the country.

That sub-section 14 of Article 6 of Decree 262 of 2004 establishes that it is a function of the Director's office of the National Administrative Department of Statistics - DANE, to "Define and certify the basic official information that needs to be generated at the national, sectoral and regional level."

That Article 2.2.3.2.1 of Decree 1743 of 2016 defined that Official Statistics must meet the following requirements: 1. That the statistical operation that generates it is incorporated in the National Statistical Plan; and 2. That the statistical operation that generates it has passed the evaluation of the statistical quality established for the NSS.

That Article 2.2.3.2.5 of Decree 1743 of 2016 defined that DANE shall establish, upon presentation to the National Statistical Advisory Council, the quality evaluation requirements of the statistics, which shall be exclusively oriented to the statistical process.

That Article 2.2.3.2.6. of Decree 1743 of 2016 established that DANE shall formulate the Annual Plan of Evaluation of the Quality of Statistics, in which the

statistical operations, including those produced by DANE, shall be defined, whose process shall be evaluated in the following term.

That according to the terms established in Section 3, Article 2.2.1.7.3.2. of Decree 1595 of August 5, 2015, which establishes the rules pertaining to the National Quality Subsystem; "The technical standardization shall be further performed by: (...) 2. The remaining governmental entities that have standardization functions, in accordance with their legal regime".

In a like manner, the aforementioned decree establishes in its Article 2.2.1.7.3.5: "Agreements for the development of the standardization activity: In the development of <u>agreements entered into between the national standardization</u> <u>body</u> or the sectoral standardization units and government entities, <u>whose</u> <u>purpose is the preparation</u> of Colombian technical standards, sectoral technical standards, technical guidelines, available normative specifications or any other normative document, the national standardization body or sectoral standardization units, as appropriate, <u>shall establish</u>, in each case, the <u>mechanisms with the contracting government entities</u> that facilitate <u>public access</u> to the full content of the documents <u>produced</u>."

That according to the above, the draft document *Technical Standard for the Quality of the Statistical Process: Quality requirements for the generation of statistics* was presented to the members of the NSS for public consultation on the DANE website between May 02 and 31, 2017 and in three face-to-face sessions on May 9, 16 and 23, 2017.

That the draft document *Technical Standard for the Quality of the Statistical Process: Quality requirements for the generation of statistics,* was presented to the National Statistical Advisory Council for comments and suggestions on June 16, 2017.

Now, therefore;

RESOLVES:

ARTICLE ONE. STANDARDIZATION OF THE STATISTICAL PROCESS. DANE issues the *Technical Standard for the Quality of the Statistical Process. Quality requirements for the generation of statistics* NTC PE1000: 2017, as the technical standard that it will use as of 2018 to perform the evaluation of the statistical process with respect to the statistical operations defined in the Annual Plan of Evaluation of Quality of Statistics. This document is an integral part of this resolution.

PARAGRAPH: The Technical Standard for the Quality of the Statistical Process: Quality Requirements for the generation of statistics NTC PE 1000: 2017, is available on the DANE website www.dane.gov.co, on the link of the National Statistical System.

ARTICLE TWO. PURPOSE AND FIELD OF APPLICATION OF THE TECHNICAL STANDARD. The *Technical Standard for the Quality of the Statistical Process: Quality requirements for the generation of statistics* NTC PE1000: 2017 aims to establish the requirements to be met by the entities that are members of the NSS that produce and disseminate statistics in accordance with paragraph 1 of Article 160 of Law 1753 of 2015.

ARTICLE THREE. OBLIGATORY NATURE OF IMPLEMENTATION. The entities that make up the National Statistical System (NSS) that produce and disseminate statistics, in accordance with paragraph 1 of Article 160 of Law 1753 of 2015, shall implement the *Technical Standard for the Quality of the Statistical Process: Quality requirements for the generation of statistics* NTC PE1000: 2017.

ARTICLE FOUR. The Statistical Regulation, Planning, Standardization and Normalization division (DIRPEN) of DANE is responsible for reviewing, updating and issuing clarifications with respect to the *Technical Standard for the Quality of the Statistical Process: Quality requirements for the generation of statistics* NTC PE1000: 2017 and, therefore, will be the party to provide guidelines, or explanatory notes pertaining to the requirements listed therein.

ARTICLE FIVE. TERM AND DEROGATIONS: This Resolution governs as of the date of its issuance and repeals the other rules that are contrary to it.

BE IT HEREBY PUBLISHED AND EXECUTED

Given in Bogotá on the day 14th of August, 2017

MAURICIO PERFETTI DEL CORRAL DANE Director

Prepared and reviewed by: Ana Paola Gómez - Technical Director DIRPEN Approved by: CJalvarezB- Chief Legal Advisory Office



NATIONAL Statistical Plan • 2017 - 2022 •

Document Approved and Issued by the

NATIONAL ADVISORY COUNCIL OF STATISTICS

April 27, 2017

Bogotá D.C., 2017

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DANE, ENTE RECTOR DEL SEN





MAURICIO PERFETTI DEL CORRAL

Director National Administrative Department of Statistics Coordinator and Regulator of the National Statistical System

It is a source of great pride for me that as of this day, and for the first time, Colombia has a National Statistical Plan (PEN *for its acronym in Spanish*). This document sets out the roadmap that we will follow from the National Statistical System during the next five years.

With this Plan, we are laying the foundations for Colombia to make a great leap towards the modernization, the inclusion and the construction of a more

equitable country. With the National Statistical System and the Statistical Plan we contribute with a firm step towards the conformation of a modern state.

The PEN also presents us with a first path to identify what statistical information of the country needs to be maintained and what information we need to produce in order to better understand the reality of the country, ensuring the fulfillment of international commitments: the Sustainable Development Goals - SDGs and the requirements of the Organization for Economic Cooperation and Development (OCDE), to name but a few.

Moreover, we must continue to work to maintain and secure the production and dissemination of official statistics through innovative and inclusive processes.

The monitoring and implementation of the PEN will be a fundamental task of DANE, because its results will ensure the achievement of the goals that Colombia has set. The National Advisory Council of Statistics is the body that will foster the members of the NSS to carry out the actions established therein and work together in a coordinated manner.

The Plan represents a challenge for our National Statistical System and it is also an opportunity for public and private entities at all territorial levels to work jointly with the overriding purpose of "ensuring that during the next five years the country maintains and increases the supply of official statistics to know its economic, sociodemographic and environmental reality, based on the coordination between the members of the NSS".

It is why I would like to end with a famous African proverb that captures very closely my feeling with respect to the NSS "If you want to go fast, go alone. If you want to go far, go together", with the NSS, we want to go far!

Kind regards

** Illegible signature **









ANDRES ESCOBAR ARANGO

Technical Vice-Minister of the Ministry of Finance and Public Credit Delegated Chairman, National Advisory Council of Statistics- 2017

Consolidating and strengthening the National Statistical System (NSS) represents a great challenge for Colombia. Reliable and transparent statistics allow us to make accurate decisions for the national reality.

Being part of this system implies responsibilities for the public and private entities that comprise it. Implementing good practices in the production and dissemination of official statistics ensures desired levels of quality in information, which is a public good.

Having official statistics does not only mean generating and disseminating

information; its relevance allows a better understanding of reality. The issuance of the first National Statistical Plan (PEN) stems from this reflection.

This plan sets an ambitious goal for the country: To consolidate the quality information that is required and that will only be achieved with the responsibility and commitment of the entities of the system. Furthermore, it marks a milestone in the history of national statistics.

Our challenge will be to continue working to improve coordination in the production and dissemination of official statistics.

Kind regards

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DANE, ENTE RECTOR DEL SEN



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*Note: These annexes are developed in the full version of the PEN (http://www.dane.gov.co/files/sen/PEN-2017-2022.pdf). They are listed here for references purposes



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COMMON ACRONYMS AND ABBREVIATIONS

AEROCIVIL	Civil Aviation Authority of Colombia
ANDA	National Statistical Data and Metadata Archive
ANH	National Hydrocarbons Agency
ANM	National Mining Agency
ASOCARS	Association of Regional Autonomous Corporations and of
	Sustainable Development
BANCO DE LA REPÚBLICA	Central bank of Colombia
CANE	National Advisory Council of Statistics
CIEFP	Inter-sectoral Commission on Public Finance Statistics
CNA	National Agriculture and Livestock Census
COLCIENCIAS	Administrative Department of Science, Technology and Innovation
CONPES	National Council for Economic and Social Policy
CRC	Communications Regulation Commission
DAFP	Administrative Department of the Public Service
DANE	National Administrative Department of Statistics
DIAN	Colombian Tax and Customs Authority
DIMAR	General Maritime Directorate
DNP	National Planning Department
DPS	Department for Social Prosperity
ECLAC	Economic Commission for Latin America and the Caribbean
EFET	Strategy for Territorial Statistical Strengthening
EUROSTAT	Statistical Office of the European Communities
ICA	Colombian Agriculture and Livestock Institute
ICBF	Colombian Institute for Family Welfare
ICETEX	Colombian Institute of Educational Credit and Technical Studies
	Abroad
ICFES	Colombian Institute for the Evaluation of Education
ICONTEC	Colombian Institute of Technical Standards and Certification
IDEAM	Institute of Hydrology, Meteorology and Environmental Studies
IGAC	Agustín Codazzi Geographic Institute
IMF	International Monetary Fund
LGBTI	Lesbian, Gay, Bisexual, Transgender, Intersex
MADR	Ministry of Agriculture and Rural Development
MEDICINA LEGAL	National Institute of Legal Medicine and Forensic Sciences
MEFP	Memorandum of Economic Financial Policies (IMF)
MGN	National Geostatistical Framework
MINCIT	Ministry of Trade, Industry and Tourism
MINDEFENSA	Ministry of National Defence
MINEDUCACIÓN	Ministry of National Education
MINHACIENDA	Ministry of Finance and Public Credit
MINSALUD	Ministry of Health



MINTIC	Ministry of Information and Communications Technology
NSS	National Statistical System
OCYT	Colombian Observatory of Science and Technology
OECD	Organisation for Economic Cooperation and Development
ONAC	National Accreditation Body of Colombia
ICONTEC	Institute of Technical Standards and Certification
ONAC	National Organization of Accreditation
PEN	National Statistical Plan
PND	National Development Plan
SDGs	Sustainable Development Goals
SDMX	Statistical Data and Metadata eXchange
SENA	National Training Service
SFC	Financial Superintendence of Colombia
SIAC	Environmental Information System of Colombia
SNA	System of National Accounts
SUPERSERVICIOS	Superintendence of Public Utilities
UN	United Nations
UPME	Mining and Energy Planning Unit



INTRODUCTION

The National Administrative Department of Statistics (DANE) presents to the members of the National Statistical System (NSS) and to the National Advisory Council of Statistics (CANE), the National Statistical Plan (PEN) for the five-year period 2017-2022. This document is the result of a joint construction and discussion with the different actors of the System.

The Plan is the main instrument of national statistical policy whose purpose is to ensure that during the next five years the country maintains and increases the supply of official statistics in order to know its economic, socio-demographic and environmental reality, based on the coordinated work of the members of the NSS. Moreover, this Plan, for the first time, allows defining the supply and demand of statistical information that the country has and requires for the next 5 years.

The PEN defines a set of objectives pertaining to the strengthening of the production and dissemination of statistics in the NSS. In order to reach these objectives, nine strategies were created that coordinate the statistical activity that is associated with entities that are responsible for their implementation. The actions are based on institutional agreements among its members, taking advantage of existing and innovative resources, continuously improving the production and dissemination processes, training the human resources of the System, and coordinating the entities of the national level with the territorial entities of the country.

