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# COMPENDIUM OF TECHNICAL RECOMMENDATIONS AND BEST PRACTICES FOR PREPARING DIRECTORIES OF ENTERPRISES AND ESTABLISHMENTS

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This compendium is a product of the Regional Statistical Framework for Directories of Enterprises and Establishments project funded by the Regional Public Goods Program of the Inter-American Development Bank (IDB), participated in by 11 countries. The compendium is being presented at the seventh meeting of the ECLAC Statistical Conference of the Americas for adoption as a regional recommendation on the preparation of directories of enterprises and establishments.

## I. THE PURPOSES OF THE COMPENDIUM

The general purpose of the compendium is to present, in a systematized way, the common framework of shared concepts and definitions and the set of technical recommendations and best practices identified for the creation, updating and ongoing improvement of directories of enterprises and establishments. This harmonized common framework and the technical recommendations and best practices are a product of the joint work done and agreements adopted by the 11 countries participating in the four components of the Regional Statistical Framework for Directories of Enterprises and Establishments project, and particularly component 3.

As explained in the project operating plan, one of the challenges identified in the effort to strengthen national statistical systems in the region are delays in producing economic statistics whose unit of observation (also known as the economic unit) is the enterprise or establishment.<sup>2</sup> The problem underlying these challenges is the lack of common standards and methodologies, established within a sound conceptual framework, for the preparation of directories of enterprises and establishments by the national institutes of statistics of the region's countries. This deficiency results in disparate criteria being followed in the preparation of directories of enterprises and establishments, produces significant variations in the quality of such directories and hinders international comparison.

The compendium will help to improve the quality of statistical information on enterprises and establishments prepared from fiscal information, economic surveys and other administrative records kept for statistical purposes, which in turn will make it possible to improve sampling frameworks and better coordinate data gathering by surveys and thence the quality of economic statistics. The result will be fuller and deeper knowledge of sectoral production structures and enterprise demography in the countries of Latin America and the Caribbean. This will also improve the international comparability and sustainability of these statistics, narrowing the gaps that now exist between countries in terms of methodologies, experience and progress.

At the national level, this will help to improve the design, monitoring and evaluation of social policies and production and enterprise development policies. At the regional level, it will allow progress to be made towards the standardization of information sources across countries and endow the region with more solid and comparable bases for the preparation of economic statistics.

The scope and nature of the directory of enterprises and establishments in each country, and thence the usefulness of the compendium there, are connected by certain factors specific to each national situation, examples being:<sup>3</sup>

Regional Statistical Framework for Directories of Enterprises and Establishments project (ATN/OC-11937-RG).

Operating plan of the Regional Statistical Framework for Directories of Enterprises and Establishments (DDR2).

<sup>&</sup>lt;sup>3</sup> See EUROSTAT (2010).

- the use the directory of enterprises and establishments will be put to,
- the legal considerations determining what information will be available for its construction, and constraints on data use.
- the type of information enterprises are required to provide to the administrative authorities, and
- the costs of constructing the directory of enterprises and establishments and keeping it up to date, which tend to be very high.

The applicability of the recommendations in this compendium is subject to the balance national offices of statistics are able to strike between the desirable and the practicable, especially considering the costs involved and the type of information they mean to provide to users.

## II. CONCEPTS AND BASIC DEFINITIONS

The main concepts and basic criteria employed to develop and use a basic common directory of enterprises and establishments will now be described.<sup>4</sup> The criteria and definitions that follow provide only a minimum of information on each subject and, depending on the degree of development of the national statistical system, the legal framework and the resources applied to implement and develop the directory, it is open to each country to increase sectoral, institutional and size coverage and include new attributes and variables in its national directory.<sup>5</sup>

#### A. CORE FUNCTIONS OF A STATISTICAL REGISTER OF ENTERPRISES

To give an idea of how important it is to have a high-quality, up-to-date directory of enterprises and establishments, the most significant uses of such directories will now be detailed:<sup>6</sup>

- (i) Detection and construction of statistical units. The units employed in the statistical and economic analysis of enterprises do not always exactly match the units defined by fiscal and social security administrations and the like. The work of constructing the directory creates a bridge between administrative records and statistical units, and is thus a powerful tool for exploiting administrative data for statistical purposes.
- (ii) Preparation and coordination of surveys and extrapolation of survey results. The following functions in particular can be identified:
  - serving as a list of addresses for the economic units of business surveys and the economic census,
  - serving as a sampling framework when random sampling is carried out for business surveys,

<sup>&</sup>lt;sup>4</sup> Unless otherwise indicated, the information in this document is taken from the progress and final reports of the four components of the Regional Statistical Framework for Directories of Enterprises and Establishments project.

To have a standard of comparison with more advanced exercises in the development of directories of enterprises and establishments, see: "Regulation (EC) No. 177/2008 of the European Parliament and of the Council of 20 February 2008 establishing a common framework for business registers for statistical purposes and repealing Council Regulation (EEC) No. 2186/93" [online] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:061f:0006:0016:EN:PDF.

<sup>&</sup>lt;sup>6</sup> See EUROSTAT (2010, chap. 3) and UNECE (2007).

- providing a basis for extrapolating the results of sampling surveys to the whole target population,
- helping to prevent duplications and omissions when information on enterprises is compiled and improving consistency between the results of different surveys,
- controlling any overlap between surveys by coordinating samples effectively, thereby reducing the response burden and cost for informants, and
- helping to control and spread the response burden that surveys place on enterprises.
- (iii) Provision of direct information for statistical analysis of the population of enterprises and their demography. This means that data on company births, deaths, survival and growth in the total population concerned can be produced regularly and also that longitudinal analysis of economic units in time can be carried out.
- (iv) Provision of direct information for structural statistics on enterprises at a given point in time, particularly when a geographical or other level of disaggregation is required.
- (v) Dissemination of a central reference directory that can provide lists of enterprises together with such data as national restrictions allow. The data most commonly given out are identification data (name and address) and some information on units in the directory by size and activity on the basis of a particular stratification criterion.

