
**Self-assessment questionnaire on the implementation of the
OECD Council Recommendation on Good Statistical Practice**

Colombia

National Department of Statistics (DANE)

August 2018

1. Put in place a clear legal and institutional framework for official statistics

Colombia has a coherent statistical legal framework, which has evolved in recent years and is updated according to the development needs of the statistical area.

Recently Law 1753/2015 was issued, which in its Article 160 sets forth the creation of the National Statistical System - NSS, which aims to provide society and the state with quality official statistics at the national and regional level, in coordination between the producing entities. This new legal framework also establishes the composition of the NSS, the obligations of the members, the appointment of the National Department of Statistics (DANE) as coordinator and regulator of the System and the functions associated with this role.

This legislation creates the National Advisory Board of Statistics (CANE¹) as a consultative body whose specific functions include the approval of the National Statistical Plan (PEN²) and the agreement with respect to the exchanges of information at the microdata level, and as a general function, to promote in the NSS the efficiency, consistency and comparability in the production and dissemination of official statistics and the statistical use of administrative records.

A greater detail pertaining to the objectives of the NSS, the obligations of its members and the composition and operation of CANE will be promptly regulated by means of a Presidential decree.

Law 1753/2015 provides that the national government, through DANE, should define the characteristics and conditions of official statistics. The draft regulatory decree proposes that these are related to the inclusion of statistics in the National Statistical Plan and the quality assurance of the statistical process.

The current legal and regulatory basis for the country's statistics is based on Law 1753/2015, which also concentrates DANE functions as coordinator and regulator of the NSS making it responsible for the issuing of standards and best practices, the formulation of the PEN as well as the definition and evaluation of the statistical quality requirements.

In order to address the responsibilities that the regulation poses to DANE, an organizational restructuring is being carried out in the Regulation, Planning, Standardization and Normalization division (DIRPEN), which consists of the following: the creation of a working group that will be the executing unit with which DANE will perform the coordination and regulation of the National Statistical System. A working group will be created that will be responsible for managing the access to administrative records that entities have by virtue of their competencies, performing the diagnosis of quality, developing inter-operability and anonymization mechanisms, and having the administrative records available so that they can be used in the various DANE divisions for statistical production. Finally, the working group on Planning will continue to elaborate and issue, with all NSS members, the National Statistical Plan.

It is important to note that in addition to the coordination of the NSS, DANE is the main producer of statistics in Colombia; it is an Administrative Department, i.e. a technical agency that, according to Article 115 of the Political Constitution of Colombia and Articles 38 and 39 of Law 489/1998 has the same status as a ministry.

¹ Spanish acronym

² Idem.

Colombian law establishes that DANE has the authority needed to collect and compile the statistics required by the country. Decree 262 of 2004 establishes the responsibility of DANE to ensure the production, availability and quality of statistical information (Article 1) and its autonomy to dictate the technical standards pertaining to the design, production, processing, analysis, use and dissemination of strategic statistical information (Article 2).

In addition to DANE, entities such as the Central Bank, the Ministry of Finance and Public Credit, some ministries and superintendencies are also important producers of statistics in the country. Generally speaking, whether by law or by decree, these entities have a clear mandate to carry out the sectorial statistical production, which is mostly developed through the use of administrative records.

Colombia has the appropriate legal framework in order to ensure the collection of information, the access to administrative records and the exchange of information at the microdata level for the production of official statistics. Law 79/1993 stipulates in its Article 5, the legal obligation of natural or legal persons to provide the requested data to DANE in the development of censuses and surveys, and the prohibition to DANE to disclose the data collected to the public or the official or public entities or bodies, but only in numerical summaries. Failure to comply with these obligations will result in the application of sanctions in accordance with the laws in force.

Article 160 of Law 1753/2015 guarantees DANE the access to administrative records held by the members of the NSS, without the latter being able to oppose legal reserve. Finally, the same article allows the exchange of statistical information, at the microdata level, when this is required for the production of official statistics or for improving the quality and consistency thereof. In all three cases, DANE is responsible for safeguarding the confidentiality and reserve of information.

Colombian law on statistical matters has always been aligned with the United Nations Fundamental Principles of Official Statistics. A reflection of this is the National Code of Best Practice developed by DANE and issued by resolution as mandatory for all members of the NSS. In addition to this, in the draft regulatory decree of Article 160 of Law 1753/2015, the United Nations Principles are explicitly adopted.

2. Ensure professional independence of National Statistical Authorities

The legal framework of Colombia allows the NSS members to be independent in their decisions with respect to the statistical methods and dissemination.

As part of Article 160 of Law 1753/2015, the power of DANE to issue a National Code of Best Practices for Official Statistics is ratified, which defines the principles and replicable actions that may contribute to improving the production and dissemination of official statistics. Colombia has had such a Code since 2011; however, it has been updated and published, explicitly incorporating the professional independence principle, which defines the condition of the coordinating and regulating body of the NSS to develop, produce and disseminate statistics independently, particularly regarding the choice of techniques, definitions, methodologies and sources to be used, and the timing and content of all forms of dissemination, free from any pressure from political or interest groups or from the national authorities³. It is noteworthy that according to the Law, the implementation of the guidelines and best practices issued by DANE are of mandatory compliance by the members of the NSS.