This document of statistical policy has outlined two general goals for the members of the System, with the expectation that at the end of the Plan's term, at least 50% of the statistical operations defined in this document will obtain a favorable opinion with respect to the quality evaluation of its production process. On the other hand, given the strategies and actions of institutional coordination within the NSS, it is expected to strengthen at least 30% of the entities that are part of the System in their statistical capacities. These goals represent major challenges for the country; for this reason, the PEN presents a five-year action plan, listing the commitments that will be undertaken by the different entities of the NSS, as well as the responsibilities of DANE as the regulator and coordinator of the System.

Also, the PEN 2017-2022 defines, in agreement with the entities of the NSS, the statistical information of an official nature that the country requires. For this effect, conditions are taken into such areas as the Colombian legislation as well as international requirements and standards, especially the country's commitments to multilateral organizations such as the Organisation for Economic Cooperation and Development (OECD) or the United Nations (UN) based on the Sustainable Development Goals (SDGs), among other requirements. Therefore, this document identifies the supply related to the statistical operations and the producing entities of the country, as well as the unsatisfied requirements for information identified by the entities of the NSS.

The PEN 2017-2022 is structured in four chapters; the first contains the reference framework that includes the normative and conceptual elements of the Plan; the second presents the diagnosis that describes the statistical production of the country, listing the strengths and weaknesses identified; the third contains the objectives and strategies outlined by the PEN; the fourth presents



the action plan for the next five years and the entities of the System that will have participation for the implementation thereof.

Finally, the document contains three associated annexes, which are an integral part of this Plan. They are: i) Supply of Statistical Operations; ii) Demand for Statistical Information (unsatisfied statistical information requirements), and iii) Description of the stages of the PEN 2017-2022 formulation process.



I. REFERENCE FRAMEWORK

The strengthening of the National Statistical System is established in Law 1753 of 2015. Article 160 of this Law establishes as an objective of the System:

"To provide to the society and the state, in a coordinated manner between the producers, official national and regional quality statistics, with common language and procedures that respect international statistical standards, contributing to the transparency, relevance, interoperability, access, timeliness and coherence of the statistics produced in the country" (Law 1753 of 2015).

The Law, on the other hand, determines that the entities belonging to the NSS are those that produce and disseminate statistics or are responsible for administrative records, for which the article establishes the following characteristics:

1. Belonging to the Branches of Public Power, at all levels of the state structure, central or decentralized by services or territorially; of the national, departmental, municipal and district level. 2. State bodies, agencies or entities that are independent or autonomous from control. 3. Legal entities, public or private, that provide public services. 4. Any legal entity or dependence of legal person that performs public function or of public authority. 5. Legal entities that possess, produce or manage administrative records in the development of their corporate purpose, which are necessary inputs for the production of official statistics (Law 1753 of 2015: Article 160).

In this sense, Decree 1743 of 2016 defines the NSS as "the coordinated set of components that, in an organized and systematic manner, guarantees the production and dissemination of the official statistics required by the country." On the other hand Law 1753 provides that the NSS is coordinated and regulated by DANE.

It follows from the provisions of Law 1753 of 2015 that DANE, in its role as governing entity of the NSS, should orient its coordination and regulation actions to: a) Ensure in the NSS the availability of official statistics that the country requires and b) Raise the quality of the statistical information produced in the NSS.

In order to promote and facilitate the coordination of the NSS, the Law establishes the National Advisory Council of Statistics as an advisory body. The purpose of this Council, among others, is to approve the National Statistical Plan, whose term will be five years. On the other hand, the Law provides that DANE shall formulate the PEN in coordination with the members of the NSS, who, in turn, are responsible for the implementation of the strategies and actions established therein, in accordance with the mandatory character as provided for in paragraph 3 of Law 1753 (Annex C).

The PEN is the "document that establishes the strategic guidelines and the actions for the development of the statistical production and dissemination taking into account the information needs of the country, including differential approaches. The Plan includes the provision of statistical operations, demands of information, information exchange requirements between the members of the NSS and strategies with respect to the results of the statistical operations "(Decree 1743 of 2016: Article 1).



In the medium term, the PEN will contribute to the efficient use of the financial, technological and human resources directed towards the production and dissemination of official statistics and will favor the coordination between the producers of the statistics and their users.

The regulations of the NSS establish that the official statistics are those that meet the following requirements (Decree 1743 of 2016):

1. That the statistical operation¹ that generates the official statistics is incorporated in the National Statistical Plan.

2. That the statistical operation that generates the official statistics has passed the statistical quality evaluation established for the NSS.

Also, in order to have prudent time to perform the quality assessments, Decree 1743 of 2016 establishes a transitional process, specifying that the official statistics up to 2022 will be those defined in this first PEN. As of the second Plan, the two above-mentioned requirements shall be met in order for them to be considered official statistics.

Statistical quality is intended to create trust in statistics by the users and the general public, so that their use allows making better decisions. In the context of the NSS, statistical quality is "a set of properties that the process and the statistical product must have in order to meet the information needs of the users" (DANE, 2011). This definition is based on international quality concepts and benchmarks, including the International Organization for Standardization (ISO), which defines quality as " the totality of features and characteristics of a product or service that confer its ability to satisfy implicit or explicit needs of users" (ISO, 1994).

The set of properties, which in the case of the NSS are known as quality attributes, are based on international benchmarks such as those issued by ISO, OECD, and the Statistical Office of the European Communities (Eurostat), among others. The last two organizations define the properties as: Relevance, Accuracy, Credibility, Timeliness, Accessibility, Interpretability and Coherence (OECD, 2003).

In addition to the above criteria, DANE has incorporated in the NSS quality assurance framework, the attributes of Punctuality, Comparability and Transparency², associated with the fundamental principles of statistics promulgated by the UN and adapted to the Good Practices fostered by DANE (DANE, 2015).

¹ According to Decree 1743 of 2016 in its article 1, a statistical operation is "the application of a statistical process on an object of study that leads to the production of statistical information".

² For more details with respect to the definition of each of the quality attributes, refer to the Quality Assurance Framework document of the National Statistical System on the following ink:

http://www.dane.gov.co/files/sen/calidad/aspGen/MarcoCalidadEstadistica.pdf



II. DIAGNOSIS

The first part of this chapter of the Plan presents the status of the production and dissemination of statistics up to 2017; moreover, it describes the main characteristics of the statistical operations and the results of the quality evaluations with respect to the statistical process. The second part relates the strengths and main weaknesses identified in the production and dissemination of the country's statistics and some of their causes.

2.1. Status of the production and dissemination of statistics

In the course of the first quarter of 2016, as an input for the formulation of the PEN 2017-2022, DANE updated the supply of statistical operations and registered 510 statistical operations produced by 108 entities³, developing working tables and scenarios for joint discussion⁴.

This process allowed identifying important general results to characterize the supply of statistical operations of the country. Specifically, it was identified that most of the entities producing statistics of the NSS are public (89%) (See Graph 1).

Graph 1. Number of statistical operations, according to type of producing entity of the NSS



Source: DANE-DIRPEN. Supply of statistical operations (updated to March 31, 2017).

³ The Inventory of supply of Statistical Operations is presented in Annex A.

⁴ The methodology for the formulation of the PEN is presented in Annex C, which includes the stage for the construction of the inventory of supply and demand of statistical operations.



Particularly when analyzing the entities with the largest number of statistical operations in the NSS, 59% of operations are concentrated in 18 producing entities, most of which are public, with the exception of the Science and Technology Observatory, whose nature is mixed (Graph 2). It should be noted that 3% of the total of statistical operations are carried out jointly by 2 or more entities.



Graph 2. Main entities producing statistical operations

Source: DANE-DIRPEN. Supply of statistical operations (updated to March 31, 2017). Note: * Entities that perform some of their statistical operations jointly with other entities.

The 510 statistical operations identified were classified into three areas containing a total of 30 subject matters where the country has statistical information. The areas are as follows: i) economic area (12 subject matters); ii) socio-demographic area (12 subject matters) and iii) environmental area (6 subject matters). Most statistical operations are concentrated in the economic area (57%), followed by the socio-demographic area (33%) and the environmental area (10%). This result allows us identifying that the country has a solid NSS.

Of the characterization of the statistical operations that are supplied, the following can be noted: the statistical methodology⁵, the periodicity of dissemination and the geographic disaggregation.

⁵ Statistical methodology is understood as "the set of statistical procedures and techniques established in a statistical operation for the design of data collection and the analysis thereof, as well as the interpretation and representation of results in an appropriate manner" (DANE 2016).



The results of the quality evaluations of the statistical process that have been carried out are also taken into account.

The methodology most used in order to produce the statistical operations identified in the supply is the use of administrative records (56%) (Graph 3). In the case of DANE, the statistical operations that are based on this methodology represent 5%.

By thematic area, of the statistical operations that use of administrative records, the economic area has the largest participation (52%), followed by the socio-demographic area (43%) and the environmental area (5%).





Source: DANE-DIRPEN. Supply of statistical operations (updated to March 31, 2017).

In terms of the periodicity of dissemination, 93% of the 510 statistical operations have a defined periodicity, with annual periodicity being the most used; followed by monthly, quarterly and semiannual (Graph 4). In the case of the category "other", daily, weekly, biweekly and bi-monthly periodicities are considered.



Graph 4. Number of statistical operations, by periodicity of dissemination and thematic area

Source: DANE-DIRPEN. Supply of statistical operations (updated to March 31, 2017).



With respect to geographical disaggregation, the statistical operations identified mainly follow the political-administrative division of the country; those different disaggregations are classified in the category "other" (levels below that of the municipal or specific areas).

Graph 5 shows that 48% of the statistical operations are presented at a single geographical level, and of this group, as shown in Graph 6, 64% of statistical operations present results only at the national level, which shows that there is a significant percentage of statistical operations that does not disaggregate their results to other levels, this result being more visible in the operations of the economic area.

On the other hand, 17% of the statistical operations present results with two geographical levels of disaggregation, mainly at national-departmental and national-regional levels; whereas 23% of the operations present results at 3 levels. Finally, 12% of the operations present results with more than 3 levels of geographical disaggregation.

With respect to the statistical operations from administrative records, in 102 cases results are presented at a single geographical level and more than half of these operations are concentrated in the economic area. This allows identifying a possible source of potential statistical information to present results at other geographical levels or to provide responses in other thematic areas.



Graph 5. Presentation of results of statistical operations, by geographical levels

Source: DANE-DIRPEN. Supply of statistical operations (updated to March 31, 2017).





Graph 6. Statistical operations with a single geographical level with respect to presentation of results, by type of level

Source: DANE-DIRPEN. Supply of statistical operations (updated to March 31, 2017).

With respect to the quality of the statistical process, of the supply of statistical operations identified, 29% (141) were evaluated by DANE between 2010 and 2015. Of this group, 84% (114) obtained quality certification, which means that, according to the type of certification obtained, they meet the attributes of relevance, accessibility, comparability, accuracy, interpretability, transparency, timeliness and punctuality, coherence and continuity.





Source: DANE- DIRPEN 2015- Statistical operations evaluated and certified.



2.2. Strengths in the production and dissemination of statistics in Colombia

According to the reviews that the OECD performed with respect to the statistical production and dissemination in the country, in addition to the previous results, it is concluded that currently Colombia has a consolidated National Statistical System (OECD, 2015), as reflected in the provision of statistical information for different actors and sectors that allows the country to be more and better informed.

