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FOREWORD

The National Administrative Department of Statistics (DANE), a government agency, is responsible for coordinating and regulating the National Statistical System (SEN). Within the Statistical Planning and Harmonization project, it works for strengthening and consolidating the SEN. The following processes support this commitment: The production of strategic statistics; the generation, adaptation and dissemination of standards; the consolidation and harmonization of the statistical information and the coordination of instruments, actors, initiatives and products, all actions geared towards the improvement of the quality of strategic statistical information, its availability, timeliness and accessibility in order to respond to the increasing demand for such information.

Conscious of the need and obligation to offer the best possible products, DANE has developed a standard guide for the documentation of the methodologies of statistical operations so as to contribute to the visualization and understanding of the statistical process. Through this instrument, the organization produces methodological documents, for use by specialists and the general public. They present in a standard manner, the main technical characteristics of the processes of each research. They are complete, of easy reading, which allows its analysis, control and evaluation.

This series of documents, favors the transparency, confidence and credibility of the technical quality of the institution for a better understanding and use of the statistical information produced following the principles of coherence, comparability, integrality and quality.

1. INTRODUCTION

The Construction Permits belong to the set of public administrative instruments and have been designed for controlling with organized procedures the growth and development of cities, municipalities, and territories, as well as to encourage the acceptance of the norms that have been adopted in aspects such as the structure of constructions, the reserve areas, the enhancement of public spaces and the construction of roads.

The Construction Permit is a urban-planning instrument defined according to decree 1469 of 2010 as “the prior authorization required to develop constructions, areas of circulation and communal zones in one or several lots, in accordance with what stipulates the Land Use Plan, the instruments that develop and complement it, the Special Plans for Handling and Protecting Goods of Cultural Interest, and other regulations on those matters. The construction permits will clearly specify the suitability for building, volumes, accessibility and other approved technical aspects for each particular construction”.

Since 1948, the “Statistics of Construction Permits – ELIC” has provided a follow-up of the information registered in the approved permits for new constructions or for enlargement or changes to the existing ones. This has fostered the acquisition of a good knowledge on the construction sector of the country. Nevertheless, due to its **prior authorization** character, the research on the consumption permits has been limited to the definition of the potential of the building activity within the scope of **formal** construction.

Overtime, the statistical operation has undergone changes in its design and procedures, though the **approved construction area** along with the **total number of permits** have been part of this research without interruption. Since 1998, the main variables include also the number of housing units approved in the corresponding permit.

Some events deserve nevertheless being mentioned such as the establishment of the monthly frequency for this information since 1986 and the fact that since 1987 the sources of information are the Curator Offices in the municipalities where they have been set up. In those places without Curator Offices the entities responsible for the control of constructions are the Municipal Planning Offices.

The results of this research have been useful in various environments and sectors. In the first place they are used for designing, measuring the impact and following up public policies focused on the construction sector. They also support analysts, researchers and associations in determining the evolution of the sector over time and for the private sector it is a source of information on the construction market.

The purpose of the present document is to present the processes and foundations of the statistical operation on Construction Permits in each of its stages and components. It is divided in three chapters: the first one introduces and describes the environment of this operation; the second one presents the main background and the different stages of the research and the third chapter is divided into seven sections, in which the design of the statistical operation with all its components is documented, from the thematic, statistical and operative points of view and each stage of the process leading to the generation of the Construction Permits statistics is described.

2. BACKGROUND

The research on Construction Permits - ELIC - is one of DANE's statistical operations covering the largest period of time. It began in 1948 and covered 17 municipalities, with emphasis in five cities, Bogotá, Medellín, Cali, Barranquilla and Bucaramanga. Since then, and as a result of the needs of information and of the changes in urban-planning regulations, the research has undergone constant improvements.

Since 1986, the information is processed on a monthly basis, though it is possible to have some monthly variables between 1973 and the first half of 1981. As it was already mentioned, the main variables of the research refer to the approved construction area, the number of approved permits; since 1998 the number of housing units are also included.

Annex 1 presents the list of the municipalities included in this research since 1948 in a chronological order. With the exception of the main cities, the geographic coverage was discontinuous during the first stages of the statistical operation.

2.1 CHANGE OVERTIME OF THE STATISTICS ON CONSTRUCTION PERMITS

As a response to the need of collecting an ever growing number of reliable data that provide a better knowledge of the construction activity with its different components and modalities, the geographic coverage, the content of the questionnaire and the output tables have been modified several times. It is possible to identify seven periods presenting homogeneous structure: 1948-1952, 1953-1963, 1965-1969, 1970-1974, 1973-1981 (I), 1981 (II) - 1985 and 1986 - to date.

In 1948 - 1952 the information included the approved area of construction (square meters), the free area and the total area of the lot, as well as the classification of the permit according to the number of floors to be constructed. In 1953-1963 the budget allocated to the project, as well as the number of permits, and area dedicated for housing were added. For these periods the geographic breakdown included 5 cities, whereas the total coverage oscillated first between 16 and 18 municipalities and then between 20 and 46.

During 1965 and 1969 the classification of the construction according to use was included as well as its financing scheme. In the 1970-1974 period¹, a classification by type of construction was added and the classifications of the value of the constructions and the financing scheme were extended. The total coverage for these periods varied between 28 and 56 municipalities and included detailed information for 5 cities until 1972 and for 7 cities for the remaining years.

From 1975 to the first semester of 1981 the available information underwent significant changes: the proposed uses of the constructions different from housing was suspended together with the classification of the value of the constructions and their financing scheme. For the period between the second semester of 1981 and 1985, information referred to the number of permits and approved construction area for all uses and for housing. The total coverage in this period corresponds to 56 municipalities whereas the information presents detailed data for seven (7) cities between 1974 and 1977, ten (10) cities and metropolitan areas between 1978 and 1983, and eleven (11) cities and metropolitan areas for 1984 and 1985.

In the last period, the information refers to 77 municipalities from 1986 to 2008 and 88 municipalities since January of 2009. It should be underlined that since 1997, the source of information of the research were the new entities in charge of managing, studying and issuing the Construction Permits in municipalities and districts, namely, the Urban Curator Offices created by Decree 2150 of 1995 and Law 388 of 1997.

¹ For 1973 and 1974 the information is consistent with both the 1970-1974 and 1975-1981 periods, therefore these two years belong to both periods.

3. DESIGN OF THE STATISTICAL OPERATION

The design of a statistical operation involves the choice of the structure and strategies in order to satisfy a particular need of information. The structure corresponds to a model of the variables. The strategies consider the development of the statistical operation, and the selection of the methods that will be used to collect, process and analyze the data.

3.1 THEMATIC DESIGN

The thematic design defines the needs of information of the users and the general and specific purposes of the statistical operation.