## 1. Units included in the directory

For the units in the directory, it was agreed to use the term "empresas" ("enterprises") for legally incorporated units and "establecimientos" ("establishments") for local units, since these concepts are in current use in most countries. In other words, there are three concepts with their own specificities: enterprise, local unit and establishment. However, the practice in Latin America, as stated by most countries, is to extend the use of the establishment concept to what in the System of National Accounts 2008 (SNA 2008) and the System of National Accounts 1993 (SNA 1993) roughly corresponds to a local unit. The discussion revealed that in the case of the directory of establishments, given the difficulties in obtaining separate information for each establishment according to a single code number for the principal activity, it was recognized that in many cases the units in this directory might be local units.

In view of this, it was decided to maintain the common denominator of "directory of enterprises and establishments" rather than "directory of enterprises and local units", since in practice the latter would imply an undertaking to create and maintain three registers: enterprises, local units and establishments. Countries would find it difficult to commit to such an undertaking at this time and one possible option is that any country may of its own accord decide to create these three registers.

An enterprise (legal unit) is a body recognized by law as having the right to own assets in its own name, enter into contracts with third parties and uphold its interests in court. Enterprises wholly or partially dedicated to a production activity may be: (a) legal persons whose existence is recognized by law separately from that of the persons or institutions owning or composing them, or (b) natural persons who carry out an economic activity on a self-employed basis.

An establishment (premises, local unit) is the part of an enterprise (workshop, factory, storage facility, office, warehouse) that is located in a topographically delimited place, with the enterprise carrying out its production activities in or from that place.

#### **B. COVERAGE**

In principle, enterprise directories should include every type of enterprise operating in the national economy, irrespective of legal status, size or sector of activity. For different reasons (access to records, cost, etc.), however, this principle cannot always be applied, and for purposes of international harmonization and comparison it is thus desirable for directory coverage to comply with certain agreed norms. During the implementation of project component 2, dealing with the regional strategy and action plan for preparing, implementing and managing directories, agreement was reached on the inclusion and exclusion criteria that were to determine the coverage of the basic common directory, and this was ratified in component 3, dealing with technical recommendations.

The basic common directory is to contain all legal units or bodies corporate (companies, non-profit institutions, etc.), all State units or regional or local administration units producing goods or services and employing five or more persons and all physical persons producing goods or services for sale. The minimum common directory excludes individuals and enterprises in the informal sector.

As regards sectors of activity, only the following are excluded: section A (agriculture, stockbreeding, hunting and fishing), section T (activities of households as employers and the activities of households as producers of goods and services for their own use) and section U (activities of extraterritorial organizations and bodies).

## C. VARIABLES OF THE BASIC COMMON DIRECTORY

By virtue of the diagnosis conducted, and consistently with the strategic vision and goals proposed in the project, agreement has been reached on the basic common directory for the 11 countries. This agreement is a cornerstone of the whole set of recommendations in this compendium. The term "basic directory" is used because the information it contains is the minimum required for the internal and external users of national offices of statistics to be able to put it to the statistical uses they need and expect of it.

The starting point for designing the common directory was the structure and content of the so-called "reference directory" used to diagnose the state of development of each country's directory of enterprises and establishments, which in turn essentially followed the directory of enterprises and establishments of the Andean Community countries (Picard, 2011).

Agreement was reached on a basic common directory containing 5 categories and 12 variables. Details of the contents of the variables can be found in chapter III (MRS 05).

Three dates are to be given for each variable: the effective date, the introduction date and the verification date. The first is useful for statistics and demography, while the other two provide directory users with information on quality.

The effective date is the date on which the value of a given type of variable present in the directory becomes effective or applicable. In accordance with the variables and sources for updating the information, the effective date may be an exact date (for example, if there is exact information on a change of address) or a year (when there is a change in the principal activity, often the only information available is the year in which the new activity became the principal one).

- The introduction date refers to the introduction of the first or new value or of the first or new type of the variable in the directory. This date also applies to "date" variables. The closer it is to the effective date, the better the quality of directory management.
- The verification date refers to the most recent date of the value or of the type of variable.

#### D. SOURCES

The information sources used to construct and update the directory can be divided into two groups: (a) sources for regular updating of the directory and (b) other sources used for directory quality control.

It is possible to enter into a multiyear agreement with the owners of the sources used for regular updating of the directory so that they will supply the data on prearranged set dates. Two types of sources are used for regular updating of the directory: principal sources and secondary sources.

Principal sources are those used to update the units in the directory and learn about all or most of the active units that ought to be in the directory (they can often be used to determine whether or not units are active too). The scope of these sources is wide, as they cover many of the units to be included in the directory.

These sources are usually produced by the tax authorities or social security bodies. According to the diagnosis conducted, the countries generally use just one principal source to inform themselves about the units to be included in the directory.<sup>7</sup>

However, the most important principal source (i.e., the source that serves to update the largest field of units) can be supplemented by other principal sources for units that are not in its field (for instance, if the most important principal source for taxpayers does not cover non-profit organizations, recourse may be had to a listing of these bodies to complete the updating of the directory).

Secondary sources are those used to update the variables for the units in the directory. One source may be used to update one or more variables. The countries generally use a limited number of secondary sources.

Each source is used to update a particular list of variables, and one variable is updated from a single source. However, it is possible to have two or more sources for updating a variable. In this case, rules need to be designed to determine which source has priority over the others.

Other sources are specialized and can be used to update one or more variables. The variables updated from other sources are not usually updated from principal and secondary sources. The field of these sources is limited, as they cover a particular category of the units to be included in the directory. For example, one source may be the register of exporting enterprises compiled by the customs authority.

<sup>&</sup>lt;sup>7</sup> Eight of the 11 countries use the tax administration as the principal source.