The importance of setting up and consolidating a NSS that responds to the country's needs and statistical challenges has been recognized within public policy⁶. In that sense, as of 2009, DANE has been working and interacting with more than 107 entities that are members of the NSS. Based on this exercise it was possible to form a supply of statistical operations from entities of the NSS at the national level.

In a like manner, as part of the process of formulating sectorial and institutional statistical plans, thematic working tables have been developed, which have pointed out the existence of positive aspects in the production and dissemination of statistics in the NSS such as:

- There is a notable production of statistics that are relevant to the country and many of them have had continuity in their production; thus it is evident that there is official statistical information for thirty matters of interest to the country, which address needs with respect to public policy, regulations, international requirements and the construction of macroeconomic aggregates.
- In some sectors there are committees formed with statistical purposes and other forms of institutional coordination addressing statistical matters.

Also, the quality evaluations performed as of 2010⁷ have allowed observing the quality status of the statistical processes of the NSS entities. These evaluations have presented the following results:

- The supply of statistical operations of the NSS shows a considerable level of quality. 81% of operations evaluated have been certified.
- Implementation of nomenclatures and classifications in statistics: The use of this type of statistical standard has been evidenced in a large part of the statistical production, which implies improvements in the organization of the data used and the statistics produced.
- The generation of documentation of statistical operations: Many of the statistical operations evaluated have submitted their respective documentation, which indicates that the entities have advanced in improving their processes.
- The integrity and consistency of databases: There has been evidence of improvements in the quality of the data as well as the structures and consistencies of the databases used for the production of statistics.

⁶ The National Development Plan 2010-2014 already mentions the National Statistical System, and also states that "the coordination for the case of statistical and geographical information will be the responsibility of the National Administrative Department of Statistics - DANE in the framework of the National Statistical System".

⁷ 240 statistical operations have been evaluated between 2007 and 2015.



• Greater participation of users in statistical operations: The entities involving the users more in part of statistical production processes has been one of the positive aspects found in quality evaluations.

2.3. Weaknesses in the production and dissemination of statistics in Colombia

In order to identify the weaknesses in the production and dissemination of statistics in the country, working groups were held and data collection instruments were conducted to the 107 entities included in the supply of statistical operations. Additionally, the reports of the quality evaluations of the statistical process prepared by the commissions of independent experts evaluating each case were used. Finally, information of studies, public policy documents and sectorial and territorial thematic reviews were used.

From these exercises, specifically, it is considered as a central problem that, notwithstanding the existing supply, the country does not have sufficient statistics and of quality to know its economic, socio-demographic and environmental reality. This problem is due firstly to the fact that the production of statistical information does not entirely meet the users' needs; secondly, that quality attributes are not present in all the statistical processes; and finally, due to weaknesses in the coordination among the members of the NSS, for the production of statistical information.

The problems identified and some of their causes are briefly presented in the following.

2.3.1. Notwithstanding the existing supply, in some subject matters it is necessary to produce more information that responds to the users' needs

In more than 96% of the subject matters in which the statistical operations are classified, information requirements were identified that were not satisfied by the current production, therefore in these areas there is not sufficient statistical information available that allows characterizing the current status of some phenomenon or monitor the progress, results or impacts of public policy interventions. This is the case with respect to aspects related to armed conflict and organized crime, which require a greater production of statistical information, even more justified in a post-conflict situation, or information associated with environmental aspects where the country has important information gaps and there is evidence of coordination problems with the Regional Autonomous Corporations (CAR) as statistical sources of the area.

In turn, due to the commitments made by the Colombian government with international organizations, these gaps in statistical information have become more evident to the extent that new information requirements have been generated from the interest of these organizations in expanding their knowledge on the reality of the country and on the progress of national public policies.

Specifically, there are evaluations of the commitments made by the national government in the process that is being carried out for the accession of Colombia to the OECD, as well as those resulting from the fulfillment of the SDGs established by the UN (Annex B).



The OECD identified for the country, on the one hand, unsatisfied information requirements related to aspects of the productive sector and of the government that are necessary for the statistical production itself, as is the case of the new base year in the System of National Accounts. On the other hand, information gaps in regional statistics regarding geo-referencing and their comparability in time and space (OECD, 2014; 2015)⁸.

In addition to the above, there are weaknesses in the disaggregation of statistical operations, not taking advantage of some of the information collected to identify the development of phenomena in the territories of the country. Furthermore, within information gaps there are weaknesses in the integration of geospatial information for the generation of official statistics that include, among other benchmarks, the international guidelines such as the United Nations Global Geospatial Information Management (UN-GGIM)⁹ initiative.

Another aspect where the lack of information is evident is related to the statistics with a differential and intersectional approach, which allows analyzing together the situations in which different types of discrimination converge: ethnicity, gender and sexual orientation, among others. It is important to produce these statistics for the following needs: 1) Better identifying and delving into the vulnerability of individuals as an input for public policy; 2) The normative requirements pertaining to the rights of the populations; and 3) The international recommendations given by the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) and the United Nations in the context of the human rights-based development approach¹⁰.

Also, the Montevideo consensus on population and development, held in 2013, pointed out the following:

The preparation of public statistics by State agencies must be consistent with an inclusive approach which encompasses the broad range of rights under public policy and that the information generated on Afro-descendent populations, indigenous populations, persons with disabilities, lesbian, gay, bisexual and transgender persons, gender, social inequalities and gaps, ageing and other issues constitutes a basic input for public policy formulation and is vital for monitoring the objectives established in national and regional agendas¹¹. (UN and ECLAC, 2013).

⁸ According to the OECD, "the growing emphasis on the territorial dimension of the national planning exercise will inevitably result in an increased demand for geo-referenced data, which will need to be comparable over time and space" (OECD, 2014: 32). The OECD also states that " Scarcity of regional statistics in many of Colombia's 32 departments, however, limits the capacity of the public sector to assess territorial dynamics and then to properly determine policy responses" (OECD, 2015: 9).

⁹ United Nations Economic and Social Council. 2011. Global Geospatial Information Management - Committee of Experts on Global Geospatial Information Management. 13p. Retrieved from:

http://www.un.org/en/ecosoc/docs/report2011.asp. UN-GGIM. 2014. Committee of Experts on the Global Management of Geospatial Information. Report on the fourth period of sessions (August 6-8, 2014). 28p. Retrieved from: http://ggim.un.org/docs/meetings/GGIM4/GGIM4%20Report_sp.pdf

¹⁰ This approach stems from the right to development, proclaimed in the UN Declaration on the Right to Development in 1986, specifically in its Article 2, sub-section 1 with the aim of recognizing the human person is the central subject of development and should be the active participant and beneficiary of the right to development (UN, 1986). Retrieved from http://www.un.org/en/events/righttodevelopment/declaration.shtml.

¹¹ Retrieved from

http://repositorio.cepal.org/bitstream/handle/11362/21860/S20131039_en.pdf;jsessionid=178D4B313C9AE204817726 D57554465D?sequence=4



Specifically, the insufficiency of statistical information with a differential and intersectional approach does not allow the country to know exhaustively the inequalities of population groups affected by problems of exclusion, mistreatment or discrimination. In general, gaps in statistical information deprive the society of evidence to assess the dimension of economic, socio-demographic or environmental phenomena that most strongly affect their well being.

Insufficient identification of information needs

The entities producing statistical information do not always know the needs of users and in such cases respond to their own needs in order to meet their mission-related obligations; generally they do not have regular procedures, communication and feedback channels for the identification of statistical information requirements and users' needs. There is a lack of bodies and mechanisms that allow knowing the timeliness and the levels of disaggregation with which it is required.

Of the statistical operations evaluated by DANE between 2010 and 2015, 47% presented difficulties in identifying users' needs, either because they do not consult them, because the enquiry mechanisms and procedures are deficient, or even because they are not interested in responding to these needs.

In terms of statistical quality, ignoring the users' needs affects the pertinence and relevance of statistics, which in turn increases the insufficiency of the statistical information in the NSS.

Limited use of administrative records to improve and increase statistical production

Even though administrative records are considered the most economical and reliable source of information for producing statistics, they are little used for the purposes of supplementing or producing statistics or for the construction of statistical frameworks. Their use is limited, in part, due to the lack of a consolidated inventory that accounts for their existence and characterization. Thus, the lack of knowledge that the producing entities have with respect to the particularities of the records that are available in the NSS prevents them from using them for statistical purposes¹².

Furthermore, there is no diagnosis available that allows assessing the potential of the administrative record for its statistical use and to recognize its deficiencies in the data collection processes. The OECD, in its evaluation report with respect to regional information, mentions that many databases with regional statistical registers could be integrated with data obtained through censuses or surveys, with which the range of regional statistical information could be expanded and improved (OECD, 2014: 32).

The limited use of administrative records is also explained because these are generally designed to record activities that allow the fulfillment of the responsibilities of each entity and, therefore, do not always have a structure or design that meet the requirements of the production of statistics.

¹² The difficulties of accessing the records, which cause this lack of knowledge or low level of use were recently corrected as of the issuance of Decree 1743 of 2016 that provides the legal and regulatory framework to allow and expedite the exchange of information.


Limited access to microdata to meet the requirements of the production of statistics

Microdata that are part of the statistical operations produced by members of the NSS are not always available to users who require them. Each entity of the System owns the statistical information that it produces and argues the reserve of information, denying access or allowing only partial access to its microdata. This obstacle is eliminated only when by means of an agreement, a contract or any other instrument whereby its use is allowed as confidential information.

In the country historically there have been problems accessing both the administrative records of public entities, as well as the microdata that make up the databases. Specifically, the National Development Plan (PND) 2014-2018 mentions that "the statistical use of administrative records faces legal limitations. These barriers have hindered statistical production, particularly at the regional level where most of the information comes from administrative records " (DNP, 2015: 582).

Legal constraints focus on the reserve and confidentiality¹³ of the information contained in the records, which restricts the sharing of information for its use in statistical production. Some entities, appealing to this nature, do not provide the information that is required or limit the flow of information, affecting the quality of statistics.

This limitation in access to information results in the inefficient use of resources, since it creates the need to turn to alternative processes for the production of information that, which in many cases is already filed in some producing entity. On the other hand, the difficulty of obtaining access to information is explained by the lack of knowledge that some producers have with respect to anonymization techniques that allow them to giving access microdata without infringing upon the confidentiality mandate.

Insufficient dissemination of statistical information and its characteristics

In terms of dissemination of statistical information, there is little interest on behalf of the production entities in making the statistics that they produce available, as well as the information that supports it (methodologies and metadata among others). Of the statistical operations evaluated by DANE, 20% do not disseminate historical series or publish them partially and for 18% of operations there are other types of dissemination limitations.

In addition to the above, according to the characterizations of the supply of statistical operations of the NSS performed by DANE, some entities do not have a dissemination policy or have deficiencies in their dissemination channels. Also, there is evidence of a lack of guidelines by the NSS for dissemination that allow producers of statistics to disseminate the information generated in a clear and useful manner.

¹³ Laws 1581 of 2012, 1266 of 2008 and 79 of 1993 and all their regulatory decrees contain the rules pertaining to the protection of data and information considered reserved and confidential pertaining to data that are not of a public nature.



With respect to the timeliness of the dissemination of information by the entities of the NSS, through the quality evaluations performed, it was found that 18% of the statistical operations evaluated do not have a timely dissemination of the results obtained or make publications with partial statistical information, which does not provide the user with sufficient elements to identify other types of characteristics of the phenomenon with respect to which the results are being delivered.

Deficiencies in dissemination become greater insofar as the producing entities do not publish the metadata of statistical operations. Thus, it is difficult to know the technical characteristics of production, limiting the use of information and making it impossible to compare it. Only 13% of the statistical operations of the inventory have metadata in the National Statistical Data and Metadata Archive (ANDA) of DANE¹⁴.