³ http://www.dane.gov.co/files/sen/bp/Code_Good_Practice.pdf

Also, Decree 262 of 2004 establishes DANE's functions and incorporates aspects of professional independence to develop, produce and disseminate statistics in an autonomous way, and particularly to decide on methodologies, definitions, and sources.

Decree 262, Article 2 states:

Two general functions of DANE are:

1. To dictate the technical standards pertaining to the designs, production, processing, analysis, use and dissemination of strategic statistical information.
2. To establish and approve the technical standards for the production and dissemination of the country's statistical information

In practice *"there is a tradition of professionalism, technical independence and high technical standards in DANE that has facilitated its work and earned high credibility for its outputs"* (OECD, 2015, p. 12)

The appointment of the Director of DANE follows the guidelines established in the Political Constitution of Colombia to appoint a Director of an Administrative Department. Even though a procedure for appointment and removal is not defined, *"the professional experience, the seniority within the national administration and the expertise of the candidates are considered"* (OECD, 2015, p. 10), which was evidenced by the team of the OECD Secretariat.

DANE, in compliance with Article 8 of the Political Constitution of Colombia, annually prepares a report to Congress (including the Senate and House) with respect to the progress of the matters related to its portfolio and reforms that it deems to be appropriate; likewise, also it elaborates and disseminates a report about the institutional performance according to the norms of transparency and access to public information⁴. Usually the report is based on the fulfillment of goals and action plans that all executive agencies propose annually at the beginning of each year.

Finally, the transparency in the publication of the information produced by DANE ensures the entity's professional independence; the publication follows strictly technical protocols pertaining to the review of information, where both internal and external expert committees⁵ take part, but in no case is approval required from any political sphere for the dissemination of data.

Other members of the NSS, such as the Central Bank, also have legal provisions that guarantee their autonomy in terms of statistics. Law 31/1992 grants the Central Bank the autonomy and professional independence to collect information from other organizations (superintendencies) and public entities for its activities.

3. Ensure adequacy of human financial and technical resources

DANE has sufficient financial and human resources to perform the regular activities pertaining to statistical production and dissemination.

The mentioned resources are suitable in extension and quality to meet statistical needs. DANE compiles more than 40 regular statistical operations per year. For the implementation of these statistical operations, DANE

⁴ <http://www.dane.gov.co/index.php/transparencia>

⁵ http://www.dane.gov.co/files/acerca/Normatividad/resoluciones/2014/Resolucion_1154_06_6_2014.pdf

requires qualified staff for the collection of data. For annual statistical operations, DANE trains approximately 6,200 collaborators and has a selection process that includes approximately 2,000 candidates for different roles as interviewers, supervisors and coordinators, among others.

In order to cover these recurring tasks, DANE annually allocates two types of budgets. The one related to operation addressed to cover the areas and support tasks such as payroll, overhead, administrative expenditures and others. These resources are guaranteed for each term and increase according to the CPI.

The investment budget is allocated annually through resources of the national level. The corresponding entity, in this case DANE, plans its expenditures for the future term, including projects of a recurring and non-recurring nature, as is the case of the censuses. This planning reflects the exercises pertaining to the identification of needs that are performed for the preparation of the National Statistical Plan and the development of new initiatives such as the accession process to the OECD or monitoring indicators to Sustainable Development Goals. These exercises are carried out internally by the technical divisions, led by the Planning and regulation Division (DIRPEN⁶) and the Planning office. Subsequently, they are presented and discussed in the Technical Committees where the Technical Directors, the Director General and the Deputy Director of DANE establish the priorities and changes. This ensures that the statistical needs of the country are met as well as the changes to be done if necessary to initiate new projects⁷.

At this planning stage, the entity estimates the costs of each process, meeting the budget cycle, and sends the draft, including goals and policies, to the National Planning Department. All the projects are registered in the National Bank of Programs and Projects. The Congress approves the national budget.

The monitoring with respect to the implementation of the resources is performed through the Ministry of Finance and Public Credit, by means of a monthly report prepared by DANE and there is a control from citizens throughout the process of reporting and the citizenry exercises control by means of formal accountability mechanisms⁸.

The General Government has prioritized the resources for the statistical area and sufficient funds have been allocated to support new activities such as innovation. DANE recently formalized the Innovation and Learning Group, which aims to institutionalize the ability to learn, innovate and manage the knowledge permanently in the entity. The allocation of resources for DANE has guaranteed the financial and technical allocation to develop the work plan of innovation, learning and knowledge management. In the last 5 years, the funds for learning were USD \$100,000 annually in average. In 2016, the funds for innovation, knowledge management and learning were USD \$1,000,000. Approximately, USD \$300,000 of this budget have specifically been implemented for the innovation plan.

DANE has a continuous training program, which aims to increase the skills and capabilities of DANE staff and users with respect to statistical matters, as well as to improve the quality and coverage of statistics.