## **E. QUALITY**

In general terms, quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (International Organization for Standardization (ISO 8042)). The quality of statistical products is defined in utilitarian terms by how well they meet or satisfy users requirements; in other words, how effectively the data can be used. Accordingly, quality can be defined as the set of attributes that make the product "fit for purpose".

To carry out their operations, users of directories require certain quality attributes from them. These requirements may be summarized as follows:

| Content                        | The directory must include the data needed to prepare and carry out the operations required to use it |
|--------------------------------|---|
| Accuracy (or validity)         | The data in the directory must not be incorrect   |
| Age                            | The data in the directory must be of recent date  |
| Consistency                    | The definitions of the units and the variables in the directory must not change over time             |
| Clarity and transparency       | The definitions of the units and of the variables and other data must be easily understood by users   |
| Availability and accessibility | The data in the directory must be easy to obtain  |

In some cases, it is possible to carry out measurements of indicators for these quality characteristics, but such measurements cannot gauge "quality" unless they are accompanied by rules to tell whether the indicator measured is of high or low quality. This project did not get as far as defining a quality framework or standards. Agreement was reached on the adoption and implementation of certain minimum technical requirements and standards and a wide range of best practices in the most important areas of directory functioning, and the position has also been taken that the statistical quality of both the directory and the other statistical products needs to be examined within the framework of the institution's overall quality model.

Nonetheless, it is possible to identify some indicators for overseeing proper application of the updating process and measuring the effects of improvement measures, and for monitoring the quality of the updated directory using the data included. For quality measurements, the cut-offs for each indicator could be as follows: below 5% counts as good, over 5% and below 10% middling, and over 10% bad.

The following indicators are proposed:

- Percentage of units in the directory field that are left unrecorded (difficult to calculate).
- Percentage of units wrongly recorded as active.
- Percentage of units recorded more than once in the directory (with different numbers).
- Percentage of units checked after more than two years.
- Percentage of units with the wrong mailing address.
- Percentage of units with the wrong geographical address.
- Percentage of units with the wrong legal form.
- Percentage of units with the wrong principal activity code.
- Percentage of units in the wrong size class.
- Percentage of mailing addresses checked more than two years ago.
- Percentage of legal forms checked more than two years ago.

- Percentage of principal activities checked more than two years ago.
- Percentage of size classes checked more than two years ago.

The regional action plan provides for a regional survey to be designed and sent out to users of directories of enterprises and establishments to obtain feedback for the ongoing directory improvement programme in the different countries.

## F. DISSEMINATION

Dissemination of the data in a directory can come to play a very important role in promoting its use and increasing decision-makers' understanding of the importance of having a high-quality directory so that good economic statistics are available, thereby helping to make the public policy design, implementation and evaluation process more efficient and optimal. If this happens, it is more likely that resources will be made available at the national level to develop and administer the directory to internationally set minimum quality standards.

The aim of disseminating information from the directory of enterprises and establishments is hindered in many countries by legal restrictions. One way of coping with this dilemma may be to reach agreement with data providers in each country on the variables that can be made known to the public. Then a subdirectory can be created with these variables and their quality prioritized.

The regional action plan provides for the preparation and dissemination of a progress report on the contents and information availability of the directories of enterprises and establishments of the 11 countries and any others that wish to join the initiative.

## III. MINIMUM TECHNICAL REQUIREMENTS AND STANDARDS AND BEST PRACTICES

By minimum requirements and standards (MRS) are meant all those that "ought to be met by every institution with the object of creating a high-quality directory of enterprises and establishments that is harmonized across all the countries" (Fernández, 2012). The latest year set for meeting these minimum requirements is 2016. This date is for guidance, however, and whether or not countries meet the requirements by then will depend on the resources available to them and the political and administrative feasibility of making the legal or institutional changes required for implementation of some of these recommendations and minimum technical standards.

A development standard for directories of enterprises and establishments may consist of generally accepted norms, rules or characteristics that ensure the needful harmonization of directories. Standards may cover technical aspects for units and attributes of the variables in the directory of enterprises and establishments. As suggested in the final report cited, one example of a standard in the document will be the use of ISIC Rev. 4 (MRS 07).

A minimum requirement means "all necessary conditions that ought to be put in place by every institution to prepare the directory of enterprises and establishments to the minimum standard of quality required by all the countries" (Fernández, 2012) (updating the domicile variables of units in the directory of enterprises and establishments at least once a year, for example). However, not all the minimum

requirements are strictly technical in character, as some depend on the institutional framework within which the directory of enterprises and establishments is developed in each country, such as access to sources of administrative records and the existence or otherwise of a single register or number for enterprises.

Statistical best practices are replicable actions, based on tested procedures yielding the best results, that help to improve a country's statistical activity.<sup>8</sup>

The purpose of a best practice is to transmit the best procedures to all areas where the selected actions can be applied and thereby bring about improvements in a variety of aspects, over and above any specific requirement.

In addition, and in line with what has been said about minimum technical requirements and standards and best practices, it should be realized that the large array of best practices described in this compendium are not necessarily a required minimum. This is something that will depend on the degree of development of the directory of enterprises and establishments in each country. In general, it can be said that implementation of best practices is part of the process of continuous improvement towards excellence in directories of enterprises and establishments.

### A. MINIMUM TECHNICAL RECOMMENDATIONS AND STANDARDS

In line with international practice and recommendations, the project participants agreed to define a set of common technical requirements and standards for regional use in order to implement directories of enterprises and establishments in the following six areas:

- 1. Management of the directory of enterprises and establishments
- 2. Data confidentiality and security
- 3. Single register of enterprises
- 4. Access to administrative records
- 5. Dissemination and use of the directory of enterprises and establishments
- 6. Quality management

The minimum technical requirements and standards for regional use described below should be regarded only as a starting point for the technical standards, which should be enhanced over time by the contributions and experience of the countries.

MRS 01. Directory of enterprises and establishments unit. Recognition in the institution's description of functions of a unit responsible for preparing and maintaining the directory of enterprises and establishments.