It should be noted that there is also an element of statistical culture; according to the quality evaluations, some entities of the NSS do not recognize the public nature of the statistical information they produce, i.e., they do not consider it necessary for the information to be available for user access. In this way, it is not implicit that part of the objectives of producing information and disseminating it is that users have the possibility of using it, either for research, for public policy decisions or to evaluate the management of the government officials with the greatest source of objective elements.

2.3.2. Quality attributes are not present in all of the NSS statistical production processes

The evaluations of the quality process of the statistical operations carried out by DANE up to 2016 show weaknesses in the production of the statistics of the country. In the reports of the committees of experts it was found that of the total number of operations evaluated by DANE:

- 53% do not have methodological documentation or have only some manuals and guides.
- 31% had failed on the application of controls, lack of documentation on actions to ensure quality compliance, lack of protocols and documentation of existing procedures, among others.
- 24% of those with methodological documentation have deficiencies in the documents, either because they are outdated or because the information on the statistical operation is inaccurate.
- In 23% of statistical operations, access to microdata is not allowed; while in 15% access is allowed with certain limitations, such as direct requirements or access by agreements, among others.
- 13% is inconsistent between the objective of the operation and the statistics obtained.
- 8% have no control over the quality of the process.

Also, in general terms, the statistical information presented by the evaluated entities does not incorporate the international standards in terms of classifications, norms and concepts, either due to lack of knowledge thereof or due to the lack of technical capacity to follow the guidelines

¹⁴ It is a World Bank initiative that allows strengthening the transparency, credibility and statistical culture; to contribute to a greater knowledge on behalf of the users with respect to the production of statistics in the NSS; and ensure the standardized and organized dissemination of the metadata of the statistical operations (DANE, 2016).



established in these aspects. This situation makes it difficult for international or national comparisons of the information produced, missing the possibility of knowing the advances with respect to other countries or the degree of fulfillment of the commitments undertaken by the government with international organizations.

Furthermore, it is evident that, in general, the evaluated statistics are compiled without knowledge of the criteria that constitute the foundation of the principles of Good Practices for the Production and Dissemination of Official Statistics.

The quality issue also occurs at the regional level. Through the implementation of regional statistical planning activities¹⁵, statistical planning activities, statistical production processes have been identified that do not take the quality criteria¹⁶ into account, partly because entities limit themselves to generating the indicators required without incorporating procedures and controls that ensure the quality of the information.

If the production process of statistical information shows deficiencies in some of its stages, the quality of the results obtained is compromised, distrust is generated in the use of data and the production of customized statistics is encouraged, stimulating the duplication of information on the same subject matter and increasing the inefficient use of resources invested to obtain them.

Low statistical capacity of the entities of the NSS

The insufficiency or low rating in the knowledge of statistical subjects by the human resource of the producing entities, along with deficient technological tools and scarce financial resources, affects the quality of the statistical information supplied, limiting the implementation of standards, guidelines and protocols in the production processes of statistics.

In the activities specific to statistical planning developed by DANE, it was found that the entities have few technical, human and financial resources to face the responsibilities in the production of information. Low levels of technical knowledge were found in both national and regional entities, which lead to the production of information without ensuring technical rigor in the programming, organization and quality assurance of statistics. The regional statistics are produced in a fragmented manner in different entities, responding to national needs of a temporary nature as a priority.

Furthermore, there is not a proper level of knowledge with respect to the use of alternative sources of information, such as those known as Big Data (geospatial information sensors, information of telecommunications, information derived from commercial and banking transactions and information from the Web, among others) that allow generating statistics in a context of low availability of information sources, changes in socio-demographic patterns and a

¹⁵ These planning activities were carried out through three means: i) Strategy for the Regional Statistical Strengthening (EFET fo its acronym in Spanish) in 16 regionall entities with officials of 106 municipalities, developing activities such as training and workshops for the construction of indicators; ii) technical assistance or advisory in statistical planning in 7 municipalities and 2 governorates, and iii) pilot of statistical strengthening in the metropolitan area of Valle de Aburrá (a project carried out in 2015 in the municipalities of Medellín, Barbosa, Girardota and the department of Caldas).

¹⁶ It is verified if the entity has established guidelines or procedures for the quality control of the process.



digital culture that gives an increasingly central role to technology. Additionally is the fact that the initiatives or training programs that take advantage of the massification trends of mobile devices with the Internet as well as information and learning technologies are non-existent or unknown.

2.3.3. Weaknesses in the coordination between the members of the NSS for the production of statistical information

The lack of coordination among the members of the NSS for the production of statistical information is made evident in several aspects. The first is associated with the lack of communication and common knowledge with respect to projects involving statistical activities. In particular, there is a lack of communication regarding the statistics that lie in each entity, the specific information needs, the target populations that have been or will be part of a study as well as the instruments and methodologies used in each case for the production of information. The isolated actions of each member make the flows of information difficult.

The second aspect is related to the existence of information systems in the producing entities that generally do not have effective communication between them. Some of the entities of the NSS construct or maintain information systems with which they produce and disseminate statistics without taking into account the relationship that may exist between these and other information systems. This proliferation of non-interoperable systems results in a multiplicity of efforts invested in statistical production.

The third aspect consists of the lack of coordination among the national entities with respect to the information requirements for regional entities, which creates duplicity of efforts, resources and times to meet the demands of information with the same characteristics. In addition to the above there is a lack of identification and standardization of the information that is requested by the national level to the entities of the regional level.

In this sense, the OECD indicates, "Colombian regional statistics suffer from a lack of coherence and coordination. Although the variety of systems for the production and dissemination of national and regional statistics adds an element of wealth to the national information system, (...) this may raise some doubts regarding to the consistency of statistical estimates given the possible discrepancies between the estimates generated by various departments for the same economic indicator" (OECD, 2015).

The most generalized consequence stemming from the lack of coordination between the entities of the NSS is the multiplicity of institutional efforts invested in the generation of statistical information that, on many occasions, generate several official statistics on the same phenomenon, causing confusion about the relevance of its use.

The National Development Plan 2014-2018 also recognizes the problem of lack of coordination and the duplication of efforts in the production of statistics, for which it recommends the use of information and communication technologies as a fundamental instrument to improve the efficiency of the handling and management of the information of national and regional level and optimizing the processes, the access to and the exchange of information; all of the above will lead to informed decisions to be made supported by more reliable data (DNP, 2015: 627).



III. OBJECTIVES AND STRATEGIES

Based on the diagnosis, the general objective and specific objectives that are expected to be achieved through the implementation of the National Statistical Plan are presented below, and whose purpose is to ensure that during the next 5 years the country maintains and increases the supply of official statistics to know its economic, socio-demographic and environmental reality, based on the coordination between the members of the NSS.

3.1. General objective

To establish existing and new statistics that the country needs to produce for the next five years that comply with the statistical quality attributes.

In order to achieve this objective, it is proposed as a general goal that at least 50% of the statistical operations of this Plan, obtain a favorable concept of the quality evaluation with respect to their production process; and additionally, that at least 30% of the entities of the NSS have strengthened their statistical capacity.

3.2. Specific objectives

The specific objectives of the PEN are listed below:

- 1. To maintain the production with respect to the statistical information of the NSS.
- 2. To facilitate the access and availability of national and regional statistical information.
- 3. To increase the quality of the statistics produced in the NSS.
- 4. To expand the supply of the national and regional statistical information of the NSS to respond to international commitments such as SDGs and OECD.
- 5. To promote knowledge management and innovation to contribute to the strengthening of the statistical capacity.
- 6. To strengthen the coordination between the members of the NSS for the production and dissemination of statistical information.

3.3. Strategies

In order to achieve the objectives proposed, the PEN 2017-2022 presents nine strategies that will be developed during the next five years by the members of the NSS:

- 1. Definition of the supply of statistical operations that need to be produced continuously.
- 2. Promotion of dissemination and access to statistical information.
- 3. Fostering of the improvement with respect to the quality of official statistics.
- 4. Identification and promotion of the statistical use of administrative records.
- 5. Promotion of the inclusion of the differential and intersectional approach in the production and dissemination of statistics of the NSS.
- 6. Promotion of innovation, learning and knowledge management processes for statistical production.



- 7. Implementation of agreements pertaining to the production of the statistics required by the country.
- 8. Integration between statistical information and geospatial information.
- 9. Strengthening of the regional statistical capacity.

Strategy 1. Definition of the supply of statistical operations that need to be produced continuously

This strategy aims to establish the supply of statistical operations that the members of the NSS agree to continue producing during the term of this Plan, having the resources that are necessary for this purpose.

Likewise, the actions planned in this strategy are aimed at determining the new production to be carried out in the NSS to meet the demands of priority statistics required by the country.

The actions considered for this strategy under the responsibility of the members of the NSS are:

- Maintain the production of the statistical operations that are being generated continuously in the NSS, which are identified in the supply of statistical operations contained in this Plan (Annex A).
- Produce the new statistics needed to meet statistical information requirements, according to the prioritization that the different sectors make in order to address information gaps during the next five years based on the demand for statistical information contained in Annex B¹⁷.
- There is a baseline of 69 projects for statistical production in which DANE, IDEAM, the National Institute of Legal Medicine and Forensic Sciences, Ministry of Trade, Industry and Tourism, the Special Administrative Unit Migration Colombia, the Ministry of Education and the Commission for the Regulation of Communications take part (Annex B).
- Implement the guidelines and standards defined by DANE and international methodological benchmarks for the production and dissemination, so as to generate consistent and comparable results at the national and international levels.
- Generate the methodological documentation of the statistical production and availability for public knowledge.

DANE will be responsible for updating the supply and the characteristics of the statistical operations and the demands of statistical information. The members of the NSS in turn agree to validate and maintain the statistical operations and the demand defined in Annexes A.1 and B of this Plan.

The CANE, through the Technical Secretariat, will prioritize the demand for statistical information that should be addressed for the implementation period of the PEN.

¹⁷ Based on the demands of information contained in Annex B, and in accordance with the prioritization that each sector makes thereof, a formal communication will be sent to the entities identified as responsible for addressing these demands, in order for them to evaluate the feasibility of developing projects that cover them and make the respective budgetary process and the internal allocation of resources, considering the spending ceilings defined in the Medium Term Expenditure Framework in force. Copies of these communications will be sent to MHCP and DNP in order to inform them of the information priorities agreed to in the PEN.



During these five years, the production of 100% of the statistical operations that are being continuously developed will be maintained; also, at least 75% of statistical information gaps that have projects defined in this Plan will be addressed; and finally, it is expected that at least 50% of the statistical information gaps that meet the requirements ODS, OECD and green growth in the framework of the UN will be met, and that they do not yet have a project to fill that information gap.

Strategy 2. Promotion of dissemination and access to statistical information

In order to facilitate the access and availability of statistical information and increase the quality of the statistics produced in the NSS, this strategy will promote the implementation and application of dissemination standards and access by the members of the NSS and the dissemination of the official statistics produced as well as other associated statistical information, making use of ICTs, with a common language that facilitates the exchange of information, the opening of data, their use and reuse¹⁸.

The strategy has three components aimed at: (i) fostering the dissemination of official statistics and their associated documentation; (ii) supporting interoperability between information systems requiring the sharing of statistics; and, iii) fostering access and exchange of microdata.

i) The first component will foster the dissemination of statistics, including associated documentation or metadata, with which information users will be able to know the methods and processes carried out for their production and correctly interpret the disseminated statistics. For this purpose, DANE will generate and promote standards and guidelines aimed at defining rules for the dissemination and access of statistical information and its ongoing improvement in terms of visualization, use, interpretation and other aspects. The component is expected to be socialized in the first year. This will pave the way for a better use of available information.