3.1.1. Information needs

As a response to the specific need of producing indicators from which to estimate the production of the construction sector, the statistical research on Construction Permits was set up. In its beginnings, this was almost the only source of information on the construction activity and the basic input in the estimation of the production of the sector.

Additionally, in the literature on business cycles, the statistics derived from the Construction Permits belong to the group of indicators that predict economic cycles. They are denominated leading indicators or short term predictors.

This statistical operation is focused on the measurement of the construction activity in the near future, although its use is also recognized within the composite leading indicators.

3.1.2. Objectives

General: To determine the potential of the construction activity at country level.

Specific: To measure the area approved through Construction Permits according to the use of the construction (including the number of housing units);

- To determine the area approved in the municipalities included into the geographic coverage;
- To quantify the number of issued Permits;
- To determine, in the case of housing construction, the area and the units to be constructed (houses or apartments) identifying Social Interest Housing (VIS), Priority Interest Housing (VIP) and housing not considered within Social Interest groupings;
- To quantify the total area and the number of approved housing units classified according to the socio economic stratification;
- To determine the area and the number of housing units to be constructed in the municipalities that are part of the geographic coverage of the research.

3.1.3. Scope

The number of Construction Permits ELIC refers to the permits issued in the 88 municipalities that are part of the national coverage in the urban, suburban and rural areas. The constructions without permit are excluded, as the statistical operation makes only reference to formal construction.

On the other hand, permits that expire or which for any other reason are not materialized, can constitute an over-registry in the numbers generated in the research, which generates a distortion between the intentionality to construct and what in fact is constructed.

3.1.4. Reference framework

a. Theoretical Framework

The statistics related to construction permits are frequently mentioned as potential candidates as leading indicator in the construction sector, due to their anticipation as to the beginning of the constructions and in addition for being an indicator common to a great number of countries, and with information over large periods of time.

The literature on leading, coincident and lagging indicators has its main antecedent in the work carried out for the National Bureau of Economic Research (NBER) by Burns and Mitchell on business cycles. The authors analyzed the behavior of the fluctuations of different series of indices and economic aggregates and established the basis for the development of composite indicators from which to observe the behavior of the economic cycles².

Since that series of Burns and Mitchell works, which initiated in the 1930's, different and numerous changes, advances and refinements in the models of business cycles have occurred, as well as in the statistical techniques used to construct composite indicators. Nevertheless it is right to say that their main intention remains.

The main objective of the indicators is to help to the identification of the break points of the economic cycles, that is to say the local maximums and minimums of the series, also known as tips and valleys that indicate the beginning and the end of the phases of the cycles.

² Ampler antecedents on business cycles can be found in different authors, among them Zarnowits (1992), Moore (1983).

The leading indicators anticipate the cycle and help to predict the points of breaks, reason for which, they are the most outstanding indicators.

From a list of candidates, and according to several criteria of adjustment to the cycle, a group of series is selected that will be included in the composite index. In the case of the composite leading indicator, two significant references can be mentioned: one generated by the Conference Board³ and the one generated by the OCDE⁴, which both include statistics on construction permits within their components, (specifically number of housing units).

In the case of Colombia, the Banco de la República (Colombia's Central Bank) publishes a monthly leading indicator known as the Monthly Indicator on Economic Activity (IMACO). It includes sectoral variables and anticipates by five months the GDP annual growth rate. Within the series candidates to be part of the indicator we find the series on Construction Permits. (Kamil, H., et al 2010).

b. Conceptual framework

The Construction Permit is one of the five classes of city-planning permits. Therefore, the fundamental concepts of the statistical operation of Construction Permits ELIC, are closely linked to city-planning.

Law 1469 of 2010 defines the city-planning permit as the prior authorization, issued by the urban curator or the competent municipal or district authority, in order to implement works related with urbanization, construction, extension, adjustment, structural reinforcing, modification, demolition of constructions, subdivision of properties into plots, and for the intervention and occupation of the public space, in accordance with adopted city-planning and construction norms established in the Territorial Ordering Plan, in the instruments that develop or complement it, in Special Plans for Handling and Protecting Goods of Cultural Interest and in the laws and other dispositions of the National Government.

³ The Conference Board (2001), "Business Cycle Indicators Handbook", The conference Board.

⁴ OECD (2001), "OECD Composite Leading Indicators: a Tool for short-term analysis", OECD.

There are five classes of city-planning permits: urbanization, division in plots, subdivision, construction, intervention and occupation of the public space.

Urbanization Permit: it is the prior authorization to create in one or several urban properties, public and private spaces, as well as public thoroughfares and perform infrastructure work for domiciliary public utilities which will make possible the adaptation, equipment and subdivision of these lands for the future construction of buildings for urban uses, in accordance with the Territorial Ordering Plan, the instruments that develop or complement it, the Special Plans for Handling and Protecting Goods of Cultural Interest and the laws and other dispositions of the National Government.

Permit for the division in plots: it is the prior authorization to create in one or several rural and suburban properties, public and private spaces, as well as thoroughfares that allow to assign the resulting estates to the uses allowed by the Territorial Ordering Plan, the instruments that develop or complement it and the environmental legislation applicable to this type of land. These permits might be issued on the basis of the accreditation of the provision of public utilities on own account, presenting the permissions, authorizations and respective concessions granted by the competent authorities.

Permit for the subdivision and its modalities: It is the prior authorization to divide one or several properties located on rural, urban or urban expansion land, in accordance with the uses allowed by the Territorial Ordering Plan, the instruments that develop or complement it and the environmental legislation applicable to this type of grounds.

When the subdivision of properties in order to urbanize or to divide them into plots has been approved, through the corresponding urbanization or division in plots permit, no additional permit will be issued: they are only modalities of the subdivision permit:

Rural subdivision: (in rural and urban expansion land) it is the prior authorization to materially divide one or several properties located in rural or urban expansion land in accordance with the Territorial Ordering Plan and the agrarian and environmental

standards applicable to this class of land, in which the accessibility to each of the resulting properties has been guaranteed.

Urban subdivision: (in urban land) it is the authorization to divide materially one or several non-built urban properties.

Re-division into plots: it is the authorization to divide, redistribute or modify the division into plots of previously urbanized land, in accordance with the norms on the issue included in the Territorial Ordering Plan and the instruments that develop and complement it.

Construction Permits and different modalities thereof: it is the prior authorization to develop constructions, areas of circulation and communal zones in one or several properties, in accordance with the Territorial Ordering Plan, the instruments that develop and complement it, the Special Plans for Handling and Protection of Goods of Cultural Interest, and other regulatory standards. In the construction permits the following aspects should be specified: the uses, the building suitability, the layout and dimensions, accessibility and other technical aspects of the construction project that need to be approved.

The different types of construction permits are as follows: new construction, extension, adaptation, modification, restoration, structural reinforcing, demolition, closing, and reconstruction.