DANE has developed 34 courses pertaining to statistical production and dissemination including three courses related to the use of official statistics, which aim to prevent them from being misused and misinterpreted; two

⁶ Regulation, Planning, Standardization and Normalization Division

⁷ http://www.dane.gov.co/files/control_participacion/planes_institucionales/Planes_Indicativos/Plan_Indicativo_Cuatrienal_2015_2018.pdf

⁸ <http://www.dane.gov.co/index.php/participacion-ciudadana>

courses related to geospatial data for the development of capabilities, a course pertaining to the design and implementation of digital surveys and other statistical topics.

Furthermore, the learning strategy includes the selection process from the summons to the training, covering the assessment and selection of interviewers, supervisors and coordinators for statistical operations. DANE has implemented a strategy based on a Blended Learning platform (www.aprendizaje.dane.gov.co). In this platform it develops interactive tools, assessment and practical activities in order to achieve the development of skills pertaining to statistical production and dissemination.

4. Protect the privacy of data providers

“The protection of confidential data is explicitly established in Colombian legislation” (OECD, 2015). In terms of statistical confidentiality, the following regulations have been defined, which are publicly accessible: Law 79/1993 according to which natural and legal persons are obliged to provide the data requested by DANE in the development of censuses and surveys; in turn, DANE is obliged to respect the statistical reserve and confidentiality of the data collected, and therefore cannot disclose to the public or to official of public entities or bodies, the data collected but only in numerical summaries. Failure to comply with these obligations will result in the application of sanctions in accordance with the laws in force. Resolution 1503/2011 forms the Assurance Committee of the Statistical Reserve which advises the Director of DANE in the adoption of standards and policies necessary to protect the statistical reserve and to define the use of microdata as well as procedures, protocols and technical mechanisms and security for the access to and dissemination of anonymized microdata.

For the other members of the NSS, Law 1266/2008 and Law 1581/2012 have been created, which incorporate the principle of confidentiality under which all natural or legal persons involved in the management of personal data that are not of a public nature, are obliged to ensure the reserve of information.

Article 160 of Law 1753/2015 reinforces this legislation in regards to two essential aspects: first, for the use of administrative records, since the law provides that when an administrative record is delivered to DANE for statistical purposes, the entity shall guarantee the reserve and confidentiality of information; second, in the exchange of microdata for statistical purposes, the law also clearly sets forth that the parties involved in the exchange shall safeguard the confidentiality and reserve of information. These provisions of confidentiality of information will be developed in greater detail in the regulation of Article 160 of Law 1753/2015.

There are specific measures to guarantee full protection of individual data, such as: i) the consolidation in DANE of the Information Security Management System, whose guidelines establish the responsibility of guaranteeing the confidentiality, integrity and availability of information assets, assuming the commitment to protect the privacy and security thereof; These guidelines are of public knowledge and have been duly disseminated within the entity; ii) the establishment and signing of the commitment to reserve, secret and statistical confidentiality by all employees and contractors of DANE contained in their contracts at the time of hiring and is also frequently informed when accessing the entity's computer equipment.

In turn, Law 79/1993 provides appropriate sanctions to the willful breach of confidentiality, where DANE may impose fines amounting to between one (1) and fifty (50) monthly minimum wages as a penalty to natural or legal persons who violate the provisions set forth in this law.

Finally, the National Code of Best Practice for Official Statistics, includes Principle 6 called "Confidentiality" which states that *“entities belonging to the National Statistical System shall guarantee the protection and confidentiality*

of the information used to produce official statistics and shall refrain from identifying the sources” (DANE, 2014, p. 8). This principle led to the construction of the microdata anonymization guideline which is published on the DANE Website⁹, the document that describes the principles and associated best practices, the processes for pre-anonymization and anonymization techniques for internal and external use.

Additionally, the National Data Archive (ANDA¹⁰) that constitutes the infrastructure created for the dissemination of metadata and microdata of statistical operations, is in harmony with the confidentiality policy, since the information disseminated complies with the provisions of the guidelines on the anonymization of microdata, in order to protect sources of information. All this has taken place having as a framework the Law 1712/2014 about transparency and the right of access public national information.

5. Ensure the right to access administrative sources to produce official statistics

DANE is authorized to access the administrative records held by the members of the NSS and which could be statistically used.

Law 1573/2015 establishes the mandatory nature for all members of the NSS to provide DANE with full databases of administrative records that the latter may request. The difficulties of access to administrative records such as those regarding social security, customs and civil registration, among others, have been corrected, since now other entities cannot oppose the legal reserve to the requests from DANE. This opens up countless possibilities for producing new statistics, consolidating many existing ones, comparing with results from surveys, complementing directories and many others, with more information and lower costs. Thus, from the issuance of Law, DANE has achieved agreements with the National Registry Office to have access to the identification of citizens in the framework of the pilot phase of the population and housing census via Internet, as well as access to the Single Tax Register (RUT¹¹) of National Tax and Customs Department (DIAN¹²).

Where possible, the NSS entities use administrative records for the generation of statistics with the purpose of reducing the burden on the source and minimize costs. Most of the NSS entities other than DANE make use of administrative records that they create and maintain for the exercise of their mission functions and that also are used to produce the statistics in their sectors. DANE, in turn, uses administrative records to produce national accounts statistics, imports and exports statistics, vital statistics and others.