With respect to the standards in particular, DANE will socialize the statistical standard known as Statistical Data and Metadata eXchange (SDMX)¹⁹ as of the first year to the entities of the NSS. In order to promote its use, DANE will carry out awareness raising and training activities, thus facilitating the dissemination and transmission of statistics and indicators between the members of the NSS and from the latter to international organizations that so require it. The members of the NSS will have the technological, physical and human resources necessary for the implementation of the SDMX, noting that this standard constitutes the statistical standard of common language that is part of the strategy of Language for the Exchange of Information developed by the Ministry of Information and Communications Technologies. For the second

¹⁸ Within the framework of Law 1712 of 2014 on transparency and access to information, it is important that entities belonging to the NSS implement actions that allow the statistical information produced to be made available to the public in an equitable way, through the development and implementation of systems and information technologies that facilitate and enable accessibility, interoperability, use and visualization of data.

¹⁹ This standard includes easy-to-use instruments for the dissemination of statistics in an organized, simple and efficient manner, allowing an improvement in the availability of statistical data and metadata for users, as well as the automation of the processes of transmission and dissemination of information between the entities of the NSS and with international organizations.



year of the Plan, it is expected that the number of NSS entities implementing SDMX will have doubled.

For this component, the members of the NSS will socialize their statistical production, will develop strategies to achieve a closer approach to users and interest groups and will divulge the means of access, purpose, use and interpretation of the statistical information they produce.

ii) The second component is intended for information systems that need to share statistical information and communicate with each other, speak the same language, so the information flows are optimized and a better statistical production is allowed for. To this end, the Ministry of Information and Communication Technologies will carry out the training on the methodology of interoperability of information systems to the entities of the NSS that require it.

DANE will develop guidelines in coordination with the entities of the NSS addressed to the administrators of information systems for the production and dissemination of statistics of national interest, taking into account provisions on the variables, indicators and required concepts, organizational structure and functions of the participating entities (administrators, information sources, coordinators or users), transmission protocols (coordinated with the Ministry of Information and Communication Technologies) and the definition of timelines in the development of processes, among others. The guidelines for the administration of information systems for the production and dissemination of statistics will be prepared for the first year.

For the operation of the existing ones and the design and implementation of new information systems that will be developed in the five-year period, the members of the NSS shall involve DANE and the Ministry of Information and Communication Technologies, in order to ensure standardization in terms of the statistical production and dissemination, integration of sources and data, and the use of information and communication technologies. Eventually, the entities belonging to the National Digital and State Information Commission should be involved in coordination with the ministry.

Without ignoring the other information systems that should be the object of this strategy, the entities that are part of each system, with the support of DANE and the Ministry of Information and Communication Technologies, will work on the strengthening and interoperability of the sources and information systems with the following initiatives:

- The agriculture, livestock and rural information system: managed by the Ministry of Agriculture and Rural Development, coordinated by DANE, and with the support of the National Planning Department, and the participation of other entities in the agriculture and livestock sector, will be permanently populated based on the National Agriculture and Livestock Census (CNA), the sector's continuous statistical operations, as well as available administrative records.
- Integrated System of Information on Gender-based Violence (SIVIGE): It aims to integrate the statistical information on gender-based violence, within the framework of Laws 1257



of 2008, 1719 of 2014 and 1761 of 2015. Currently, SIVIGE has a Coordinating Committee integrated by the Ministry of Justice and Law, Ministry of Health and Social Protection, Presidential Counselor for Women's Equity, DANE and the National Institute of Legal Medicine and Forensic Sciences.

- System of Statistics in Justice: Led by the Ministry of Justice and Law, it aims to integrate the different information systems in the sector, related to criminal, penitentiary and judicial policy matters. Currently, the design of the system is available and progress has been made on interoperability matters by applying the SDMX.
- Environmental Information System of Colombia (SIAC): Led by the Ministry of Environment and the Institute of Hydrology, Meteorology and Environmental Studies and with the support of the National Planning Department, integrates information subsystems administered by the different entities of the sector, with a view to achieving their interoperability.

By the fifth year, at least these four information system initiatives will have interoperability.

- iii) For the third component associated with the access and exchange of microdata, DANE during the term of the Plan will receive, on behalf of the entities of the NSS that are interested, the requests for access to confidential microdata and will take them to the CANE for their agreement. By the fifth year of the Plan, 50% of the databases of confidential microdata will be used, whose exchange was agreed upon in the CANE. For this, DANE will carry out follow-up processes to the exchanges of information that were agreed upon by the CANE.
- iv) Similarly, DANE will prepare and socialize the methodological guidelines for the anonymization of microdata, which will guide the members of the NSS in the implementation of the different strategies that allow that, maintaining the reserve, the producers of statistics or those responsible for administrative records to share the microdata to promote their use.

For their part, the entities of the NSS will define which of their statistics or administrative records will be made available to the public at the microdata level in an anonymised manner. The members of the NSS will allocate the necessary resources to carry out the anonymization process, making use of robust methodologies, including the one proposed by DANE. With the implementation of this strategy, by the fifth year, 40 anonymised databases of the entities of the NSS will have been published for public use.

Strategy 3. Fostering of the improvement with respect to the quality of official statistics

This strategy aims to increase the quality of the statistics produced in the NSS, both at the national and regional levels, in accordance with international best practices, in order to have information that meets criteria of transparency, relevance, interoperability, access, timeliness and coherence, among others. In this sense, DANE as the coordinator and regulator of the NSS will assume the leadership of this strategy and the members of the NSS will have to comply with the provisions that arise from the two components: The first consists of the promotion of statistical quality; the second one is aimed to the design and formulation of the requirements, to the statistical quality



evaluation scheme and to the carrying out of the evaluations pertaining to the statistical operations of the members of the NSS.

i) Promotion of statistical quality

During the first year, DANE will adjust and update the National Code of Good Practices of Official Statistics and will take it to CANE for its opinion, so that it is issued for the knowledge and application of all the members of the NSS.

In parallel, during the next five years, and in order to broaden the knowledge that the entities of the NSS have with respect to the benchmarks that regulate the statistical production and dissemination, DANE will develop a Program for Socialization and Awareness Raising of Norms and Statistical Standards that will comprise the following:

- The Principles and Good Practices for Official Statistics.
- The guidelines, technical standards and statistical standards for statistical production and dissemination (methodological documentation, concepts, nomenclatures and classifications as well as transmission of statistical information).
- Statistical quality requirements.

For the above, it is proposed as a goal that 50% of statistical operations have implemented guidelines, standards and norms in the fifth year. In order to have the greater scope of the Program, DANE will make use of Information and Communication Technologies (the website, virtual courses), as well as face-to-face courses and awareness raising materials in the framework of the learning strategy.

ii) Quality evaluation of the statistical process

The objective of the evaluation is to ensure the quality of the statistical production process within the framework of the UN fundamental principles and the requirements to verify the quality of the official statistics of Colombia. The transparency, objectivity and impartiality of evaluations are essential if their objective is to be achieved and for members of the NSS to effectively benefit from the recommendations or findings that are identified in the evaluations.

Currently, DANE publishes the methodological documents of the Quality Assurance Framework of the National Statistical System and the Methodology of Evaluation of Statistical Operations, which define the quality attributes and the evaluation procedure. The latter specifies that the process of verifying the fulfillment of requirements is to be performed by a commission of independent experts who, as a result of their evaluation, produce reports with which DANE issues the respective certifications (DANE, 2014).

However, as part of this strategy, the Statistical Quality Assessment model will be strengthened during the first year; this action will be under the responsibility of DANE and will be developed with the accompaniment of the CANE and technical support from the Ministry of Commerce, Industry and Tourism and the Colombian Institute of Technical Standards and Certification.



For the strengthening of the Quality Assessment System model, in the first year a National Technical Corporate Standard will be prepared that will be issued jointly with the ICONTEC as the standards development organization of Colombia. This standard will establish the parameters and requirements to be met by the production process of an official statistic within the NSS. The issuance of the standard will allow having a benchmark built in conjunction with all members of the NSS, following the international procedures and standards established for standardization.

The standard will be made available to the public in such a way that any producer of statistics can access it and improve their statistical production processes. The standard will consider the differences in the statistical production process that can be determined by the statistical methodology.

Furthermore, in the second year DANE will be subject to the accreditation process by the National Organization of Accreditation of Colombia. In the National Quality Subsystem (Decree 1595 of 2015) accreditation allows the society to have a guarantee of the technical competence and impartiality of the body evaluating the conformity of products and processes. In the case of statistics, and since the statistical operations produced by DANE will also be subject to evaluation, it is intended that with the accreditation the members of the NSS will be provided with the guarantee of DANE's suitability and objectivity.

In the scheme of evaluation of quality attributes, which will be subject to review for the accreditation, at least three key aspects will be involved:

- An Independent Expert Commission will carry out the evaluation of the quality with respect to the statistical process of the NSS members and their final opinion.
- There will be independence between the area that produces statistics in DANE and the area that develops the evaluations.
- DANE will establish the methodology with respect to the evaluation of the statistics that will consider having a Certification Committee as the body in charge of the revision of the opinion issued by the Independent Experts Commission for the certification of the statistics evaluated, once the fulfillment of requirements has been verified²⁰.

Finally, in order to perform the evaluation of all the statistical operations, it is necessary to have a plan that is increasing gradually that allows the members of the NSS to prepare for the evaluation and DANE to develop the processes and the contracting of independent experts for each case. To that end, as of 2017, and in accordance with Article 2.2.3.2.6 of Decree 1743 of 2016, between January and March of each year, DANE will define the set of statistical operations that will be subject to evaluation with respect to the quality in the following term and it will report it to the respective members through the Annual Evaluation Plan of the Quality of the Statistics²¹.

²⁰ In the case of fiscal statistics, the Certification Committee will be accompanied by the Office of the Comptroller General, in accordance to Article 42 of Law 42 of 1993, Ministry of Finance and Public Credit and DANE.

²¹ In order to define the statistical operations that will be part of the annual plans for the evaluation of the quality of statistics, the sorting of the supply of statistical operations (included in Annex A) will be taken into account in



Since the members of the NSS will have knowledge as of the previous year, prior to the definition of their budgets, with respect to which of their statistical operations will be evaluated, and will also have access to statistical quality requirements, they will be responsible for preparing both technically and budget-wise, so that they have the necessary resources for the development of the evaluations in the year established in the Annual Plan for the Evaluation of the Quality of Statistics.

In the fifth year of implementation of the PEN, 75% of the statistical operations that have been part of the annual plans will have been evaluated.

Strategy 4. Identification and promotion of the statistical use of administrative records

The strategy seeks to increase the use of administrative records as a source of information, in order to expand the production of statistical information. This strategy is based on three components: identification, strengthening and data management.

i) The first component groups the identification and characterization, which refers to the construction of an inventory of the administrative records generated by the members of the NSS at the national level, which accounts for the technical characteristics of the records that are produced²². DANE will carry out this task through a capture and query application that will allow obtaining information about the objective, the observation unit, the variables and coverage of the record, among other characteristics, during the first year of implementation of the OEN. The entities of the NSS will be responsible for providing the information that allows identifying and characterizing their administrative records in the query system.

Subsequently, DANE will consolidate and make available to the society the inventory of administrative records with the information provided by the members of the NSS. The entities responsible for the records that are part of the inventory shall also keep the information updated for the next four years with the technical characteristics of the registry, through the same application.