Intervention and occupation of the public space permit: it is the prior authorization to occupy or to modify part of public properties included in the public space, in accordance with the adopted city-planning norms in the Territorial Ordering Plan, the instruments that develop and complement it and other existing standards.

The types of intervention and occupation of the public space permit are as follows: occupation of the public space for the location of equipment permit, intervention of the public space permit, and intervention and temporary occupation of marine beaches and low tide lands permit.

The urbanization and their modalities permits, are subject to changes and extensions.

Before extending, modifying and demolishing buildings, urbanizing and dividing into plots urban land, or urban and rural expansion land, a permit issued by the person or competent authority is required. A permit is also required for the division into plots or the subdivision of properties for urbanizations or plots in all type of land, as well as for the occupation of the public space with any class of equipment.

In the municipalities or districts with more than 100,000 inhabitants, the permits will be studied, transacted and issued by urban curators. Municipalities might associate to jointly order the study, proceeding and issuance of permits to urban curators. In this case at least two urban curators should be assigned to this job and the municipal organizations of the municipalities that comprise the association, will no longer exert that function. The municipalities with less than 100,000 inhabitants, the study, proceeding and issuing of the permits will be the responsibility of the authority to which the municipality has assigned that function. Nevertheless, they might designate urban curators following Law 388 of 1997 and its decrees.

Who might be titular of permits, are the holders of main real rights, the owners, the proprietors of the right of dominion by way of trusts and the trustees of the same trusts and of the buildings object of the request.

The permits of urbanization, plotting and construction will have a use period of twenty-four (24) months deferrable once for an additional twelve (12) months term, counted from the date in which the administrative acts by means of which they were issued were validated.

When in a same act, the permit for urbanization and for construction are issued, these will have a use period of thirty-six (36) months deferrable once for an additional twelve (12) months term, counted from the date in which the administrative acts by means of which they were issued were validated. The request of the extension must be formulated within the 30 calendar days prior to the expiration date of the respective permit, whenever the constructor in charge certifies the initiation of the work.

c. Legal Framework

The legal framework of the statistical operation is the following:

Law 1469 of 2010 that states the dispositions by which the city-planning permits are regulated, is the conceptual basis of the Construction Permit and of the set of administrative instruments related to it.

In addition, in article 45, it requests from the sources of information to provide the questionnaires including the information of the construction permits.

“Obligation to provide the information on permits. It will correspond to the urban curators or the planning offices, or the organizations in charge of the issuance of permits, according to Law 79 of 1993, to send to the National Administrative Department of Statistic - DANE, within the first 5 days of every month, the information of all the permits issued during the immediately prior month. This information will be sent in the questionnaires defined by DANE for this purpose.”

Law 388 of 1997 states “the mechanisms that allow the municipality, within the framework of its autonomy, to promote the ordering of its territory, the equitable and rational use of land, the preservation and defense of the ecological and cultural heritage located within its territory and the prevention of disasters in high risk zones, as well as the execution of efficient city-planning actions”.

This law is the basis of the territorial ordering, that has within its instruments the city-planning permit and therefore the construction permit. For the present research, it is relevant as it regulates which agents are in charge of studying, handling and issuing the construction permits, a fundamental information for establishing the informants of the research.

This law also dictates that in each National Development Plan, the government will establish the type and maximum price for the classification of Social Interest Housing (VIS), which is one of the breakdowns used in the research.

Finally, Law 79 of 1993 establishes the statistical reserve, according to which the information will only be available in numerical summaries, that will be unable to deduce any individual information that could be used for commercial purposes, for taxation, for judicial research or any other use different from the properly statistical one.

d. International reference

The statistics related to the Construction Permits are frequently used as indicator of the potential of the construction activity, the reason why they are to be found in various countries.

The methodology to generate indicators can vary significantly, due to the differences in the regulation of each country with respect to the construction permits. However, some regularities stand out: the information is generally collected from the offices in charge of issuing the permits in the territories of a country, which usually depend on local governments.

The main variables are usually the number of approved housing units, the total number of approved permits, the usable or constructible area, and the estimated value of the construction.

Some specific examples of statistics of Construction Permits are presented below.

Canada (Building Permits): it is a monthly survey, via mail, to nearly 2,300 municipalities, that represent all the provinces and territories, and 95% of the population.

The collected variables are the number of housing units and the value of the approved constructions, which include new constructions, alterations and extensions⁵.

⁵ Statistics Canada, Building Permits, <http://www5.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=64-001-XWE&lang=eng#formatdisp>

Spain (municipal construction Permits): it is a monthly survey to the promoters of the projects when they request the construction permit from the City council of the respective municipality. The survey covers the 17 autonomous regions and the Ministry of Development is in charge of collecting and consolidating the information with the collaboration of some of the communi.

The main collected variables are the areas of construction and the number of housing units, and information is separately published for construction permits concerning new construction, rehabilitation construction (that includes extensions and adjustments) and demolition

The information refers to all construction permits issued at national level, for which an estimation of the municipalities that do not report in the period is performed⁶.

3.1.5. Design of indicators

In order to measure the potential of the building activity, the research uses three indicators: the area to be constructed, measured in square meters, the number of approved housing units and the number of issued permits.

The area to be constructed derives from the sum of areas of constructions approved under construction permits (new constructions and extensions) and constitutes a quantitative measurement of the size of the building activity.

Compared with other measures with similar objectives, as for instance the estimated value of the approved constructions, the area presents some significant advantages: first of all, the area to be constructed has been measured over time without interruptions, as it is a requirement for requesting a construction permit. Another consideration is that the difference between the area reported in a permit and the finally constructed area should be minimal, unlike measures related to monetary values that are more likely to experiment changes over time as they are more difficult to estimate prior to the construction with certainty.

⁶ Ministry of Economic Development of Spain, municipal Permits of work, http://www.fomento.gob.es/MFOM/LANG_CASTELLANO/ATENCION_CIUADADANO/INFORMACION_ESTADISTICA/Construccion/ConstruccionEdificios/default.htm

Within the limitations of this measurement, one stands out and is the fact that it does not reflect the different characteristics that can have a same amount of constructed area. It is the reason why the areas of adjustments cannot be taken jointly with the new and adjustment areas. Additionally, it is necessary to use different classifications and breakdowns to generate a greater comparability of the results.

The authorized housing units are calculated as the sum of housing (houses or apartments) approved as new units; in the case of extensions, they are only included in case they generate additional units.

This is the internationally most common measurement within the statistics of construction permissions. It quantifies the capacity of the building activity to generate housing solutions and is closely linked to the residential deficit.

3.1.6. Plan of results

The analysis of the results of Construction permits is descriptive and includes the calculation of annual changes (for the last twelve months) and during the current year, as well as the behavior and share of each of the different elements included in the breakdown. This information is disseminated in press bulletins, statistical annexes and other publications.