In order to promote and improve the use of administrative records, DANE has drawn a line of work with administrative sources, which begins with the knowledge of the record, its objective and the processes and sub-processes that define it; this translates into agreements of interagency actions pertaining to the value and use of information. In this sense, DANE has made progress in developing a methodology for the surveying of the diagnosis of administrative records, which has been tested in the Integrated Social Security Contribution Form

⁹ http://www.dane.gov.co/files/sen/lineamientos/protocol_for_microdata_anonymization.pdf

¹⁰ Spanish acronym

¹¹ Idem

¹² Idem

(PILA¹³) and the beneficiary identification system (SISBEN¹⁴). For the development of this line of work, DIRPEN will be restructured and a working group will be created called Data Management.

Additionally, based on statistical quality evaluations, where the information source is also rated, DANE issues improvement plans for administrative records that are used for statistical production. Finally, a pilot project for the strengthening of territorial statistics from administrative records is being carried out in the metropolitan area of the Valle de Aburrá, Antioquia, where the administrative records that can be used to produce and improve territorial statistics are identified. Once the pilot is complete and evaluated, the best practices will be replicated to other areas of the country.

DANE has a legal mandate to issue the guidelines, standards, best practices and technical standards for both the production of official statistics and the statistical use of administrative records; moreover, a legal mandate was issued for all members of the NSS to comply with them. In developing the above, DANE has generated standards¹⁵ and will produce guides, concepts, guidelines and plans for the design, maintenance, reporting and use of administrative records.

Finally, the integration of databases of administrative records or of these with databases of surveys is a practice that is used by the members of the NSS. An example of this is the integration of records conducted by the Ministry of Health and Social Protection called SISPRO. DANE also uses this technique and in the draft regulatory decree of Article 160 of Law 1753/2015 it provides that the databases resulting from the integration may be disseminated by the entity without restrictions when they are not confidential data, or anonymized if they are subject to confidentiality.

6. Ensure the impartiality, objectivity and transparency of official statistics

Colombia guarantees equal access to official statistics for all users at the same time; there is no privileged access to information. This is ratified by the OECD Committee on Statistics and Statistical Policy, which in its evaluation states that DANE “*does not provide data to any external person or institution before their official release*” (OECD, 2015, p.13). To this end, among other tools, DANE has rolling 12 months in advance release calendar¹⁶ where the exact date and time is provided, where all users at the same time, are able to access publications on the website, also, and according to the recommendations from OECD, from there it is possible to access the statistical results of all operations. Additionally, social media are used in the dissemination of results¹⁷.

When a publication is released in advance or is delayed, this is reported on the DANE Website in a timely manner, through the release schedule; similarly when methodological changes are made or errors are found, for which effect DANE has the procedure "Dissemination of Statistical Information by External Mass Media" that is part of our Institutional Management Integrated System. For studies such as employment and GDP a press conference is held where the results are presented objectively without any bias¹⁸. There are processes and procedures in place so as to ensure that the potential risks of leaks of information are controlled in the information

¹³ Spanish acronym

¹⁴ Idem

¹⁵ http://www.dane.gov.co/files/sen/planificacion/metodologia/planes_fortalecimiento_RA.pdf

¹⁶ <http://www.dane.gov.co/index.php/calendar/>

¹⁷ https://twitter.com/DANE_Colombia

¹⁸ <http://www.dane.gov.co/index.php/sala-de-prensa/comunicados-y-boletines>

processing; an example of such procedures is the confidentiality agreement to be signed by all the officials in the entity at the hiring. On the other hand, in relation to what users publish, a permanent monitoring of media is performed, so that when there is a misinterpretation or misuse of statistics, statements are prepared that clarify the scope of the data and they are sent the source that made the misinterpretation thereof¹⁹.

Colombia developed a public system of metadata, known as ANDA²⁰, where access is provided to the methodological and technical documentation of each of the studies of DANE and 11 other members of the National Statistical System. For the ANDA, guidelines have been developed addressed at all members of the NSS on methodological documentation of statistical operations. The ANDA contributes both to transparency and to the proper interpretation and understanding of statistical results. Likewise, through the ANDA, the public has available 100 anonymized databases pertaining to household surveys²¹. In this respect, the OECD states the following: "*The procedures implemented by DANE as regards to metadata are in line with good practices and recognised as such by users*". (OECD, 2015, p.7).

The methods and sources used in the production of statistics are based on technical considerations. Article 160 of Law 1753/2015 states that to have "*quality official statistics at the national and territorial levels, with common languages and procedures respectful of international statistical standard*" is the objective of the NSS, which is ratified in the National Code of Best Practice. In this regard, in all of DANE studies and some of the National Statistical System, studies are performed with respect to international benchmarks, best statistical practices are identified and there is a set of internal and external committees to discuss the methodological aspects²².