The inventory of administrative records will contain the information that makes it possible for producers to identify the variables and information with which they can produce or supplement their statistics in such a way as to cover unsatisfied demands in terms of statistical information required by the country.

accordance with the fulfillment of the following criteria: response to international commitments; attention to public policy requirements; construction of macroeconomic aggregates; and, production provided for a regulation.

²² The characterization consists of the identification of the main technical characteristics of the administrative records as the objective of the registry, the unit of observation, the variables, the coverage and the geographical disaggregation, among others, so that through metadata or technical data sheets these characteristics can be known. The query applications prepared for the inventory of administrative records will allow the availability of such technical data sheets.



The query and update system of administrative records will be available in the first year. Also, the application will contain the inventory of administrative records updated as of the second year.

ii) The second component consists of the creation of the Data Management group by DANE, which will design a Program for the Strengthening of administrative records, addressed to those records of interest for the NSS, previously identified in the consolidated inventory in the first component of this strategy. To this end, DANE will formulate a diagnosis methodology that will allow identifying actions for the strengthening of administrative records. In the first year, the Strengthening Program will be completed and its implementation started.

During the validity of the PEN, the diagnoses of the required administrative records will be prepared in accordance with the requests and needs for information production by the entities of the NSS. In addition, their statistical potential will be established and opportunities for improvement of the databases will be identified so that those responsible thereof can use them in the performance of their mission-related functions. DANE, as appropriate, will assist the entity in the execution of the improvement actions established. For the fifth year, the Strengthening Program will have been implemented in **30% of the administrative records identified in the statistical inventory for statistical use**.

Also, DANE will disseminate the Methodology of Diagnosis of Administrative Records in order to promote a greater use thereof in the production of statistics. The entities interested in applying this methodology may request the accompaniment of DANE or may implement it autonomously.

iii) The third component promotes the use of administrative records, especially those that have been the subject to the diagnosis. The use is aimed toward the production of new statistics, generation or strengthening of statistical frameworks and comparisons of the results of statistical operations. The statistical use of the administrative record allows the production of statistical information without totally turning to the censuses or surveys, significantly reducing the costs of producing statistics and avoiding the respondent's burden.

The use that is made of the records must take into account the guidelines generated by DANE in terms of statistical production and dissemination, so that they comply with the minimum standards that facilitate the understanding and use by any user.

In order to promote the access to records, DANE through the Data Management group will make available to all the members of the NSS the databases of the statistical records that are produced in DANE, anonymised if they have a reserve or non-anonymised if they do not have it. The delivery of these databases will be carried out in accordance with the parameters and protocols established by DANE, which will allow guaranteeing the reserve and confidentiality, as established by Law.



The databases of administrative records, statistically enhanced by DANE (transformed and adapted for their statistical use), will be returned to the entities by the party responsible or administrator thereof upon request in accordance with Chapter 3 of Decree 1743 of 2016. This will allow their use for the production of official statistics. Also, the strategy seeks to promote that the entities that have the enhanced databases returned to them, to disseminate them, in order for the NSS to have more information aimed toward statistical production. It is expected that in the fifth year the members of the NSS will statistically use 80% of the administrative records with diagnosis.

Strategy 5. Promotion of the inclusion of the differential and intersectional approach in the production and dissemination of statistics of the NSS

This strategy consists of disseminating criteria and guidelines for the production and dissemination of official statistics with a differential and intersectional approach that respond to national and international requirements in this regard. The strategy seeks to facilitate and provide statistical information for public policy decisions aimed at "examining the situations in which different types of discrimination converge, creating an intersection or overlapping of identities and, in this way, many different ways of experiencing discrimination" (Constitutional Court, Judgment T-141/15). In this way, we intend to produce statistical information that allows understanding in addition to the specificities of the population groups according to the gender, disability, ethnicity, life path and other socioeconomic characteristics²³, the intersections between them.

In order to expand the production of statistical information in this regard, the strategy encourages actions to institutionalize the differential and intersectional approach in the production and dissemination of statistics, as a fundamental element to identify the different factors that generate unequal treatment of a person or a given population group (Constitutional Court, Judgment T-878/14). To this end, the carrying out of the following actions is considered:

- Define concepts, minimum variables and benchmarks to be taken into account in the inclusion of the differential and intersectional approach.
- Make a diagnosis on the statistical production in relation to the differential and intersectional approach, so as to identify the starting point for the mainstreaming of these approaches in the NSS.
- Based on the diagnosis, develop a guide with the inclusion criteria pertaining to the differential and intersectional approach in official statistics. This guide will be provided to the members of the NSS for their consideration.
- Disseminate and socialize the guide for inclusion of the differential and intersectional approach in official statistics among the members of the NSS.

²³ According to the Montevideo agreement, it is stated that "(...) the preparation of public statistics by State agencies must be consistent with an inclusive approach which encompasses the broad range of rights under public policy and that the information generated on Afro-descendent populations, indigenous populations, persons with disabilities, lesbian, gay, bisexual and transgender persons, gender, social inequalities and gaps, ageing and other issues constitutes a basic input for public policy formulation and is vital for monitoring the objectives established in national and regional agendas" (UN & ECLAC, 2013: 5).



- Prepare and develop the implementation plan of the guide, prioritizing the entities and statistical operations that will incorporate the differential approach in their production.
- Train the prioritized entities in the inclusion of the differential and intersectional approach in the production of their statistics. DANE will lead this activity and it will be developed within the framework of the learning strategy prepared by DANE Innovation and Learning Group Area.
- Promote the inclusion of minimum variables for the incorporation of the differential and intersectional approach in the statistical operations carried out from administrative records that have persons as the unit of analysis.

In order to address the development of the above actions, an inter-institutional group, coordinated by DANE and composed of the Presidential Counselor for Women's Equity, the Ministry of the Interior, the Ministry of Health and Social Protection, the Ministry of Information and Communication Technologies, DPS, DNP, the Unit for Integral Care and Reparation for Victims and the entities deemed necessary. The group will make a work plan, allocating time and responsible persons.

For the first year of implementation of the PEN, the diagnosis of statistical operations that should include these approaches will be completed; for the second year the inclusion guide of differential and intersectional approach will be published. Between the second and fifth year at least 65% of statistical operations from administrative records that may be subject to the intersectional differential approach will include it.

Strategy 6. Promotion of innovation, learning and knowledge management processes for statistical production

This strategy aims to strengthen the capacities of the entities of the NSS for innovation in statistical production and dissemination, according to global trends²⁴. The strategy will be based on official statistics, in order to reduce costs, solve current problems in collection and processing, develop new methodologies and take advantage of traditional and alternative sources of information such as administrative records and Big Data.

DANE will design and prepare an innovation, learning and knowledge management program that will be coordinated with the country's data innovation guidelines, and jointly with the members of the NSS, for which the following actions will be developed:

i) DANE, jointly with the entities of the NSS, in the first year, will prepare a diagnosis on the status of innovation, learning and knowledge management for the country's statistical production and dissemination, identifying the opportunities and needs of the NSS with respect

²⁴ Innovation is understood as the generation of significant improvements in the activity, creation, use or transformation of new products, services, processes, organizational methods in statistical production and dissemination. Adapted concept: The Measurement of Scientific and Technological Activities. *Proposed Guidelines for Collecting and Interpreting Technological Innovation*. Oslo Manual. In turn, Learning and knowledge management aim to promote and strengthen the statistical capacity of the members of the NSS, through various training strategies in different aspects of statistical production and dissemination.



to these aspects. DANE will be responsible for developing the instruments and tools for the survey, capture and query of the information required for the diagnosis, as well as for coordinating the actions thereof. The entities of the NSS will be responsible for providing the necessary information for such diagnosis.

- ii) From the diagnosis, and within the framework of the NSS, the work plan of Innovation, Learning and Knowledge Management will be built and executed, supported by working groups of international organizations in the field of knowledge exchange. The work plan will include milestones and targets with their respective indicators for monitoring and follow-up. As part of the Program, the activities associated with the generation of statistical capacity will be included in the entities that form part of the NSS in the areas of statistical production and dissemination, based on the needs identified in the diagnosis.
- iii) DANE will follow up to establish the progress of the innovation, learning and knowledge management plan for the statistical production and dissemination within the NSS framework.
 By the fifth year, 80% of the Innovation, Learning and Knowledge Management Program shall be implemented.

DNP will socialize with the CANE the data innovation policy project, before it is presented for approval of the CONPES.

Strategy 7. Implementation of agreements pertaining to the production of the statistics required by the country

In order to strengthen the coordination among its members so as to respond to the country's statistical needs, this strategy aims to open spaces for the generation and implementation of agreements among the members of the NSS, considering the participation of the private sector in those scenarios.

In this sense, for the inter-institutional coordination in the NSS, action plans will be established that can be defined in working groups, agreements or other mechanisms. These action plans shall aim to:

- Eliminate and avoid the duplication of statistics on the same phenomenon and reach consensus on the competence in its production, including the analysis of various unique information registers.
- Prioritize the information gaps that shall be addressed in the next five years in accordance with the demand for statistical information contained in Annex B.
- Permanently identify the statistical information requirements that are generated based on the dynamics of each theme.
- Define the entities that should produce the new statistics needed to meet statistical information requirements²⁵.
- Consider the optimization of the production processes of statistical operations in order to avoid the loss of information.

²⁵ From the prioritized demand.



With respect to the mechanism of the working groups, in order to ensure the coordination in the NSS, within the framework of the CANE, the working groups will be formed and put into operation and DANE, as Technical Secretariat will carry out the following actions:

- Summons the first meeting of the working groups: In this first meeting the members will define the working plan, elect the Technical Secretary and start to establish the action plan.
- Collect and monitor the implementation of action plans: DANE will rely on the Technical Secretariats of each working group and will periodically prepare a report to submit to the CANE.

In some thematic areas, working groups on statistical production have already been set up, hence in those cases a new body will not be created, but work will continue to be done with the existing one, making the adjustments to the work plans so that they include the above-mentioned aspects, if necessary. Without prejudice to the working groups that are defined subsequently to this document, at the end of the second year of implementation of the PEN, at least the following working groups will have been formed and will be working²⁶:

- 1. Agriculture and livestock statistics: This working group will achieve the coordination between the entities producing information to jointly define what the official statistics are and what will be the projects to fill information gaps, within the framework of the Agriculture and Livestock Information System that is being developed. Also, it will serve as a coordinating body so that, from its administrative records, the public and private entities of the sector, together with DANE, maintain and update the Rural and Agriculture and Livestock Sector Master Framework. The group will consist of the Ministry of Agriculture and Rural Development and DANE (who will lead it), the Colombian Agriculture and Livestock Institute, the Colombian Observatory of Science and Technology and DNP. Moreover, the group will have the participation of representatives of producers, research centers and Academia.
- 2. *Education statistics:* Its main objective will be the achievement of agreements that will lead to filling the information gaps identified in the sector; and establishing the responsibilities with respect to the production of new statistics. The members of this working group will be the Ministry of Education, DANE, DNP, the Colombian Institute for the Evaluation of Education, the Colombian Institute of Educational Credit and Technical Studies Abroad, the Colombian Observatory of Science and Technology, and the National Training Service.
- 3. *Mining and energy statistics:* This working group will mainly focus on coordinating the production of information, in order to avoid duplication and address gaps identified with respect to the production of information pertaining to mining activity. This group will have the participation of the Ministry of Mines and Energy, DNP, the National Hydrocarbons Agency, the National Mining Agency and the Mining and Energy Planning Unit, in addition to DANE. The inclusion of other members may be considered.