MRS 02. Unit staff. The staff assigned to the unit has to be large enough to prepare and maintain the directory and improve it as necessary. It might include the following positions: a project leader, information technology specialists capable of consulting, updating and tabulating any information in the database, and analysts or staff with adequate knowledge of the variables that go into directories who can continuously evaluate the quality of the directory. All these staff should be given the training necessary to keep their knowledge up to date.

See Code of Good Practice in Statistics in Latin America and the Caribbean, approved at the sixth meeting of the Statistical Conference of the Americas of the Economic Commission for Latin America and the Caribbean (ECLAC), Bavaro, November 2011 [online] http://www.dane.gov.co/files/noticias/BuenasPracticas\_en.pdf.

MRS 03. Continuity of legal units. The continuity of a legal unit in time will be determined by the continuity of its identification number. For the purposes of analysing continuity, it is very important for the identifier to be of excellent quality.

MRS 04. Continuity of statistical enterprises (continuity for enterprise demography purposes). An enterprise will be deemed not to be continuing if two or all of the following three things change: (a) the legal unit controlling it, (b) the principal activity (expressed in the four-digit code of the nomenclature of economic activities used) and (c) the enterprise's main location.

**MRS 05. Basic common directory**. The basic common directory agreed by all the countries will contain two types of units: enterprises and establishments. The variables it will record for each unit will be as follows:

## Variables in the basic common directory of enterprises

| Variables                | Definition   |
|--------------------------|--|
| Identification variables | Identification number in the directory   |
|                          | External identification number (for example, taxpayer's identification number (RUC) or administrative identification number (RUT)) |
|                          | Name or trade name   |
|                          | Legal form of the unit   |
| Location variables       | Address (including telephone number, e-mail, fax number and postal address)  |
| Stratification variables | Principal activity code  |
|                          | Size (measured by the number of persons employed or turnover)  |
| Continuity data          | Number in the directory or external number used to set up the enterprise   |
|                          | Number in the directory or external number of the previous legal unit to which the enterprise may be considered a successor        |
| Demographic variables    | Date of birth  |
|                          | Start-up date  |
|                          | Date of final cessation of the activities of the enterprise  |

## Variables in the basic common directory of establishments

| Variables                | Definition   |
|--------------------------|--|
|                          | Identification number of the local unit  |
| Identification variables | Trade name   |
| identification variables | Identification number of the company on which the local unit depends                               |
|                          | Type of unit: ancillary, secondary or main   |
| Location variables       | Address (including telephone, e-mail, fax and postal address)                                      |
| Stratification variables | Principal activity code  |
| Stratification variables | Size (measured by the number of persons employed or turnover)                                      |
|                          | Number in the directory of local units that was used for the constitution of the local unit        |
| Continuity data          | Number in the directory of the previous local unit to which the unit may be considered a successor |
|                          | Date of birth  |
| Demographic variables    | Start-up date  |
|                          | Date of final cessation of activities  |

- MRS 06. Annual updating of units in the directory of enterprises and establishments. The units in the directory have to be updated as the information available from administrative sources allows, but in any event at least once a year.
- MRS 07. Use of ISIC Rev. 4. The comparability of statistical information between countries is a crucial aspect for the production of economic information and thus for directories of enterprises and establishments. Accordingly, all countries must use ISIC Rev. 4 or an adaptation of it that ensures comparability. An implementation plan must be designed that includes the date of entry into force and introduction into the directory, surveys and administrative sources.
- MRS 08. Calculation of the number of persons employed or employees. The purpose of this variable is not only to measure employment but also, and particularly, to obtain a stratification variable, for which different intervals for the number of persons employed or employees need to be obtained as a minimum.
- MRS 09. Territorial classification of the country. Each country must determine a classification of territorial units so that each statistical unit in the directory of enterprises and establishments can be codified in accordance with this classification.
- MRS 10. Confidentiality. Confidentiality is one of the core principles of official statistics. To ensure confidentiality, then, security protocols or procedures need to be determined during the information transmission and maintenance phases. Data must be kept in a secure place with controlled access.
- MRS 11. Confidentiality rules. Confidentiality rules for the release of information from the directory of enterprises and establishments need to be set, at least for internal use.
- MRS 12. Unique legal unit identifier. A necessary condition for a high-quality directory of enterprises and establishments is that there should be a unique identifier for every legal unit in the country.
- MRS 13. Definition of "statistical purposes". Within the legal context associated with official statistics, "use of information for statistical purposes" can be taken to mean that this information should be used exclusively to develop and prepare statistical findings and analyses within the corpus of official statistics.
- MRS 14. Competence of the national statistics office to prepare the directory of enterprises and establishments. The competence of the national statistics office to prepare a directory of enterprises and establishments for statistical purposes must be recognized. This recognition should preferably be enshrined in the national statistics law, but if not it should be included in the description of the institution's competences.
- MRS 15. Access to administrative sources. The country's national statistics law should guarantee full access to the administrative sources needed for the performance of the functions entrusted to the national statistics office.
- MRS 16: Uses of the directory of enterprises and establishments. The directory of enterprises and establishments will have a key role in economic statistics. It will be employed mainly (a) as a framework for economic surveys and (b) for statistical uses (enterprise demography, periodic analyses and dissemination among the general public, at least in the form of tables). Some requests from researchers should also be met, subject to confidentiality requirements.