3.1.6.1. Design of tables and results

The tables are defined by DANE as an organized set of data, designed in order to organize the requirements of the users of the información⁷.

All the variables covered by the research and collected in the questionnaire on Construction Permits in 88 municipalities are consolidated monthly and are presented according to the following groupings:

⁷ National Administrative Department of Statistics - DANE, http://www.dane.gov.co/files/planificaci3n/fortalecimiento/cuadernillo/Lineamientos_Investigacion_estadistica.pdf; Basic recommendations for a statistical research: Strategy for the Strengthening of Territorial Statistics - Recovered the 20 of March of 2013 P. 24

- The total area approved for construction, by purpose, according to type of permit (urban, suburban and rural), type of request (new or modification), class of construction (new or extension) and socioeconomic stratum;
- The number of permits approved for construction, by use, according to type of permit (urban, suburban and rural), type of request (new or modification), class of construction (new or extension) and socioeconomic stratum;
- The area and number of permits approved by department and municipality, classified into housing and other uses
- The area approved for the construction of housing, divided into Social Interest Housing (VIS) and Others, by type of housing (House or apartment) and class of construction (new or extension).
- The number of dwellings to be built, according to class of construction (new or extension), type of housing for Vis and other than VIS.
- The area approved for housing, by departments and municipalities, according to type of housing, VIS and other than VIS and by socioeconomic stratum.
- The number of housing units approved by departments and municipalities detailed by type of housing, VIS and other than VIS and by socioeconomic stratum.
- The area approved by departments and municipalities, according to use of the construction and socioeconomic stratum.
- The number of permits approved for housing, by departments and municipalities, according to class of construction, type of housing and Social Interest Housing.
- The number of permits approved according to the use of the construction.

3.1.7. Design of the questionnaire

The questionnaire for collecting the statistics of Construction Permits includes seven modules as follows:

Location: this module includes variables which purpose is to identify the permit, to determine its geographic location, the type of permit (urban, suburban or rural), and the date of approval, and to establish those permits that are modifications due to partial changes with respect to a previous permit.

Type of permit: it is a categorical variable of order and it is divided into the following categories:

Urban: All approved permit for a construction that is within the urban perimeter established by the competent organization of the city of reference.

Suburban: All construction that is within the urban perimeter but located at the extreme boundaries of the city of reference.

Rural: All construction that is outside the urban perimeter of a city established by the competent organization of the city of reference.

Identification of the construction: the purpose of this module is to establish the most approximate location of the project, to know the name the constructor or the person in charge of the construction and the contact information.

Stratum: it is a classification given by the public utility companies to the district where the building will be constructed. According to the official stratification, six strata are identified : Lower-Lower (1); Lower (2); Lower middle (3); Middle (4); Upper middle (5) and Upper (6), (Decree 2220 of the 5 of November of 1993).

Description of the construction: the purpose of this module is to obtain a concise but sufficient description of the construction or the project object of the permit.

Class of construction: this module classifies the constructions in new and extension to clearly establish the net increase of the total constructed area aggregate.

New construction: construction of a completely new structure, whether or not the site on which it will be built, was previously occupied or not.

Extension: it includes all increase of the constructed area, and might refer to the simple addition of a roof, or a cover for a terrace or other type of hard surface. The requested data only refer to added area.

Approved area and units to be constructed for each use: this module refers to the different permits, according to the constructions use: residential or nonresidential. The first case includes the housing units and the second the other uses: industrial, office, warehouse, commerce, hotel, educational, hospital and healthcare, public administration, religious, social-recreational and any other non-residential use⁸.

Note: The use must correspond to the structural design.

Use of Housing units (new constructions): the purpose of this module is to obtain information on the area and the number of housing units, classified as Social Interest Housing (VIS) or other. In addition a breakdown is provided according to the type of housing unit: house or apartment.

Since January of 2013, a specific category is created within VIS in order to identify Housing of Priority Social Interest (VIP).

The classification of Social Interest Housing (VIS) is defined according to the Law 388 of 1997 that states that in each National Development Plan, the National Government should establish the type and maximum price of the units dedicated to this type of housing. According to the last National Development Plan, units of Social Interest Housing should not exceed 135 SMLMV and the subcategory units of Housing of Priority Social Interest should not exceed 70 SMLMV.

⁸ See the glossary for the definition of the different uses

New and/or added housing units: this module only applies for permits of new housing or extensions that generate additional units. It requests information that allows defining the predominant type (houses or apartments) and the number of housing units.

3.1.8. Specifications of validation and consistency

The rules described below are applied during the editing and primary processing of the data. These activities guarantee their completeness, correction and consistency.

The validation process begins during the editing and capture phase. It is performed using a reference list of valid (or possible) categories and values for each variable of the questionnaire, using two types of validation rules. The first one is excluding, that is to say, the data accepted should correspond to the listed possibilities or fall within the interval of values determined without exceptions. In the second, when the data do not fit within the accepted values, a justification is requested; if it is satisfactory the information is maintained.

The consistency process refers to the relations between variables of the questionnaire. It is required that each questionnaire fulfills the rules linking the different modules to guarantee the coherence in the information.

3.1.9. Classifications

This statistical operation uses the coding of departments and municipalities according to the Political-administrative Classification of Colombia-DIVIPOLA, though the publications exclude the codes and only present the names of municipalities and departments.

3.2 STATISTICAL DESIGN

3.2.1. Basic components of the statistical design

- **Universe**

All of the approved Construction Permits in the national territory.

- **Objective (target) population**

The complete set of permits approved during the month of reference by each competent authority in each of the 88 municipalities included in the research.

- **Sampling Framework**

It includes all municipalities covered by the research. The listing contains 88 municipalities, according to the criteria presented in the paragraph 3.2.4 Sample Design.

- **Definition of variables**

Construction permits variables fall in three groups according to the following definition:

Classification Variables: Uses, departments, municipalities and for housing the construction program: Social Interest Housing VIS, Not Social Interest Housing (Not VIS), by type of housing structure (houses or apartments) and by socioeconomic stratum.

Variables of Analysis: area, in square meters for all the uses and approved housing units.

Calculated variables: annual changes and shares, monthly aggregates, current year monthly aggregates (January to publication month) and last twelve months aggregates.

- **Source of data**

Organizations in charge of studying, processing and issuing the construction permits in the 88 included municipalities. They may be Urban Curator Offices or municipal Planning Offices. The sources of information according to municipalities appear in Annex 3.

- **Geographic coverage**

Since 1970, the research underwent essential changes; among which the most important one was the significant increase of the geographic coverage. The initial sample in this period included 56 urban centers, of which 51 were selected on the basis of the population size according to the 1964 Census and the remaining 5 for their geographic location.

From 1986 to May 2012 the publication of the information, collected and reported monthly, corresponded to 77 municipalities. These municipalities represented about 90% of the urban population of the country and according to the 1993 Census, approximately the same percentage of the constructed area.