²⁶ The definition of these thematic areas was based on the collection of information and meetings that were held with the members of the NSS for the definition of the inventory.



- 4. *Environmental statistics:* This working group will mainly focus on the coordination of the existing different systems and platforms of information, as well as in the definition of statistics that address aspects associated with environmental accounting, climate change, green businesses, waste and the report of contaminants, among others, within the framework of the Colombian Environmental Information System. This working group will be composed of the Ministry of Environment and Sustainable Development, DNP, the IDEAM, the Agustín Codazzi Geographic Institute and ASOCARS, in addition to DANE. The inclusion of other members may be considered.
- 5. *Public finance statistics:* This working group is necessary to resolve the differences presented by fiscal statistics generated by the entities of the NSS associated with this topic, as well as by the need to implement good statistical practices and national and international standards on accounting, budgetary, public investment, and treasury aspects; as well as to work on the harmonization of general frameworks such as the SNA 2008 (UN) MEFP 2014 (IMF). Since there is currently an Inter-sectorial Commission on Public Finance Statistics (CIEFP), there is no need to create an additional working group; the work plan defined by the CIEFP on fiscal statistics will be reviewed and supplemented in the light of the aforementioned aspects.
- 6. *Transport statistics:* This working group will aim to coordinate the production of statistics with respect to the complementarity of the results generated by the entities of the sector and the conciliation of the observation units used. The working group will consist of, at least, the Ministry of Transport, DANE, DNP, the Superintendence of Ports and Transport, and the General Maritime Directorate.
- 7. Information and Communication Technologies statistics: The purpose of this working group will be to coordinate the entities of the NSS that produce and disseminate ICT statistics according to the statistical information requirements defined by the ICT sectorial public policy or by International organizations. The working group will consist of, at least, the Ministry of Information and Communication Technologies, the Colombian Observatory of Science and Technology, DANE and DNP.
- 8. Common language and interoperability: This working group, cross-cutting to the relevant thematic areas for the NSS, will address the discussion on the definition and implementation of guidelines and standards that allow generating a common language in the production and dissemination of statistics, making them comparable and interoperable. This working group will be composed of the Ministry of Information and Communication Technologies, DANE, and DNP, without prejudice to invite other entities of the NSS that are deemed relevant.
- 9. Convergence of requests from the nation to the region: This working group led by DNP and DANE will aim to improve the coordination between entities at the national level that make requests of statistical information to the regions, in such a way that, where possible, duplications are eliminated from the unification of requests that several national entities make on the same aspect. Also, international information requirements will be considered that need to be addressed by the regions, as is the case of the SDGs, among others.



Strategy 8. Integration between statistical information and geospatial information

This strategy aims to encourage the use of the National Geo-statistical Framework (MGN)²⁷, spatial representation and analysis, and the use of other sources of remote earth observation sensors to strengthen the production and dissemination of statistics through the use of best practices and ensuring the integration of statistical information with the geospatial information, in accordance with the other strategies of the National Statistical Plan.

In order to implement this strategy, DANE will develop the following actions:

i. In the first year, DANE will design and carry out a diagnosis among the entities of the NSS on the status of integration with respect to the statistical and geospatial information for the production, dissemination and use of information in a geospatial context²⁸.

DANE will develop the methodology, instruments and tools needed to carry out this activity and the members of the NSS will implement them and will provide the necessary information and resources.

- ii. DANE, during the first year of the PEN, will provide the information of the National Geostatistical Framework on its Geo-portal, as well as the guidelines for its use, in order to allow the members of the NSS to take advantage for the collection, availability and dissemination of the statistical information.
- iii. DANE will develop a program to strengthen technical skills in the use of geospatial information, in the detection and analysis of requirements, design, statistical production, and statistical analysis and dissemination for the members of the NSS.

The program will focus on promoting the use of the National Geo-statistical Framework, developing knowledge and skills in spatial representation and analysis, and the use of other sources of remote earth observation sensors for the strengthening of official statistics.

With these activities it is expected to increase by 50% the use of the National Geo-statistical Framework for the third year, and 70% for the fifth year.

²⁷ MGN understood as the set of statistical units and associated variables properly geolocalized, through the use of an official geographic reference and the political administrative division (DANE, 2017).

²⁸ The geospatial context is understood as the ability to geolocalize data, where a fact is considered, on an official geographical basis.



Strategy 9. Strengthening regional statistical capacity

This strategy aims to generate the technical conditions that allow providing a response to the requirements and the unsatisfied demands for information with respect to and from the regional entities, to improve the quality of the regional statistical production, as well as to strengthen the coordination nation-region.

DANE and DNP will make the prioritization of the regional entities with which this strategy will be developed during the validity of the PEN, in a coordinated manner with the DNP *Strategy of arrival in the region*, in order to carry out an organized work in the selected regions.

The strengthening of the regional statistical capacity begins with the identification and definition by DNP and DANE, with the support of different sectors of the Government and taking into account the unsatisfied demands for information identified by the different members of the NSS and of the regions, of a set of basic indicators that would be desirable to be produced by all the regional entities.

These basic indicators should take into account the requirements for production of statistical information of the regions to meet the demands of the national entities; they will be useful for the design of public policies, as well as for decision making at the local level and they will take into account international requirements related to Sustainable Development Goals and the OECD, among others.

For this purpose, the indicators prioritized by the working group *Convergence of requests from the nation to the region*, which additionally show evidence of not being produced by other members of the NSS or by any administrative record of the national level, will be used as inclusion criteria in the battery.

For the production of these basic or minimum indicators defined, the minimum standards and guidelines to collect the information required for its construction will be evaluated, by sectors in conjunction with DNP and DANE. In a complementary manner, DANE will identify another set of indicators that corresponds to the specific needs of the regions prioritized by the strategy for strengthening regional statistical capacities, as well as the unsatisfied demands with respect to indicators of these territories that could be addressed by the nation and whose solution is essential for the development of the public policy of the regions.

Furthermore, DANE will make an identification of the administrative records that the prioritized regions have and that can serve as a potential source of data for the production of new statistical information. Based on the identification, characterization and consolidation of the indicators mentioned above, DANE will prepare a diagnosis for each selected region, which will account for the supply of available and unavailable indicators, according to the regional and national requirements, as well as of the main weaknesses that the statistical activity shows in these regions.

In a like manner, DANE will characterize the administrative records identified, indicating in a preliminary manner their potential use to increase the statistical supply of each of the selected



regions, according to local and national demands. These diagnoses, which will determine the main issues of the regions to have the required statistical information, will be the input for DANE to formulate, for each region selected, an action plan for the strengthening of their statistical capacities.

The action plans for the strengthening of statistical capacities, aimed at responding to the regions' needs to strengthen their human resources in order to improve the availability and use of their statistics, will include improvement actions for the production of statistical information that will enable each region to have a battery of indicators that respond to the requirements of the regional and national policy. The execution of these plans will be the responsibility of the respective regional entity with the accompaniment of DANE and DNP, as appropriate. DANE will be responsible for developing the instruments and tools for the development of diagnoses and the formulation of action plans. It is expected that between the second and fifth year, 70% of the action plans for the strengthening of statistics pertaining to the selected regional entities are to be implemented.

Notwithstanding the group of regional entities prioritized to be strengthened in their statistical capacities, this strategy aims to expand its scope to those regions that, on their own initiative, seek to improve their statistical capacities. In this sense, DANE and DNP will support the generation of technical capacities of the officials in the areas responsible for the production and dissemination of statistics of the regional entities that express their interest, so that in their work the quality of statistics is ensured and the production processes are improved by incorporating good practices and innovative processes. To this end, awareness raising and training actions will be developed in the following areas:

- National Statistical System, its coordination instruments and the role played by DANE in its role of coordinator and regulator thereof.
- Implementation of the tools associated with the norms and standards in the production and dissemination of statistics, in order to promote compliance with quality criteria by the producers of regional statistical information.
- Production of statistics, especially in the design and construction of indicators and the formulation of their baselines.
- Use of innovative techniques, processes and means (use of administrative records, Big Data) in the production and dissemination of regional statistics.
- Advisory or technical assistance for the development of regional statistical planning activities (the formulation of statistical plans and baselines of indicators) at the request of the regional entities.
- Development and implementation in the region of activities for the generation of knowledge, the preparation of virtual contents of easy access for various users and face-to-face workshops, aimed at strengthening the human resource in the regional entities in order to improve local statistical capacity on a more massive scale.

Strengthening of monitoring processes at the regional level, through training on tools and methodologies for the preparation, design and implementation of the monitoring systems and the construction of baselines in order to measure progress in the obtaining of results in the



regional management of the Regional Development Plans (PDT) and Sustainable Development Goals (SDGs).

It is expected that, during the 5 years of validity of the PEN, 75% of the requirements made by the regional entities with respect to socialization and training in these areas are addressed.



V. ACTION PLAN

Objective	1. To maintain the product	ion with res	oect to	the s	tatisti	cal inf	ormat	ion of the NSS	
Strategy 1.									
Definition of the supply of statistical operations that need to be produced YEAR continuously								INDICATOR	BASELINE
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5		
1. Maintain the production of the statistical operations that are being generated continuously in the NSS.	100% of the statistical operations that are being developed on a continuous basis will be maintained.	Entities of the NSS	100 %	100 %	100 %	100 %	100 %	Percentage of statistical operations maintained	100 % (2017)
2. Produce the new statistics needed to	75% of statistical information gaps that have projects defined in this Plan will be addressed.	Entities of the NSS	0 %	25 %	35 %	50 %	75 %	Percentage of information gaps with projects addressed	0 % (2017)
meet statistical information requirements.	formation 50% of the statistical information gaps considered as priorities and Entities of the	35 %	50 %	Percentage of information gaps without project addressed	0 % (2017)				
3. Implement the guidelines and standards defined by DANE and international methodological benchmarks for the production and dissemination.	50% of the statistical operations of the NSS will have guidelines and standards implemented.	Entities of the NSS	23 %	28 %	35 %	45 %	50 %	Percentage of statistical operations of the NSS implementing standards and guidelines	23 % (2016)
4. Generate the methodological documentation of the statistical production and availability for public knowledge.	80% of the statistical operations of the NSS will have methodological documentation pertaining to the published statistical production.	Entities of the NSS	23 %	45 %	55 %	65 %	80 %	Percentage of statistical operations that will have methodological documentation published	23 % (2016)



Objecti	ve 2. To facilitate the access and	d availability of natio	nal a	and re	egion	al sta	tistic	al information	
Strategy 2.									
Promotion of dissemination	on and access to statistical inform	ation			YEAI	R			BASELINE
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5	INDICATOR	
1. Foster the dissemination of statistics, including associated	Document with the standards and guidelines for the dissemination and access of statistical information socialized.	DANE	1					Document socialized	0 (2016)
documentation or metadata.	Duplicate the number of the entities of the NSS that implement SDMX.	Entities of the NSS	4	6				Number of entities with SDMX implemented	3 (2016)
	30% of the entities of the NSS at the national level trained on the methodology of interoperability of information systems.	MinTic, Entities of the NSS	5 %	10 %	15 %	20 %	30 %	Percentage of entities trained	0
2. Interoperability between information systems.	Document with the guidelines of administration of the information systems for the dissemination of published statistics.	DANE, MinTic	1					Document published	0 (2016)
	Four initiatives of information systems with interoperability.	Entities of the NSS		1	2	3	4	Number of initiatives for information systems with interoperability	0 (2016)
3. Access and exchange of confidential microdata.	50% of confidential microdata databases whose exchange was agreed upon in the CANE will be used.	Entities of the NSS		10 %	20 %	35 %	50 %	Percentage of microdata bases	0 %
4. Prepare and socialize the methodological guidelines for the anonymization of microdata.	Document with methodological guidelines for anonymization published.	DANE	1					Document published	0 (2016)
	40 series of anonymised databases of the entities of the NSS published.	Entities of the NSS		10	20	30	40	Number of anonymised database series	21 (2016)