- MRS 17. General quality reference for the directory of enterprises and establishments. The quality of the directory of enterprises and establishments could be grounded in institutional policy in this area. Essential references will be the Regional Code of Best Practice in Statistics, approved by the Statistical Conference of the Americas and based on the European Union model, and any national codes developed in conformity with this.
- MRS 18. Annual internal monitoring report on the directory of enterprises and establishments. It is necessary to arrange for the preparation of an annual report on the register within the institution. This report should cover the main characteristics of the directory and make it possible to carry out annual monitoring of it. The report should include at least: (a) a listing of the sources used, (b) the number of enterprises and establishments for each section of the classification of economic activities taken, (c) the number of units that have information available on each of the characteristics included in the basic common directory of the directory of enterprises and establishments, at both the enterprise and establishment levels, and (d) comments on any problems with particular characteristics. The report should state the exact number of units affected in each case.
- MRS 19. Public quality indicators for the directory of enterprises and establishments (Topics: 7.4 and 7.5). There should be public quality indicators at the disposal of users. Given the current state of development of some directories of enterprises and establishments in the region's countries, this requirement ought to come into force in 2015 or 2016.

## **B. BEST PRACTICES BY TOPIC**

This listing of best practices (BPs) should be treated not as a minimum requirement to be met by a particular date, but as a set of procedures that can be applied as part of a programme of continuous improvement towards excellence.

## 1. Managing the directory of enterprises and establishments

- (a) Organizational aspects and resources
- **BP 01.** Person responsible for the directory of enterprises and establishments (Topic: 1.1.1). Irrespective of the status of the specific unit in charge of the directory of enterprises and establishments, the person responsible for the project in the institution must rank high enough to be able to communicate with and seek collaboration from any unit in the institution when required.
- **BP 02.** Name of the unit in charge of the directory of enterprises and establishments (Topic: 1.1.1). The unit should have the phrase "directory of enterprises" in its name, although it may have other competences too.

<u>Consideration</u>: this will improve the visibility of the project.

**BP 03. Liaison with administrative sources** (Topic: 1.1.1). Each institution must have someone who liaises with each of the administrative sources to ensure there is no duplication and communication flows freely. This liaison person should be tasked with reaching agreements with other institutions if necessary, or improving existing agreements.

<u>Additional comment</u>: the use made of administrative sources in the institution must extend beyond the directory, although the directory is one of the main destinations for information provided by such sources.

**BP 04. Personnel recruitment** (Topic: 1.1.2). Care should be taken when inducting or recruiting staff to the directory of enterprises and establishments team so that they perform optimally in the tasks they are to undertake.

<u>Additional comment</u>: the expert who studies multinationals should be someone with a good knowledge of accounting rules and good communication skills, as it might be necessary for him or her to visit these firms in some cases.

**BP 05. Training plan** (Topic: 1.1.2). The training plan put in place by the national statistics office to meet the needs of the directory of enterprises and establishments must provide for specific training in administrative sources and the handling of classifiers, and in general instil basic knowledge about the management of a relational database.

<u>Additional comment</u>: Everyone in the directory of enterprises and establishments team must receive a training that matches their profile and the tasks they will be undertaking.

**BP 06. Staff continuity** (Topic: 1.1.2). There should be continuity in the staffing of the directory of enterprises and establishments, especially at the project start-up and consolidation phases.

## (b) Managing the records of the directory of enterprises and establishments

**BP 07. Early warnings on administrative files** (Topic: 1.2.1). There need to be early warnings so that serious errors detected when a file is received can be rapidly notified (for example, the number of records received in comparison with the same source the year before, problems with identifiers, number of records with a variable left blank and territorial comparisons of the number of records in the light of earlier years).

Additional comment: there are often problems with administrative information, either in the identifiers or in some variable. These problems most often arise in the initial stages of collaboration between institutions, but they can crop up at any time. Information problems may be encountered because there is no better-quality information in the file or because the data really have not been notified properly. All this information should be included in receiving programmes for each file that process problematic records with a series of indicators. As administrative files are submitted periodically, errors are gradually corrected.

**BP 08. Reactivating statistical enterprises** (Topic: 1.2.1). In terms of enterprise demography, a statistical enterprise is considered to have continuity, and thus keeps its old identification number in the register, if it carries out seasonal activities or resumes trading within 24 months from a temporary suspension of activities.

<u>Consideration</u>: this topic is important for the effort to achieve consistency between the data in the directory of enterprises and establishments and enterprise demography.

**BP 09.** Consensus over changes policy (Topic: 1.2.2). Policy regarding changes in characteristics needs to be discussed with those in charge of surveys so that the principle of record quality is safeguarded, which means that users' needs have to be taken into account.

Additional comment: the most important changes are going to be in the stratification variables, such as economic activity and size. These will influence the estimates because they affect sample selection, one of the most critical aspects. Changes in location are also important, especially in the case of units that have been selected for surveying.

**BP 10. Stability of economic activity in the directory of enterprises and establishments** (Topic: 1.2.3). For switches between principal and secondary activities, a stability rule is recommended whereby, for the principal activity to be reassigned, the secondary activity should exceed the activity for which the unit is classified over a period of two years prior to the change of classification.

<u>Additional consideration</u>: although codification of the principal activity is prescribed as the minimum requirement in a directory of enterprises and establishments, it would be advisable for secondary activities to be codified as well in countries where this can be done.

- **BP 11. Timing of changes** (Topics: 1.2.2, 4.3 and 5.3). In deciding when a change should be introduced, user satisfaction should be given priority over the traditional idea of reflecting the real world as accurately as possible. For example, consistency between short- and long-term statistics, and thence in economic information, may be more important than reflecting reality.
- **BP 12.** Historical basis for changes (Topics: 1.2.2 and 1.2.6). The steps to be followed when correcting an error or updating a variable must be well documented. One option is to establish a historical database of alterations as they are made. The structure and functionality of this database will depend on the procedures that have been agreed for dealing with errors and updating variables. The database should form part of the directory of enterprises and establishments and should include the following variables:
  - The original value
  - The new value
  - The detection date (only for errors)
  - The date of the change
  - The source for the new value
  - The correction method (only for errors). Interactive or batch correction could be used. In the case of interactive correction, the person doing the correcting should also be recorded.
- **BP 13.** Use of different sources for the same variable (Topic: 1.2.2). A variable in the directory of enterprises and establishments can be updated from different sources. Once the ranking of the different sources for a characteristic has been determined, a method must be established for applying them to the register updating procedures. There are a number of possibilities, but perhaps the most reliable method is to assign a date and source code to the characteristic and use algorithms.
- **BP 14. Policy on changes by unit size** (Topic: 1.2.2). The size of the unit of observation may influence policy on changes. Automatic updating rules tend to be easier to apply to smaller, less complex units that have less of an impact on the economic figures. Conversely, changes in larger units have a variety of consequences for users, so it is important to ensure they are correct. For this, data from a number of sources can be compared for consistency, or the unit concerned can be contacted to validate the change, if it is a fundamental one.