Finally, there is a set of guidelines for all members of the NSS in terms of methodological documentation, design, management of impartiality, performing of tests and anonymization for statistical operations that is available to all members of the NSS. In a like manner, the following are available to the public: the assessment methodology pertaining to the quality of the statistical process, the directory of statistical operations of the NSS and the report on which of these have been certified, the validity of the certification and the details provided by the experts commission that was responsible for its evaluation.

7. Employ sound methodology and commit to professional standards used in the production of official statistics

DANE's statistical production process incorporates statistical standards in terms of classifications, concepts, methodologies, standards for the documentation and dissemination of metadata, microdata and indicators, as well as technical guidelines, which are the result of joint work with the producers of statistics and the analysis of international benchmarks pertaining to the matter. Furthermore, DANE, as the coordinator of the National Statistical System, performs the processes of adoption and adaptation of standards that are publicly accessible through the entity's Website²³, and leads the efforts toward the implementation of these standards on behalf of the producers of statistics. According to Article 160 of Law 1753/2015, members of the NSS are required to implement the guidelines, best practices, standards and technical standards that DANE defines for the production and dissemination of official statistics and for the statistical use of administrative records.

¹⁹ <http://www.eltiempo.com/archivo/documento/MAM-304318>

²⁰ http://formularios.dane.gov.co/Anda_4_1/index.php/catalog

²¹ http://formularios.dane.gov.co/Anda_4_1/index.php/catalog/MICRODATOS

²² <http://www.dane.gov.co/files/acerca/Normatividad/resoluciones/2014/1558.PDF>

²³ <http://www.dane.gov.co/index.php/sistema-estadistico-nacional-sen/normas-y-estandares-2/aspectos-generales-normas>

DANE statistical operations follow a statistical production model consisting of five phases (detection and analysis of requirements, design, implementation, analysis and dissemination), each of which takes into account the methodological and technical guidelines established; technical areas and working teams have been formed that allow DANE to design and develop the studies as well as to disseminate statistical information.

In DANE, all the discussions of a technical nature pertaining to the statistical operations and studies conducted by the entity, their redesign and improvement, the definition of new statistical operations, the study of relevant technical documents related to statistical production, the socialization of best practices and other matters subject to monitoring are internally held in the Technical Committee, which is a body comprised of the Technical Directors and chaired by the director of DANE, which was institutionalized through Resolution 226 of 2014 and which is held at least twice a month²⁴.

The design of the statistical questionnaires used in the data collection processes takes into account international practices. Likewise those are examined by pilot tests and experimental exercises that determine potential failures or improvements, not only for the questionnaires but also for the capture applications. These validation tests are a requirement in each of the statistical operations. Forms are always subject to improvements depending on the changes that may occur in the phenomenon under study. On the other hand, information users always have a scenario for providing feedback to the statistics and give an opinion with respect to the methodological instruments designed.

When the redesign is performed in a statistical operation, the necessary instruments are created that guarantee the coherence of the new information produced; e.g., the parallel calculation system to verify the data. In the case of the surveys, the statistical design determines the sampling plan where the statistical method for the selection of samples and their size is established; the statistical procedure to estimate the values with respect to the parameters of the target population and the estimation error, as well as the procedures to perform the maintenance of the sample, aiming at the best estimates with minimal error.

The registration of enterprises in DANE has an ongoing process of updating the information of the statistical units and it meets a delivery schedule for the development of the annual activities of statistical production. It follows documented procedures for the processing and validation of information from administrative records and surveys of DANE. With annual cut-off dates, changes are identified in the units by sector and information is reported for the analysis of economic surveys. Along with the above, there is a process of verification of information by telephone operation that enables validating or complementing registry information.

Once the standards and the methodological development are incorporated, there are three types of committees that could be held: internal committees, external committees and expert committees. The latter are intended to advise DANE with respect to the design or redesign processes of the statistical operations, review the methodologies and strengthen their effectiveness. They are composed of experts in the respective matters for which they were summoned²⁵. Their participation stands out in the design of the CPI, poverty measures and labor market measures. Internally there is a resolution that is public, which sets forth the procedures for carrying

²⁴ <http://www.dane.gov.co/files/acerca/Normatividad/resoluciones/2014/226.PDF>

²⁵ http://www.dane.gov.co/files/acerca/Normatividad/resoluciones/2014/Resolucion_1154_06_6_2014.pdf

out revisions, adjustments, improvements and methodological changes to statistical operations and studies conducted by DANE²⁶.

8. Commit to the quality of statistical outputs and processes

The NSS has a quality assurance framework that is public and is available to members of the NSS. The framework operates under a scheme of interaction between users and producers of statistics. In it the provisions and initiatives that DANE has developed in terms of quality as the coordinator of the system, based on international benchmarks are referenced.

Based on the quality assurance framework, a model is implemented that aims at ensuring technical rigor in the national statistical production through a scheme of promotion, evaluation and monitoring of the National Code of Best Practice, the statistical process and the quality requirements established by DANE, which are the three cornerstones that frame the quality in the NSS.