Since May 2012, the analysis and dissemination of the information covers 88 municipalities including 11 municipalities of the department of Cundinamarca for which historical information was compiled from January 2009. The municipalities that were added are: Cajicá, Cota, Funza, La Calera, Madrid, Mosquera, Sibaté, Sopó, Tabio, Tenjo and Tocancipá.

- **Geographic breakdown**

The statistics are generated at municipal and departmental level. The first aggregation exercise consists of collecting the information from each source of a given municipality and constructing the totality of the information of Construction permits for that municipality. At the second aggregation level, the municipalities are grouped according to the department to which they belong. It must be underlined that the department aggregates refer only to the municipalities of that department included in the research.

3.2.2. Statistical units

- **Units of observation and analysis**

The observation unit is the entity in charge of the approval of Construction permits in each municipality included in the statistical operation. The analysis unit is the Construction permit itself, once it has been approved.

3.2.3. Period of reference and of collection

The collected information corresponds to the construction approved in the month previous to the period of reference. The information is collected in the Urban Curator Offices or the Planning Offices on a monthly basis.

3.2.4. Sample Design

Type of sampling: the selection of the sample is realized by deterministic sampling, based on the dynamics of municipalities with important population, housing or construction growth, according to the population censuses, and includes those municipalities in which there is evidence of an increasing level of the construction activity or those having a significant geographic position indicating the convenience of their inclusion.

3.3 DESIGN OF THE EXECUTION

The following lines describe the process of collecting the data according to the previously described methodology.

3.3.1. Training system

The technical secretariat of ELIC provides specific training to the Logistics Group at DANE's Headquarters, using the different documents supporting the research. This training starts with the explanation of the methodology (the object of the research, how it is measured, why it is measured, the variables used and the type of calculations).

Once the Logistics Group has understood the use of the tools that will be used, its members organize the advanced training course in each of the territorial directions (Bogota, Bucaramanga, Barranquilla, Cali, Manizales, Medellín). In this training emphasis is made on the knowledge and handling of the collecting questionnaire, as well as in each of the variables object of study. In addition, specific discussions are held to provide elements to answer in due time the questions that the sources may have.

3.3.2. Preparatory activities

- **Awareness-raising process:** The awareness-raising process is developed as follows:

In new municipalities, the procedure starts with a written communication to the Urban Curator, the Head of the Planning office or the person in charge of issuing the permits, in order to present the objectives the research, and underline the importance of this particular information for DANE and for the country in general. The questionnaire and the completion manual are enclosed; in addition, support is permanently offered to solve all the questions that might arise in reporting of the information.

For municipalities that are already part of the research, the process is done by the staff in charge of collecting activities, who monthly provide the sources with empty questionnaires, which contain completion instructions; at the same time the questionnaires for the month of reference are collected. In this visit the questions raised in reporting the information are answered.

Selection of the staff: This process is developed according to the procedure of the Personal Services Contracts Office⁹ establishing the guidelines to be observed both in DANE Headquarters and in the Regional Directions, for contracting professional services and support to the management of the organization, at the expense of the operational or investment budget of DANE and FONDANE.

3.3.3 Design of instruments

Besides the questionnaire, the Construction Permits research ELIC has the following instruments necessary for the process of data collecting and its control:

Manuals:

Completion Manual: it contains the description of the chapters of the questionnaire and detailed instructions for its correct completion. This manual supports also the training activities and the technical assistance to the sources.

User Manual: it allows the users (in this case the staff involved in the execution of the operation) to use the tools of the system, in particular in aspects concerning the collection of the physical questionnaires and the information for the transmission to DANE's headquarters.

System Manual: it is the document that technically describes the information system of Construction Permits. It is directed towards the persons in charge of the maintenance and support of the system within the research staff.

⁹ Personal services contracts.- Human Resources Management. GTH-020-PD-01.2013

Guidelines:

- Guidelines for Generating Quality Indicators in editing activities in the Regional Directions. It describes how to obtain the indicator of quality for the editing process in Regional Directions. It is expressed as a percentage, and must be greater than 92%.
- Guidelines for Generating a Reliability Indicator: It describes how to obtain the indicator of quality for the Headquarters and the indicator of reliability. Both of them are calculated at Headquarters. The first one evaluates the data capturing process of the Regional Directions and the second is an average of the indicators established for the Regional directions and for the Headquarters.

Methodologies:

Methodology ELIC: it is a descriptive document presenting the justification, the background, the objectives, the definitions, the thematic scope, the type of research, the variables to be considered, the parameters, the universe, the objective population, the sample, the selection method, the regularity of the research, among others.

ELIC Methodological card: it is summary of the methodology describing in general form the characteristics of the statistical operation.

Control forms:

- Control Plan: it enumerates the activities of each process of the statistical operation, which are the requirements and specifications for the proper execution of each activity.
- Out of specification products: considering the control plan, this form enumerates the activities of each process of the statistical operation, and indicates what should be done when the requirements and specifications are not fulfilled.

3.3.4. Data collection

Operative scheme

The collecting process is decentralized and carried out by the regional directions of DANE. In the case of the cities, the structure is composed by one person in charge of the research and one data collector.

Staff in charge of the Research: he/she has the responsibility of training the personnel, organize and direct the work in the field, as well as to carry out the controls on the quality of the information, make the pertinent observations, and develop the coverage controls.

Collector: he/she is the person in charge of obtaining the required data from the sources.

Figure 1. Operative chart



Source: DANE

3.3.5. Methods and mechanisms for data collecting

The required information is requested by the regional directions of DANE at national level, on a monthly basis. The collectors visit the sources to deliver the questionnaires for the following month. The number of questionnaires being delivered corresponds to the average numbers of permits issued in the preceding months plus a reserve. The questionnaires of the previous month are collected on this occasion. Their contents is compared with the past records of the corresponding office.

The legal base for collecting this monthly information is given by Article 45 of Law 1469 of 2010 that establishes the obligation of the Curator Offices and other entities issuing Construction Permits to report to DANE all the information concerning the permits issued in the immediately prior month.

The entity issuing permits has to know the obligation of completing DANE's questionnaires. In the case of incomplete questionnaires or when they do not register the information correctly, the collector have to send them back for correction.

Paper questionnaire: also called physical questionnaire, or questionnaire P-200. It is designed for collect the relevant information from the permits (one questionnaire per permit). It is considered as complete when the Urban Curator or the person in charge of issuing the permits has signed it.

Control of coverage: Each Regional Direction has been assigned the sources that has to respond to them and it is responsible for verifying their monthly reports. If they did not issue any permit, they are requested to sign a document declaring this lack of activity.

This procedure is intended to guarantee that the information corresponds to the totality of the 88 municipalities, a coverage of 100%.