	Objective 3. To increase the qu	ality of the st	atistic	s pro	oduce	d in tl	he NSS	6	
Strategy 3.									
Fostering of the improvement with respect to the quality of offic		ial statistics	YEAR				INDICATOR	BASELINE	
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5	-	
1. Promotion of statistical	National Code of Good Practices of Official Statistics updated, adjusted and issued.	DANE	1					Document updated	0
quality.	100% of the Socialization and Awareness Raising Program of Norms and Statistical Standards implemented.	DANE	10 %	25 %	50 %	75 %	100 %	Percentage of program implementation	0
2. Quality evaluation of the	National Technical Corporate Standard of statistical quality requirements prepared and published by the Icontec.	DANE	1					Technical standard published	0
Quality evaluation of the statistical process.	75% of the statistical operations included in the annual plans will be evaluated.	Entities of the NSS	75 %	75 %	75 %	75 %	75 %	Percentage of statistical operations	0 %



(Objective 4. To expand the supply of the n	ational and re	egior	nal stat	tistica	l info	rmati	on of the NSS	
Strategy 4.									
Identification and promotion of the statistical use of administrative records YEAR								INDICATOR	BASELINE
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5		
1. Identification and	Query and update system developed.	DANE		1				System Developed	0
characterization of administrative records generated by the NSS.	100% of the inventory of administrative records updated in the query system.	Entities of the NSS		100 %	100 %	100 %	100 %	Percentage of update of the inventory	0 %
	Administrative record strengthening program published and socialized	DANE	1					Program socialized	0
2. Program for the Strengthening of administrative records,	30% of the administrative records identified will have implemented the Strengthening Program.	Entities of the NSS		6 %	14 %	22 %	30 %	Percentage of administrative records that have implemented the strengthening program	0 %
aimed at those records of interest to the NSS.	50% of the administrative records identified will have been diagnosed on statistical use.	Entities of the NSS		12 %	24 %	36 %	50 %	Percentage of administrative records with a diagnosis with respect to their statistical use	0 %
3. Statistical use of administrative records: production, generation or strengthening of frameworks or comparisons of results.	At least 80% of the administrative records with a favorable diagnosis with respect to their statistical use will be used statistically.	Entities of the NSS		10 %	30 %	55 %	80 %	Percentage of administrative records used statistically	0 %



C	Dbjective 4. To expand the supply of the n	ational and re	egion	al stat	istical	infor	matio	n of the NSS	
Strategy 5.									
-	nclusion of the differential and intersectional uction and dissemination of statistics of the N	••	YEAR				INDICATOR	BASELINE	
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5		
1	Diagnosis of statistical operations that should include the differential and intersectional approach.	Interinstitution al Group	1					Diagnosis	0
Guidelines for the production and	Differential and intersectional approach guide published.	Interinstitution al Group		1				Guide	0
dissemination of official statistics with a differential and intersectional approach.	65% of statistical operations from administrative records that may be subject to a differential and intersectional approach will have included it.	Entities of the NSS		10 %	25 %	40 %	65 %	Percentage of statistical operations from administrative records with differential and intersectional approach	0 %



Strategy 6.									
Promotion of innovation, learning and knowledge management processes for statistical production					YEAR		INDICATOR	BASELINE	
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5		
1. Innovation, learning and knowledge management program in line with the needs of the NSS.	Diagnosis performed of innovation, learning and knowledge management needs for the country's statistical production and dissemination.	DANE, DNP	1					Document of diagnosis	0
	Innovation, Learning and Knowledge Management work plan built.	DANE, entities of the NSS	1					Work plan	0
	80% of the Innovation, Learning and Knowledge Management Program implemented.	Entities of the NSS		20 %	40 %	60 %	80 %	Program implementation percentage	0 %



	n the coordination between the member informa			•					
Strategy 7.									
Implementation of agreements pertaining to the production of the statistics required by the country						2		INDICATOR	BASELINE
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5	-	
1. Establish action plans that can be defined in working groups, agreements or other mechanisms.	Nine working groups formed, with their respective action plans.	DANE, entities of the NSS involved	9					Number of working groups	1
Strategy 8.									
Integration between s	statistical information and geospatial inform	nation	YEAR						DACELINE
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5	INDICATOR	BASELINE
1. Promote the use of the National	Diagnosis of the status of integration with respect to the statistical and geospatial information for the production, dissemination and use of information in a geospatial context.	DANE, entities of the NSS		1				Diagnosis	0
1. Promote the use of the National Geo-statistical Framework.	50% use of the National Geo-statistical Framework for the third year, and 70% for the fifth year.	Entities of the NSS		25 %	50 %	60 %	70 %	Percentage of use of the National Geostatistical Framework	10 %



	informa	tion							
Strategy 9.									
Strengthen	ing of the regional statistical capacity				YEAR				DACELINI
ACTION	GOAL	RESPONSIBLE	1	2	3	4	5	INDICATOR	BASELINE
	Inventory of statistical information and administrative records completed.	DANE, DNP		1				Inventory	0
1. Formulation of action plans for the strengthening of the national statistical capacity.	20 diagnostics on statistical capacity	DANE		5	10	15	20	Number of diagnoses	5
	At least 70% of action plans to strengthen statistics of selected regional entities, implemented.	Entities of the NSS		15 %	30 %	50 %	70 %	Percentage of implementation of regional action plans	0 %
2. Identify and define a battery of basic indicators.	Battery of basic indicators consolidated.	DANE, DNP	1					Battery of Indicators	0
3. Strengthen the capacity with respect to the production of regional statistics in order to improve their availability and use.	75% of the requirements made by the regional entities will be addressed.	DANE, DNP, entities of the NSS involved	75 %	75 %	75 %	75 %	75 %	Percentage of requirements to regional entities being addressed	0



VI. GLOSSARY

Accessibility. It refers to the easiness with which data can be located and accessed. The range of different users leads to considerations such as multiple formats of dissemination and the selective presentation of metadata. Accessibility therefore includes the relevance of the manner in which data is provided, the dissemination means, as well as the availability of metadata and user support services. It also includes the affordability of data for users in relation to its value to them and whether the user has a reasonable opportunity to know what data is available and how to access it.

Accuracy. It refers to the degree to which the data accurately estimates or describes the quantities or characteristics to be measured. Accuracy refers to the proximity between the estimated values and the true (unknown) values. Accuracy has many attributes, and in practice there is no single aggregate or general measure thereof. By necessity, these attributes are usually measured or described in terms of the error, or the potential significance of error, which is introduced through the individual sources.

Administrative record. A set of data that contains the information collected and preserved by entities or organizations in the fulfillment of their mission-related functions or competences.

Anonymization of microdata. It is a technical process that consists of transforming the individual data of the observation units, so that it is not possible to identify the subjects or individual characteristics of the information source, while preserving the statistical properties in the results.

Big Data. It refers to the large amounts of digital data continuously generated by the world population.

Coherence. It refers to the reconciliation between the data generated by the statistical operation. This means that there is no contradiction between the concepts used, the methodologies adopted and the series produced by the operation.

Comparability. It refers to the impact of differences of concepts applied and measurement tools and procedures when statistics are compared between geographic areas, sectors or over time.

Derived statistical operation. Application of a statistical process that uses as a methodology the estimation or modeling, based on the use of one or several sources (statistics or their combination with data sets), based on conceptualizations or methodologies that are different from those of the data sources used.

Geographic coverage. It refers to the territorial extension on which a statistical operation is conducted; it can be national, regional, departmental, etc.

Geographic disaggregation. It presents the level of detail of a territorial division with which it is necessary to disseminate the information according to the geographic coverage. This is established in the project planning.



Interoperability. Interoperability is the action, operation and collaboration of several entities to exchange information that allows providing online services to citizens, businesses and other entities through a single point of attention or contact.

Interpretability. It refers to the ease with which the user can understand, use and analyze the data properly. The suitability of the definitions of concepts, target populations, variables and terminology that underlie the data, and the information that, if appropriate, describes the limitations of the data.

Metadata. Information necessary for the use and interpretation of statistics. The metadata describe the conceptualization, quality, generation, calculation and characteristics of a set of statistical data.

Microdata. Each one of the data with respect to the characteristics of the study units of a population (individuals, households and establishments, among others) that are consolidated in a database.

National Statistical System. Coordinated set of components, which in an organized and systematic manner, ensures the production and dissemination of official statistics at the national and regional level required by the country. Its components are the entities or organizations that integrate it, users, processes and technical instruments for coordination, policies, principles, information sources, technological infrastructure and human talent.

Official statistics: Statistics produced and disseminated by the entities that make up the National Statistical System (NSS), which allow knowing the economic, demographic, environmental and social situation at the national and regional levels to be taken into account for decision-making and that meet the conditions and characteristics established in Article 2.2.3.2.1 of Decree 1746 of 2016.

Periodicity. Frequency with which the measurement of an element is made.

Punctuality. Time lapse between the publication of the data and the expected date of its publication (for example, with respect to the dates announced in the official release calendar, approved by regulations or previously agreed upon with the partners).

Relevance. The extent to which information serves to address the purposes for which users seek this information. It depends both on the coverage of the required topics and the use of appropriate concepts. Value is also characterized by the merit of users' purposes in relation to the OECD mandate, agreements with member countries and the opportunity costs of producing information.

Statistical dissemination. Stage comprising the dissemination of the information obtained in the statistical operation, based on the design. In this stage, the dissemination and marketing strategies are developed in such a way that the users access and use the results of the statistical operation.



Statistical information: The set of results and the documentation that supports them, which are obtained from statistical operations and which describe or express characteristics with respect to an element, phenomenon or object of study.

Statistical operation. The application of a statistical process on an object of study that leads to the production of statistical information.

Statistical operation based on census. Conduct of a statistical process that uses as its statistical methodology the collection of information with respect to the complete set of observation units belonging to a given population or universe under study.

Statistical operation based on the use of administrative records. Application of a statistical process that uses as its statistical methodology the generation of aggregated data from a set of variables that characterize a topic of interest and which are contained in one or more administrative records.

Statistical operation by non-probabilistic sampling. Application of a statistical process that uses as its statistical methodology the selection of a sample to characterize a set of observed units, and there is no sample frame and therefore the selection probabilities are not known.

Statistical operation by probabilistic sampling. Application of a statistical process that uses as its methodology the selection of a sample based on a sample framework and on the selection probabilities previously known in order to obtain estimates of a target population.

Statistical process: The systematic set of activities aiming toward the production of statistics, including, among others, the detection of needs, the design, collection, processing, analysis and dissemination.

Statistical register: A database resulting from the transformation or integration of one or more administrative records that are prepared to satisfy statistical needs.

Thematic disaggregation. It refers to the level of thematic detail up to which statistically significant information can be obtained from the available data. E.g. the number of children enrolled in school can be disaggregated by sex, age group and ethnicity.

Timeliness. It reflects the time elapsed between the occurrence of the phenomenon and its availability. The context of a period of time that allows information to be of value and still serve to make decisions needs to be considered. The concept applies equally to situational or structural data; the only difference is the time period.

Transparency. It refers to the information context in which the data is provided to the user, together with metadata (explanations, documentation, information with respect to quality that may limit the use of the data). The data would have to be complemented with graphs, plans, methodologies, etc.



VII. BIBLIOGRAPHY

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