The methodology for evaluation and certification with respect to the quality of the statistical process²⁷ verifies the fulfillment of the attributes and requirements in three principal aspects: The context, the statistical process and the database. This methodology was based on the following benchmarks: the UN Fundamental Principles of Official Statistics, the Framework for Data Quality Evaluation (MECAD²⁸), the European Statistics Code of Practice, the OECD quality guidelines, the model for quality assessment in the UK and the ISO 9001 standard. A key feature is that a Committee of Independent Experts conducts the evaluation process.

By means of the evaluation process it is intended to increase the credibility, reliability, comparability and transparency of the statistical production, given that the quality requirements are framed in the attributes of statistical quality established internationally, such as: the relevance, transparency, accessibility, comparability, accuracy, interpretability, timeliness and punctuality, coherence and continuity.

With the enactment of Law 1753/2015 the country formally has an instrument that characterizes official statistics and consolidates the improvement of quality in statistics, because all members of the NSS have a legal mandate to fulfill the recommendations issued by the Committees of Independent Experts in the framework of evaluations. Furthermore, the regulatory decree draft of the above-mentioned article states that the characteristics and conditions of official statistics need to be based on the approval of the evaluation of the statistical quality.

Finally, there are evaluation reports and improvement plans for the statistical production processes of the NSS that have been evaluated to date, which allow establishing that official statistics meet the information requirements of the country for decision making.

The evaluation of the statistical quality performed by DANE is widely recognized by peers in the region and the OECD Secretariat which in the accession evaluation report access states that the certification developed by DANE ensures a proper operation of the production of statistics by the entities of the National Statistical System, a situation that makes it different from the statistical systems of many other countries, especially due to its regularity and permanence. It also values that DANE has an effective quality policy that allows a continuous improvement of DANE statistical production and that of the other entities that are part of the NSS, thus

²⁶ <http://www.dane.gov.co/files/acerca/Normatividad/resoluciones/2014/1558.PDF>

²⁷ <http://www.dane.gov.co/index.php/sistema-estadistico-nacional-sen/calidad-estadistica-2/aspectos-generales-calidad>

²⁸ Spanish acronym

demonstrating an efficient and innovative management on behalf of Colombia with respect to the other members of the OECD. (OECD, 2015)

9. Ensure user-friendly data access and dissemination

In terms of ensuring access and availability of data of easy use, presented in a clear and comprehensible manner, in DANE, statistics and information associated with them is available through various dissemination tools. “DANE uses a range of dissemination media including websites (national, regional, Colombiastad, the CDI), bulletins, statistical reports, press releases, emails, social networks” (OCDE, 2015, p.19). DANE also manages the access of the public to microdata for 100 anonymized databases for public use without any restriction and 141 anonymized databases to be processed in the specialized room according to the protocols in place; all these databases are available in SPSS and TXT²⁹. In addition, Law 1753/2015 provides that members of the NSS are able to exchange statistical information, at the microdata level, for the production of official statistics or the improvement of consistency and quality. The mechanisms and protocols for the exchange will be detailed in the Regulatory Decree draft of the Law, which will be issued in the upcoming months. In the framework of the NSS, specific recommendations are made by experts through quality evaluations in order to strengthen the dissemination of the statistical operations evaluated.

In order to contribute to equality in terms of access to information, for example, DANE as the leading producer of the NSS, has made progress in the translation of its website into English up to the third level of browsing; a major part of the methodological documentation is already translated and work is being done on the translation of the remaining that is publicly available in Spanish.

So as to help with fulfilling this recommendation, in the National Code of Best Practices there are principles aimed to ensure that all users have a direct access to the official statistics and their documentation, and to publish official statistics in a clear manner, so as to allow an adequate interpretation and a proper use; in that way it is established that the dissemination of official statistics use various media and technology, to meet the needs of users and ensure greater coverage³⁰.

Through the implementation in the NSS of the DDI-Dublin Core standard for documentation, the methodological documentation of 98 statistical operations corresponding to 12 entities of the NSS³¹ has been disseminated through the National Data Archive, where the description of the statistical processes, the use of administrative data, the target population, the units of observation and analysis as well as the questionnaires, among many other aspects can be found in a standardized manner.

With respect to the guidelines for the NSS, there is a bank of good statistical practices³² where the way in which they can be implemented is specified; additionally there are technical documents related to the design, methodological documentation of the statistical process, the preparation of metadata, impartiality, the reduction of the burden to the sources, confidentiality, the performing of tests and the anonymization applicable to the various statistical operations³³.

²⁹ http://formularios.dane.gov.co/Anda_4_1/index.php/catalog/MICRODATOS

³⁰ http://www.dane.gov.co/files/sen/bp/Code_Good_Practice.pdf

³¹ http://formularios.dane.gov.co/Anda_4_1/index.php/catalog

³² <http://sen.dane.gov.co:8080/senApp/module/bbpModule/index.html>

³³ <http://www.dane.gov.co/index.php/sistema-estadistico-nacional-sen/normas-y-estandares-2/estandarizacion-de-documentacion-metodologica>

There is a system of harmonized concepts that are applicable to the statistical operations performed in DANE and the National Statistical System so as to contribute to uniformity, harmonization and comparability of the statistical production³⁴.

Finally, as part of the dissemination policy, DANE has available on the website the resolution for price or costs when specific services pertaining to information processing services are required³⁵.