3.3.6. Data transmission

Once the information is compiled by the regional directions, a first filtering on quality criteria is performed by the collectors. After passing this control the information is captured using the specific electronic application. These data as well as the physical questionnaires are sent to the Logistics Group at DANE's Headquarters, where the information passes through the validation and consistency tests before being consolidated at national level.

3.4 SYSTEMS DESIGN

The following paragraphs describe the design and the structure of the tools developed or adjusted in the technological platform and in the data base of the research

3.4.1. Design

The development of the information system of Construction permits-ELIC starts with the design of the data base. A previous analysis of the variables of the questionnaire was realized (their characteristics and interactions) to generate the fields and tables that make up the structure of the data base.

The design included also screens and reports according to the specifications of the research. These requirements respond to the needs of capturing and processing information that will be used as input for more elaborated products.

Within the programs and procedures there are established standards to name and to identify descriptors, variables, tables and other elements of the project.

Finally, the characteristics and main aspects of the system were shared with the work groups of the statistical operation to show its qualities and scope, and to verify their functionality.

3.4.2. Development of Software

The computer programs supporting the Statistics on Construction Permits-ELIC were elaborated according to the requirements of the research. They are in the form of parametrized modules, well documented, and set up in such a way that they are easy to modify and to maintain.

The activities in this stage include quality assurance and verifying the coverage of the requirements of the system.

3.4.3. Test Plan application to the System

In this stage the system is submitted to the test plan of validation, verification, integrity and consistency for its maintenance. It is the way to discover possible inconsistencies. These tests are: tests of the programmer, functional tests, tests of the interface with the user and tests of verification of the fulfillment of standards.

As a result of this procedure, the project is fed back insofar as each test serves as a support to implement new modifications that lead to a more efficient operation.

3.5 DESIGN OF METHODS AND MECHANISMS FOR QUALITY CONTROL

This section describes the methods and the mechanisms for controlling, monitoring and guaranteeing the quality of the results, following the objectives stated at the beginning of the statistical operation.

The first filter for quality of the information is known as editing and is realized in the Regional Directions. The Editing and Coding Manual has been developed for that purpose as described below:

3.5.1 Editing and Coding Manual:

Editing:

It is the process followed (in this case by a staff at the regional direction of DANE) to completely review the contents of the questionnaires so as to verify the fulfillment of the completion instructions. It is necessary to determine if the information is complete and complies with the parameters established for each variable of the research; the direct communication with the source is necessary when the analysis reveals that the information is not satisfactory. This stage intends to control to guarantee the quality of the information, completing the totality of the data requested in the questionnaire.

The questionnaires must be organized by municipalities and they must correspond to permits for new constructions or for modification of old ones. The renewal permits and those of urbanism must be excluded because they are not object of this research.

After classifying the questionnaires that are object of the research, the editing of each chapter must comply with the standards and finally a number is assigned to each questionnaire to continue with the data capturing process.

Codification:

It is the process by which codes are assigned (numbers, letters or their combination) to some variables for their standardization, facilitating its recording and the construction of data bases. In some cases, within this process, it may be convenient to write on the side of the questionnaire the words that are not of easy reading to make easier its recording.

The shaded boxes of the questionnaire are reserved for the codification of the information, following specific instructions.

The variables that are codified are the **municipality** and the **department** (as it was mentioned before, the codes used are those of the Political-administrative Division of Colombia-DIVIPOLA); the **form number** (according to consecutive ordering by municipality and Regional Direction); **the permit number**, that is standardized to a six digit number, **the Urban Curator Office** (they have an identification code) or the responsible entity (a 0 is used to code this last case) ; and finally the **year** and the **month**, codified with four and two digits respectively.

Indicators of Quality and Reliability:

Once the former process is ended the coordinator of each Regional Direction compares the physical questionnaires with the digital information registered with the computer application. The indicator of local quality is derived from this revision, whose procedure is documented in the Guidelines for obtaining the Indicator in Regional Directions.

There are also calculations made at DANE's headquarters. The Logistics Area implements a validation process and applies the Guidelines for obtaining a new quality indicator. The arithmetic average of the two quality indicators is the reliability indicator. It has three possible results: satisfactory, acceptable and critical. In the last case the persons in charge are requested to take remedial actions.

3.6 DESIGN OF THE ANALYSIS OF THE RESULTS

3.6.1 Statistical analysis

From the output tables that present the information of the Construction Permits issued in the month of reference, an analysis of internal consistency is made. The information is verified again in order to detect errors or inconsistencies.

This analysis includes the revision of the figures for each municipality and each variable or classification, guaranteeing the coherence of their values within the expected ranks. The outliers cases identified with this process are selected for verification.

Later, an analysis of behavior of the variables is realized in which the approved areas in the month of reference, by use and by department, are compared with the areas of the same month of the previous year. The analysis is realized through the annual percentage change. These analysis also include the comparison of the areas approved during the current year and in the last twelve months including the month of reference with respect to similar periods of the preceding year.

For housing permits an analogous analysis is realized taking account the classification of Social Interest Housing (VIS)¹⁰ and Housing other than that of Social Interest (Not VIS) as well as the difference of structures between houses and apartments.

Although the behavior analysis includes the changes of the month of reference with respect to the previous month, these changes reflect to a large extent short term events.

3.6.2. Context Analysis

This analysis is realized monthly and intends to review the coherence of the information on the Construction Permits with respect to other sources related to the construction sector. Other figures produced by other statistical operations of DANE (Census of Constructions CEED, Gray Cement Statistics ECG), and by other public or private organizations (Colombian Chamber of Construction, FEDESARROLLO, ASOBANCARIA) are very helpful at this stage.

The news produced by different mass media are also taken into consideration as they describe the short term situation of the construction sector, as well as the state of the construction market.

3.6.3. Committee of experts

The Committee of experts of the Research on Construction Permits analyze the data that are produced, they contextualize it, and they validate the results to be disseminated.

- Internal committee: which includes the thematic leaders of the research and representatives of the office of the Chief Statistician, of the Deputy Chief Statistician, of the Direction of Methodology and Statistical Production DIMPE, the Direction of Synthesis and National Accounts DSCN and the Direction of Regulation, Planning have representation, Standardization and Normalization DIRPEN.

¹⁰ Since January 2013, the category Social Interest Housing (VIS) includes separately the subclass corresponding to Housing of Priority Social Interest - VIP.

3.7. DESIGN OF THE DISSEMINATION

3.7.1. Administration of the data repository

The storage and maintenance of the historical data are directly carried out on DANE's "Systema44" where the validated information of the month of reference is consolidated monthly.

3.7.2 Products and instruments of dissemination

The results of the statistical operation appear in: tables of results (to see Annex 5), bulletin and press release, historical series, Annexes and presentations. The results are disseminated to the public in general through the institutional webpage

The monthly bulletin consists of a written document in which the results corresponding to each month of reference are analyzed. The analysis is based on the changes. The press release is a monthly written document in which appear a summary of the most important data included in the bulletin. The other products for dissemination are documents that accompany the press bulletin and which complement, extend or clarify the information of the bulletin.