Additional comment: given the impact of the larger units in a directory of enterprises and establishments, a specific exercise could be carried out to integrate data and apply consistency analyses for the main units

in the directory, with parameters being set in each country in view of the size of its directory. This supplements best practice 68 (BP 68).

- **BP 15. Frequency with which variables are updated** (Topic: 1.2.2). If possible, variables should be contrasted once a year. This is what happens with major enterprises, which are usually surveyed every year. For all other units, there could be a review policy that involved contrasting information, at least on a sampling basis, every four years.
- **BP 16.** Conflicts between units at the national statistics office (Topic: 1.2.3). It can happen that an internal conflict arises between units of the national statistics office regarding the treatment of particular units (the way economic activity is considered, for example). It is thus advisable to designate an authority to resolve conflicts over the way units in the register are treated. This authority should usually be whoever is in charge of the actual register. In the event that the central bank is responsible for preparing the national accounts, as it is in some countries, it is important to lay down agreed classification standards.
- **BP 17. Errors policy** (Topics: 1.2.6 and 7.3). Errors should be dealt with under a systematic operating policy. This may consist of three steps: (a) deciding whether errors have occurred, (b) deciding whether they should be corrected and (c) deciding how and when to correct them. Efforts should be made to minimize the impact of errors on surveys.
- **BP 18.** Implementation of ISIC Rev. 4 for administrative sources (Topics: 1.2.3 and 5.3). Implementation of ISIC Rev. 4 in the directory of enterprises and establishments necessarily involves this classification being adopted in the core administrative sources that supply the economic activity variable for the directory. This is a strategic issue and must be treated as such by the institution.

<u>Consideration 1</u>: when ISIC Rev. 4 comes to be implemented, there must be a decision as to which of the administrative source or sources supplying the directory of enterprises and establishments it is going to be introduced into. There are two ways of doing this:

- (a) Introduce it as an additional variable in the administrative source itself. This has the advantage of not distorting or influencing the management of the register, but the disadvantage is that, because it is not an important variable, there may be little interest in obtaining it, so that its quality is affected.
- (b) Introduce it as a classification of reference activities in the administrative file. For example, if a tax has to be paid on economic activity, the classification used for the payment should be an adaptation of ISIC Rev. 4. If it is included as proposed in this section, the use of this classification by the body managing the administrative source is the responsibility of that body, as it is a non-statistical use and thus outside the competence of the national statistics office. Nonetheless, it may indirectly entail an additional effort by the national statistics office, as a classification will impact society more when it has an administrative use with economic consequences deriving from the code selected.

<u>Consideration 2</u>: from a practical standpoint, the twofold classification must set out from an examination of the correspondence between classifications. When the correspondence between the old and new classifications of activities is established, there are two possibilities.

(a) A code from the old ISIC becomes a code in the new ISIC (this is the ideal situation because the change is automatic).

(b) A code from the old ISIC becomes more than one code in the new ISIC. This needs to be studied case by case. For example, a sampling survey could be carried out and a transition matrix applied. Additional information: the national statistics office should collaborate with those responsible for the administrative sources to facilitate implementation of ISIC Rev. 4 in these sources. When assigning economic activity, it is useful to develop web tools to help the user identify the relevant code. These tools should be available both within the institution and externally. In Spain, in addition to other technical collaborations, there is a computer application called Ayuda a la Codificación (AYUDACOD) that assists with correct interpretation of the classification.<sup>9</sup>

**BP 19. Intervals for the persons employed and employees variable** (Topic: 1.2.4). The following intervals are taken to classify the number of persons employed and employees in a unit: 5-9, 10-19, 20-49, 50-99, 100-199, 200-499, 500-999 and 1,000 or over, or disaggregations compatible with these.

Note: these intervals match those in the Andean Community recommendations.

**BP 20. Proxy for employees** (Topic: 1.2.4). Sometimes, for reasons of information availability and quality, it is convenient to take the employees variable as a proxy for the persons employed variable.

Consideration: in this case, the persons employed variable could be imputed.

Note: see EUROSTAT, 2010, chap. 5, part 5C, point 2.9 for further information.

<u>Definition</u>: employment can be calculated as the number of physical persons or full-time equivalents. The number of physical persons includes all physical persons employed full-time and part-time by a unit. Full-time equivalents are defined in the national accounts (employment in full-time equivalents is the number of full-time positions, defined as the total number of hours worked divided by the annual average of hours worked in full-time positions) and in the structural statistics. This variable should ideally be calculated on both definitions, although that is very complicated (see EUROSTAT, 2010, chap. 5, part 5C, point 2.10b).

**BP 21.** Continuity of establishments (Topic: 1.2.5). For continuity purposes, an establishment changes when its location changes by more than a short distance, a "short distance" being taken to mean a change within the same lower-level administrative territorial unit (municipality, for example).

<u>Consideration 1</u>: although it is logical to attach great importance to the criterion of continuity in terms of location, this cannot be an imperative, as it must be possible for a local unit to move a short distance without losing its identity. Should it pursue the same activity with the same staff at a short distance from the previous location, the move will not usually put an end to the local or regional function of the local unit, whence the best practice proposed. A long-distance move, however, does result in a loss of identity.

<u>Consideration 2</u>: addresses should as far as possible be standardized in the directory of enterprises and establishments, as that facilitates cross-checking against this variable, a procedure of great importance in constructing the directory.