10. Establish responsibilities for co-ordination of statistical activities within the NSS

DANE is the leading producer of statistics in the country. Decree 262 of 2004, in Article 1 states that “*The National Administrative Department of Statistics, DANE, aims at ensuring the production, availability and quality of the strategic statistical information, and directing, planning, implementing, coordinating, standardizing, and evaluating the production and dissemination of basic official information.*” The official statistics that are produced by DANE may be enquired on the Website.

The country's statistical production is also conducted by many entities both public and private, most of which have a legal mandate empowering them to carry out these activities, according to the characteristics of the statistical production of the NSS, which is documented in the inventory of statistical supply³⁶ and which is an input for the preparation of the National Statistical Plan.

The coordination and regulation of the NSS was delegated to DANE in Article 160 of Law 1753/2015. This article also creates the National Advisory Board of Statistics (CANE), which is the consultative body that is responsible for the approval of the National Statistical Plan and the agreement of information exchanges at the microdata level, between members of the NSS.

The OECD Committee on Statistics and Statistical Policy concluded in its evaluation that DANE performs the coordination of the NSS by implementing practices that are innovative at the international level (OCDE, 2015). The coordination among members of the NSS is implemented through policy tools such as the National Statistical Plan, the definition and issuing of standards, best practices and technical guidelines, and the assessment of statistical quality, where the compliance of the former is evaluated.

The National Statistical Plan is the instrument whereby the strategic guidelines and the actions for the development of statistical production will be established, taking into account the information needs of the country. The preparation of the plan is led by DANE and performed in coordination with all members of the NSS. The document, which should be formulated every five years, will be taken to CANE for approval. In a like manner, DANE will monitor the implementation of the Plan, and periodically report the advance to CANE.

The concepts, standards, best practices and technical guidelines both for the production and the dissemination of official statistics are established by DANE in a permanent way, for use by all members of the NSS. These guidelines, which mostly adopt and adapt international standards, can be found published for the information of

³⁴ <http://www.dane.gov.co/index.php/sistema-estadistico-nacional-sen/normas-y-estandares-2/estandarizacion-y-armonizacion-de-conceptos>

³⁵ http://www.dane.gov.co/files/acerca/Normatividad/Resolucion255_2012.pdf

³⁶ <http://sen.dane.gov.co:8080/senApp/module/pe/index.html>

all³⁷. DANE provides support and technical assistance to members of the NSS for the implementation of the standards issued.

Finally, in order to ensure that the processes of quality management are common, DANE performs quality evaluations of the statistical process, for which effect it establishes the evaluation requirements and mechanisms, which are disseminated by means of the website. Furthermore, a commitment to quality improvement in the production process of statistics is generated through the evaluations.

It is noteworthy that, from Article 160 of Law 1753/2015, the implementation of the strategies and actions of the National Statistical Plan, the standards, guidelines and best practices, and of the recommendations stemming from quality evaluations are of mandatory compliance by members of the NSS.

The law has recently regulated the mechanism of exchanging statistical information, at the microdata level, between members of the NSS. The possibility arises that microdata are exchanged for the purpose of producing official statistics or improve their quality and consistency, which allows it to further harness the information available in the NSS and reduce duplication of efforts while reducing costs.

11. Commit to international co-operation

DANE, as leader of the National Statistical System implements from different channels of technical cooperation and international relations, actions aimed at strengthening the ties between countries; this activity, which includes the development of technical assistance missions, videoconferencing, horizontal cooperation and South - South cooperation, has positioned DANE as one of the two most important leaders in providing technical cooperation on the continent.

This is made evident by the participation of professionals from different entities of the National Statistical System in technical assistance programs in order to promote and ensure data quality and comparability thereof. The NSS members are actively involved in the international agenda, in thematic groups of experts, conferences and workshops for the management and promotion of knowledge, the sharing of lessons learned, research and innovation and learning management.

Furthermore, the commitment and leadership of DANE is a key factor in the harmonization of agendas and regional technical alignment, which is why the participation of the Directors of the various national statistical offices is particularly important in the formulation of statistical projects with regional and global outlooks, which contribute to the conceptual structure, the definition and design of the global statistical framework and certainly to the compliance with the United Nations Fundamental Principles of Official Statistics.

In the framework of the above, DANE has performed promotion strategies, knowledge management and socialization of good practices aimed at meeting this need for international cooperation through the transfer of knowledge and exchange of models, processes and strategies for the statistical production and dissemination. Part of the above is made evident in its participation in meetings, working groups, information transmission and completion of questionnaires in scenarios of cooperation and exchange with international statistical agencies, such as the UNSD - United Nations Statistical Commission, where we will be members from January 2017, the

³⁷ <http://www.dane.gov.co/index.php/sistema-estadistico-nacional-sen/normas-y-estandares-2/aspectos-generales-normas>

SCA - ECLAC - Statistical Conference of the Americas, the CEA³⁸ - Andean Statistical Committee, UNECE - United Nations Economic Commission for Europe, UNODC - United Nations Office on Drugs and Crime, IOM - International Organization for Migration, UNFPA - United Nations Population Fund, IDB - Inter-American Development Bank and WB - World Bank, among others. Also we are the representatives of Andean countries at the Inter-agency and Expert Group on Sustainable Development Goal Indicators.