The results of the statistical operation are subject of two different processes throughout different publications, as the series are adjusted overtime and change from a preliminary to a final state:

Preliminary: set of information subject to revision and, therefore, to changes; the information is considered in this state for a period of one year.

Final: the final information is the set of reviewed information, that is, once the preliminary period has passed that corresponds to a year.

Update of the webpage

At the time of the monthly publication, the information on Construction permits is disclosed on DANE's webpage, which can generally be consulted by the public. Any additional information that some user might require, might be requested from DANE through Databank, and if it is possible to process, will be remitted to the user.

3.8 DESIGN OF THE EVALUATION

For the evaluation consideration is taken of the minutes of the internal committees and of working groups where the observations to the research are registered, which purpose is to establish short, medium and long term improvement plans, as well as of the quality evaluations of the research that are led by the Direction of Regulation, Planning, Standardization and Normalization DIRPEN of DANE.

4. RELATED DOCUMENTATION

- Consistency - Construction Permits Statistics (ELIC), Bogota, DANE.
- Validation - Construction Permits (ELIC), Bogota, DANE.
- Completion Manual Construction Permits (ELIC), Bogota, DANE.
- Editing and Coding Manual Construction Permits (ELIC), Bogota, DANE.

GLOSSARY

Acquisition Principle: principle used in National Accounts. According to this principle, the acquisitions of individual goods and services by the general government and the NPISH are assigned to the households that benefit from them (SNA 2008).

Actual final consumption of general government: The value of the actual final consumption of general government is equal to the value of its total final consumption expenditure less its expenditure on individual goods or services provided as social transfers in kind to households. The value of the actual final consumption of government units is thus equal to the value of the expenditures they incur on collective services (SNA 2008 par. 9.103).

Ancillary (cultural) Product: It is a product that does not contribute to the generation of symbolic contents, is not one of its inputs, but makes possible this generation, and its exclusive use is to make the dissemination of cultural contents possible. (CAB Manual).

Beneficiary of a cultural expenditure: Any economic agent who benefits of this expenditure, regardless of the payment made by him (total, partial or no payment at all). (CAB Manual).

Beneficiary Principle: principle used in the CSA. The expenditure is assigned to the entity benefiting from it, independently from the entity that pays for it: it generalizes the acquisition principle to other institutions and sectors. (CAB Manual).

Capital transfer: Capital transfers are unrequited transfers where either the party making the transfer realizes the funds involved by disposing of an asset (other than cash or inventories), relinquishing a financial claim (other than accounts receivable) or the party receiving the transfer is obliged to acquire an asset (other than cash) or both conditions are met. (SNA 2008 par. 8.10).

Characteristic (cultural) Product: which particularity is that there is interest in describing how they are produced. (CAB Manual).

Characteristic cultural activity: It is a productive activity which most important output consists of a characteristic cultural product. (CAB Manual).

Collective services: Certain kinds of services can be provided collectively to the community as a whole. The characteristics of this services may be summarized as follows: a. They are delivered simultaneously to every member of the community or to particular sections of the community, such as those in a particular region of a locality; the use of these services is usually passive and does not require explicit agreement or active participation of all the individuals concerned; and the provision of a collective service to an individual does not reduce the amount available to others in the same community or section of the community. There is no rivalry in acquisition. (SNA 2008 par. 9.96)

Connected (cultural) Product: Products other than characteristic of culture that are part of cultural expenditure. (CAB Manual)

Connected (cultural) Product properly called: They are part of specific cultural products, those that create, express, interpret, conserve and transmit symbolic contents, though there is no particular interest in knowing how they are produced. (CAB Manual).

Consumption of fixed capital: It is the decline, during the course of the accounting period, in the current value of the stock of fixed assets owned and used by a producer as a result of physical deterioration, normal obsolescence or normal accidental damage. (SNA 2008 par 6.240)

Creative industries: They originate in the individual creativity, the ability and the talent, and have a potential of creation of wealth and employment through the generation and use of intellectual property. (CAB Manual).

Cultural heritage: It includes those products and practices having a symbolic value and as a consequence may also have a historical value. Through them collective identities are expressed. (CAB Manual).

Cultural industries: Industries that combine some industrial functions of conception, creation and production, with industrial functions of large-scale manufacturing and communication using physical support or hardware. Another definition could be "Cultural industries are those that produce on industrial scale certain cultural goods and services on tangible or electronic supports, and use as input creations protected by copyright". (CAB Manual).

Culture (ample definition): It includes the characteristics, beliefs, conventions, forms of coexistence, customs, imaginary, systems of values and symbolic practices, collective and individual, prevailing in a group. (CAB Manual).

Culture (operative definition): It is a set of human activities and products whose raison d'être consists of creating, expressing, interpreting, conserving and transmitting symbolic contents. (CAB Manual).

Culture expenditure: it includes the expenditure for the acquisition of cultural goods and services, the expenditure related to the development of the infrastructure required for the inherent production in the future (gross capital formation), the expenditure in cultural practices and in other grants that promote the access to culture. (CAB Manual).

Culture Satellite Account: It is a systematic and coherent accounting framework, derived from National Accounts, organized in tables whose entries are interrelated and present detailed information on the functioning and the economic characteristics of Culture. (CAB Manual).

Current transfer: In short terms, a transfer that is not a capital transfer is a current transfer. It is a transfer that does not oblige one or both parties to acquire, or dispose of an asset. (SNA 2008 par. 8.10)

Depreciation: It represents the decline, during the course of the accounting period, in the current value of the stock of fixed assets owned and used by a producer as a result of physical deterioration, normal obsolescence or normal accidental damage. (SNA 2008 par. 6.240).¹

Expenditure table (CSA): It is a table presenting the cultural expenditure classified by type of beneficiaries and type of financing units. (CAB Manual).

¹ This term is avoided in the SNA and **consumption of fixed capital** is preferred because in commercial accounting it is often used to write off historic costs whereas the SNA consumption of fixed capital depends on the current value of the asset.

Final consumption expenditure of general government and NPISHs: Final consumption expenditure incurred by general government and NPISHs includes a wide range of consumption goods and services, either on collective services or on selected individual goods or services. (SNA 2008 par. 9.84 and par. 9.105)

Financing units: These are the agents who pay for the goods and services or transfers received by the beneficiaries. (CAB Manual).

Full-time equivalent employment: Indicator widely use in labor markets analysis. It is defined as total hours actually worked by all employed persons divided by the average number of hours actually worked in full-time jobs. (SNA 2008 par. 19.43)

Gross Domestic Product: measures the value created by the productive activities of the resident institutional units. It consists mainly of the sum of gross value added, plus the taxes net of subsidies on products not included in the value of output (SNA 2008 par. 16.47).