<u>Consideration 3</u>: the topic of continuity for premises, like enterprises, may take account not only of location (the main factor), but also production factors, such as economic activity and workforce, and the legal unit they come under. Depending on the administrative information available, best practices for

<sup>&</sup>lt;sup>9</sup> http://www.ine.es/EX INICIOAYUDACOD.

establishment continuity that also take these factors into account can be considered (see MRS 04), but given how little impact such continuity has in terms of enterprise demography, the matter does not seem worth pursuing further.

**BP 22. Reactivating establishments** (Topic: 1.2.5). An establishment is deemed to have continuity, and so keeps its old identification number in the register, if it carries out seasonal activities or restarts its activities within 24 months of temporarily suspending them.

Additional comment: the link between events affecting enterprises and those affecting local units is complex, although it is simpler in the case of enterprises that only consist of one local unit, as is very often the case. It can be said that the relationship between events at the enterprise level and events at the local unit level is very far from direct. All events at the local unit level can take place without there being any event at the level of the enterprise. The most specific observation that can be made is that some events at the enterprise level (creation, concentration with no change in overall production capacity) entail at least the creation or transfer of local units, while others (disappearance, deconcentration with no change in overall production capacity) entail at least the disappearance or transfer of establishments.

**BP 23.** New developments (Topic: 1.2.6). From the perspective of the directory of enterprises and establishments, the categories to be used for new developments should be harmonized at the national statistics office

<u>Definition</u>: by new developments are meant the set of final states into which sampling units whose questionnaires have not been included are classified. Generally speaking, new developments are due to problems with data collection (rejection, for example) and with the framework.

<u>Consideration</u>: some of the categories to be used for new developments in the directory of enterprises and establishments are: (a) permanent closure, (b) merger, (c) break-up, (d) takeover, (e) split-off, (f) erroneous inclusion (outside the scope of the survey) and (g) duplication. It is usually the data gathering unit that assigns these categories to each new development.

## 2. Data confidentiality and security

- **BP 24. Transmission of encrypted data** (Topic: 2.1). Data transmitted to prepare the directory of enterprises and establishments must be encrypted.
- **BP 25. Secure data transmission** (Topic: 2.1). Data must be transmitted via whatever secure channels exist between the country's administrations.

Consideration: in particular circumstances, and for certain institutions, CDs may be the medium of choice.

- **BP 26. Single data entry point** (Topic: 2.1). The transmission process should be automated as far as possible and there should be a single data entry point per institution to make it easier to protect and guarantee security.
- **BP 27. Contact persons** (Topic: 2.1). There need to be contact persons at each institution who are notified whenever information is sent.

Additional comment: there will usually be a formal application for the request, and once this has been sent, notification must be given to the contact person for the single point, with the consignment including details of the request and the person making it, and also the person and unit sending it.

**BP 28. Metadata in the transmission** (Topic: 2.1). When data are transmitted, the associated metadata must be sent at the same time to facilitate correct interpretation of the information.

**BP 29. Secure zone** (Topic: 2.2). The directory of enterprises and establishments will be kept at the national statistics office in a secure zone with restricted, controlled access and subject to measures to safeguard its security.

<u>Consideration 1</u>: to build trust with the institutions that have supplied the information and to overcome doubts about possible misuse of it, it is considered helpful to explain to these institutions how the national statistics office will treat the information they supply, including security measures.

<u>Consideration 2</u>: among the quality certification processes, it is advisable for bodies to implement standards such as ISO-IEC/27001, which specifies requirements for the establishment, implementation, monitoring and review, maintenance and improvement of an information security management system (ISMS).

**BP 30. Confidentiality in the statistics law** (Topics: 2.3 and 2.5). The national statistics law needs to provide for the issue of confidentiality.

**BP 31. Anonymization techniques** (Topics: 2.3 and 2.5). Standard anonymization techniques must be used to preserve confidentiality whenever the directory of enterprises and establishments is disseminated.

**BP 32. Safeguarding statistical secrecy** (Topics: 2.2 and 7.1). Everyone involved in preparing the directory of enterprises and establishments must sign an undertaking to preserve statistical secrecy.

<u>Consideration</u>: there is no problem with access to the directory of enterprises and establishments when the data are seen by people from the national statistics office or statistical institutions who are covered by the same law as the national statistics office and are therefore required to preserve statistical secrecy.

**BP 33. Notification of data release to providers** (Topic: 2.3). Any release of data should be notified in advance to the providers of the information in case they have any comments.

<u>Consideration</u>: the information in a directory of enterprises and establishments comes from an array of administrative sources and thus cannot necessarily be assumed to reflect the information received from any one source. Nonetheless, it is advisable to keep data providers informed.

**BP 34. Release of economic activity information** (Topics: 2.3, 2.4 and 2.5). Depending on the quality of codification of the economic activity variable, it can be released at particular levels of aggregation that may be other than the four-digit level.<sup>10</sup>

<u>Consideration</u>: depending on the quality of the information, it can be released at a two-, three- or four-digit level, sometimes even by economic sector. If some unit is not perfectly classified or a piece of information is missing, the possibility of imputing this should be considered.

Some countries have legal or administrative restrictions on the disclosure of certain variables, an example being the classification of a business's economic activity.

- **BP 35.** Secondary activities (Topic: 1.2.3 and 2.4). Secondary activities will be included in the directory when they account for at least 10% of the enterprise's turnover or 5% of the activity concerned in the whole national economy.
- **BP 36.** Controls on access to the directory of enterprises and establishments (Topic: 2.1). Access to the directory of enterprises and establishments must be controlled by user name and password, taking into account the role assigned to each user.

Consideration: user profiles or roles may be both internal and external to the institution.

#### Internal roles:

- (a) Directory worker (will usually have reading and writing rights).
- (b) Other users in the institution (will only have the right to read aggregate or individual data, depending on their role).