It has also established horizontal technical cooperation with national statistical offices such as the INEGI (Mexico), INEC (Ecuador), INEGE (Equatorial Guinea), INE (Chile) and developed projects with academic and private sectors, including the University of Minnesota, the Universidad Externado de Colombia and the Universidad Nacional de Colombia, GPSDD - Global Partnership for Sustainable Development Data, and the CEPEI³⁹- Center for International Strategic Thinking, among others.

As of 2014, Colombia performs the transmission of indicators to the OECD through the SDMX standard for topics such as prices, retail, employment, construction, manufacturing and foreign trade. Currently 81 indicators are being transmitted according to the data structures (DSD's) of short-term economic statistics and labor market statistics. Furthermore, DANE provides support in the implementation of the standard in entities of the NSS.

Technical cooperation and international relations have been an important part of DANE's work in the consolidation of a regional agenda and the alignment of programs and projects for the production and dissemination of comparable statistics, fostering the integration of countries. Colombia and the region have benefited from extensive bilateral consultations, working groups, expert meetings and have helped to strengthen international standards for their participation in international organizations.

12. Encourage exploring innovative methods as well as new and alternative data sources as inputs for official statistics

DANE has established its vision or future perspective as: In 2018 DANE will consolidate itself as a modern, innovative and knowledge-generating institution and will continue to be the leading entity in statistical production. In order to achieve the vision, DANE formalized the Innovation and Learning Group, which aims to institutionalize the ability to learn, innovate and manage the knowledge permanently in the entity.

The innovation pillar consists of promoting significant improvements in various tasks by creating, using or transforming new products, services, processes, organizational methods to revolutionize the organization and the production and the dissemination of statistics for the country and its citizens, so as to have better information for decision making. For that effect, DANE has developed policies and strategic plans for innovation and training in statistical production, dissemination and in issues concerning additional activities needed to support statistical production, in the framework of the Generic Activity Model for Statistical Organizations (GAMSO). The policies and strategic plans for innovation and knowledge management correspond to recommendations and good practices from the OECD.

The innovation plan contains 18 projects that will be executed until 2018. That number of projects could be increased according to the winners of the innovation contests, and other strategies that are being developed.

³⁸ Spanish acronym

³⁹ Spanish acronym

DANE is currently working on a Smart Data strategy, which aims at strengthening the production, generation and dissemination process of official statistics through the use of alternative sources of information and non-traditional methods such as administrative records and Big Data. In order to accomplish this objective, three priority lines with specific projects have been established, as follows:

1. Sustainable Development Goals
 - a) Use of satellite images to calculate land use and land coverage statistics
 - b) System of Enquiry and Geographic Location of Schools
2. Big Data and other statistical operations
 - a) Measuring of CPI price variations through Web scraping
 - b) Scanner data to CPI prices
 - c) Subjective poverty measurement by means of Big Data
 - d) Big Data as an input for updating the Statistical Directory, using data mining techniques from websites.
 - e) Mobile data usage to optimize the census operation (CDR and VLR)
 - f) The eCensus (as previously mentioned)
3. Integration of sources
 - a) Use of administrative records for population projections
 - b) System of Enquiry and Geographic Location for Schools.
 - c) Urban levels upgrading of the National Geostatistical Framework, incorporating administrative records.

There are three phases to execute the Smart Data strategy, whereby we define actions, identify potential alliances with think-tanks, private sector, and the government sector, among others. DANE is constructing the innovation lab to ensure all technical and technological resources to the innovation strategy development, learning (training) and knowledge management.

Access to the data of private corporations is also provided for in Law 1753/2015. The law establishes that legal persons having administrative records, which could be used statistically, are part of the NSS. It also requires from members of the NSS to submit to DANE the databases of administrative records that it may request without opposing legal reserve. In the draft regulatory decree of Article 160 of the above-mentioned Law, the definition of administrative records is sufficiently broad so that it covers the databases that are generated by private legal entities, therefore the obligation to submit them the DANE would also be covered.

Finally, in terms of the development of geospatial data DANE has positioned itself as a leader in the region. Colombia is now a member of the United Nations Expert Group on the Integration of Statistical and Geospatial Information (UN-EG ISGI), a forum for the coordination and dialogue between the representatives of the statistical and geospatial communities. The purpose of belonging to such group of experts is to learn and adapt to the regional level the matters pertaining to the management of geospatial information that are developed at the global level, so that DANE replicates the experiences to members of the NSS.

DANE, in turn, has developed geospatial information services through various tools, among which the Geoportal stands out, providing access to visualization services and search by geographic metadata catalogs. This service

includes the Geovisor, the Visualization Laboratory as well as Data and Metadata⁴⁰ and even services such as Identification Systems of Educational Institutions (SISE⁴¹) that is articulated with the single directory of establishments of the Ministry of National Education.

⁴⁰ <http://geoportal.dane.gov.co/v2/>

⁴¹ Spanish acronym