Household actual final consumption: It consists of the consumption goods and services acquired by individual households. The value of household actual final consumption is given by the sum of three components:

- a. The value of households' expenditures on consumption goods or services including expenditures on nonmarket goods or services sold at prices that are not economically significant;
- b. The value of the expenditures incurred by government units on individual consumption goods or services provided to households as social transfers in kind; and
- c. The value of the expenditures incurred by NPISHs on individual consumption goods or services provided to households as social transfers in kind. (SNA 2008 par. 9.81)

Immaterial cultural heritage: it corresponds to practices, representations, expressions, knowledge and techniques that bring to the communities, the groups and the individuals a sense of identity and continuity that is transmitted from generation to generation, and that the communities and the groups recreate permanently based on its meaning, its interaction with nature and its history. (CAB Manual).

Self-employed worker: Self-employed persons are persons who are the sole or joint owners of the unincorporated enterprises in which they work, excluding those unincorporated enterprises that are classified as quasi-corporations. (SNA 2008 par. 19.25)

Individual good or service: Individual goods or service are essentially “private”: They have the following characteristics:

- d. It must be possible to observe and record acquisition of the good or service by an individual household or member thereof and also the time at which it took place;
- e. The household must have agreed to accept the provision of the good or service and to take whatever action is necessary to make it possible, for example by attending a school or clinic;
- f. The good or service must be such that its acquisition by one household or person, or possibly by a small, restricted group of persons, precludes its acquisition by other households or persons. (SNA 2008 par. 9.92).

Intangible assets: See Tangible assets.

Intellectual property products: Examples of intellectual property products are the results of research and development, mineral exploration and evaluation, computer software and databases, and literary or artistic originals. They are characterized by the facts that most of their value is attributable to intellectual endeavor. They can be described in general terms in the following way. Intellectual property products are the results of research, development, investigation or innovation leading to knowledge that the developers can market or use to their own benefit in production because use of the knowledge is restricted by means of legal or other protection. (SNA 2008 par. 10.98)

Interdependent (cultural) Product: The interdependent goods and services are products used as inputs or as capital assets by the cultural characteristic activities. These products may be considered as completely linked to the cultural activity. Its exclusive role is to participate in the cultural production or to support a cultural activity or to create the conditions that make it possible, but its own nature is not to create, to express, to interpret, to conserve or to disseminate symbolic contents. (CAB Manual).

Intermediate consumption: It consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. (SNA 2008 par. 6.213)

Job: The agreement between an employee and the employer defines a job and each self-employed person has a job. The number of jobs in the economy exceeds the number of persons employed to the extent that some employees have more than one job. It is a set of specific tasks and responsibilities constituting the explicit or implicit contract between a person and an institutional unit to carry out and assume them in exchange for remuneration during a defined period or until new notice. (SNA 2008 par. 19.30)

Knowledge-capturing products: Knowledge capturing products concern the provision, storage, communication and dissemination of information, advice and entertainment in such a way that the consuming unit can access the knowledge repeatedly. The industries that produce the products are those concerned with the provision, storage, communication and dissemination of information, advice and entertainment in the broadest sense of those terms including the production of general or specialized information, news, consultancy reports, computer programs, movies, music, etc. The outputs of these industries, over which ownership rights may be established, are often stores on physical objects (whether on paper, or electronic media) that can be traded like ordinary goods. (SNA 2008 par. 6.22)

Market Output: Market output consists of output intended for sale at economically significant prices. (SNA 2008 par. 6.99).

Material cultural heritage: it includes the historical monuments, the archaeological patrimony, the patrimony kept in the museums, printed audio-visual content and repositories or text files and objects with a historical character. (CAB Manual).

Mixed income: Mixed income is the surplus or deficit accruing from production by unincorporated enterprises owned by households; it implicitly contains an element of remuneration for work done by the owner, or other members of the household, that cannot be separately identified from the return to the owner as entrepreneur. (SNA 2008 par. 20.49)

Non-market Output individual or collective goods and services produced by the IPSFLSH or by the government, supplied free, or at prices that are not economically significant, to other institutional units or to the community as a whole. (SNA 2008 par. 6.128)

Non-terminal product: A specific product is non-terminal when it is used as intermediate consumption for the production of another characteristic product. (CAB Manual)

Occupied person: Employment in the SNA is defined as all persons, both employees and self-employed persons, engaged in some productive activity that falls within the production boundary of the SNA and that is undertaken by a resident Institutional unit. (SNA 2008 par. 7.19)

Production Account: It records production as an economic activity in which a producer uses inputs and capital in order to obtain other goods or services (SNA 2008 par. 1.17).

Remuneration of employees: total remuneration, in cash or kind, paid by an employer to an employee in return for the work carried out during the accounting period. (SNA 2008)

Subsidies: Current unrequited payments that governmental, including non-resident government units, make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services that they produce, sell or import. (SNA 2008 par. 7.98)

Tangible assets: The SNA does not formally include a division between tangible and intangible assets in the classification. However the categories of dwellings, other buildings and structures, machinery and equipment, weapons systems and cultivated biological resources can be taken to correspond to tangible assets and the other categories to intangible assets. (SNA 2008 par. 10.67)

Taxes on production and on imports: Taxes on production and on imports consist of taxes on products and other taxes on production. Taxes on products consist of taxes on goods and services that become payable as a result of the production, sale, transfer, leasing or delivery of those goods or services, or as a result of their use for own consumption or own capital formation. ... Other taxes on production consist mainly of taxes on the ownership or use of land, buildings or other assets used in

production or on the labor employed, or compensation of employees paid. (SNA 2008 par. 7.73)

Taxes on products: Taxes on products consist of taxes on goods and services that become payable as a result of the production, sale, transfer, leasing or delivery of those goods or services, or as a result of their use for own consumption or own capital formation (SNA 2008 par. 7.73).

Terminal product: A characteristic product is terminal when it is used as intermediate consumption in some production process that does not correspond to a cultural characteristic activity. (CAB Manual)

Transfer: transaction by means of which an institutional unit provides goods, services or assets to another institutional unit without receiving from the latter any good, services or asset in return as a direct counterpart (SNA 2008 par 8.10)

Valuables: They are goods of considerable value. They are not used up in production or consumption. Valuables are acquired as stores of value. (SNA 2008 par 6.214)

Volunteer work: a person who participates in a process of production goods for some organization (company/institution/home) or of services for a market organization. This work undertaken voluntarily is not remunerated. (SNA 2008 par 7.41)

Wage employment: The relationship of employer to employee exists when there is an agreement, which may be formal or informal, between the employer and a person, normally entered into voluntarily by both parties, whereby the person works for the employer in return for a remuneration in cash or in kind. (SNA 2008 par. 19.20).