#### External roles:

- (a) Accredited researchers.
- (b) Other external users.

## 3. Single register of enterprises

**BP 37. Identifiers of statistical enterprises and establishments** (Topics: 1.2.5, 3.2 and 3.3). The directory of enterprises and establishments must have a special identification number for each statistical enterprise unit, which will also serve to differentiate this from the legal unit. There should also be another special identifier in the directory of enterprises and establishments for the establishment.

<u>Consideration</u>: these numbers will serve to identify the continuity of both units in the directory of enterprises and establishments. They may also be useful for further safeguarding the anonymity of enterprises by making their legal identifier inaccessible.

**BP 38.** Checking of identifiers (Topic: 3.1). Identifiers must be checked when the information is received, especially if they have some verification digit.

<u>Consideration</u>: the quality of the coverage provided by the directory of enterprises and establishments will depend greatly on whether there is an appropriate identifier. If the quality of identifiers is found not to be good, the institutions responsible for the administrative sources affected should be informed.

## 4. Legal changes to facilitate access to and use of administrative records

- **BP 39. National statistical plan and statistical purposes** (Topic: 4.1). Requests for data for projects forming part of the national statistical plan must always be treated as requests for data for statistical purposes.
- **BP 40.** Agreements and statistical use of data (Topic: 4.1). Agreements or protocols entered into must always include safeguard clauses to ensure that data will be used exclusively for statistical purposes and will never be transferred to third parties without the prior agreement of the institution that provided the information.

**BP 41: The benefits of agreements** (Topics: 4.3, 5.1 and 5.3). The existence of agreements is a guarantee that the law can be applied or problems solved if the laws are not clear enough.

Additional comment: there may be laws in the country that have the same status as the law governing the public statistics service and that do not allow administrative data to be used for statistical purposes. For example, there may be a tax law with the same status as the statistics law providing that data can only be used for tax purposes. This creates a problem that will have to be solved by arriving at inter-agency agreements or even changing some law.

This was a problem in some European Union countries. It was solved because the European Union statistics law does allow tax sources to be used for statistical purposes and this law has a higher status than any national law. Understandings between institutions must be grounded in accords, which means that an agreement should be signed to facilitate the relationship between the tax authorities and the national statistics institute.

In summary, international laws that outrank national laws can be called into service to solve national problems. There are no instances of this in Latin America, with the partial exception of the Andean Community. This solution is feasible for the Andean Community countries if the same type of problem arises, as there is the potential for an Andean Community-wide law that can resolve national problems. In the other countries, international comparisons can provide arguments, but solutions have to be found at the national level.

Consideration 1: the ideal solution would be for national statistics offices not only to have administrative information available, but also to be able to have input into the preparation of information. For this, an article would have to be incorporated into the national statistics law stating something to the effect that the national statistics office shall be consulted and shall be involved in the initial design and subsequent development of and discontinuities in administrative records constructed and maintained by other institutions with a view to facilitating the use of these registers for statistical purposes.

Consideration 2: data protection legislation may affect records in the directory of enterprises and establishments that relate to natural persons. An article could be introduced into the data protection law stating that is inapplicable to data that are going to be used for official statistics or by the national statistics office. One possible argument is that in this case the data will be protected by statistical secrecy provisions.

Additional comment 1: if some data-supplying institution had severe doubts about confidentiality, the identifiers of the legal units and of the statistical data would be in separate and specially protected files, making it impossible to cross-match this information except for essential processes necessary to the integration of administrative and statistical information, which would be carried out by a unit with all necessary safeguards.

Additional comment 2: data protection legislation should not act as an obstacle to the progress of official statistics when handling administrative data, especially for the purpose of preparing frameworks and directories. The statistics law also needs to safeguard individual rights, something that is solved by the application of statistical secrecy requirements.

## 5. Access to administrative records

- **BP 42.** The benefits of agreement follow-up committees (Topics: 4.3 and 5.1). Agreements should be flexible and create room for continuous improvements in collaboration. To this end, among other clauses, they should make provision for a follow-up committee where procedures can be improved and shared. Among other considerations, the composition and functions of the follow-up committee will need to be specified and meetings held at least once a year.
- **BP 43.** The benefits of inter-agency committees (Topics: 4.3 and 5.1). If there is no agreement, there should at least be an inter-agency committee comprising representatives of the national statistics office, the tax authority and the social security authority to work out how administrative sources can be used in the preparation of the directory of enterprises and establishments.
- **BP 44. Data sharing security protocol** (Topics: 2.3 and 5.1). Data sharing protocols should lay down the confidentiality measures, security measures and data transmission procedure to be used.
- **BP 45. Benefits for providers** (Topic: 5.3). The agreement should also try to provide some benefit for the institutions providing data. These should at least be given a summary report on data utilization and some cross-matching information; confidentiality rules would have to be observed here, but there should be an effort to ensure the information is as useful as possible for the institution providing the administrative source.
- **BP 46.** Agreements: an institutional issue affecting more than the directory of enterprises and establishments (Topic: 5.3). An agreement is an opportunity not only to secure a supply of data for the directory of enterprises and establishments but potentially to encompass any kind of current or future collaboration between institutions in other areas.

<u>Additional comment</u>: the use of administrative sources for statistical purposes is a best practice in itself, as it means a reduced burden on informants and lower costs.

**BP 47. Proportionality in information requests** (Topic: 5.3). Any request for information from administrative sources must always be properly argued and justified in terms of proportionality, with an explanation of why the information is needed and for what purpose.

Additional information: this best practice forms part of the European Union regulations on directories. Article 15(b) of Regulation (EC) No. 177/2008 of the European Parliament and the Council of the European Union refers to "the updating of the list of register characteristics in the Annex, their definitions and their continuity rules, as provided for in Article 5, taking into account the principle that the benefits of the updating must outweigh its cost and the principle that the additional resources involved either for Member States or for enterprises remain reasonable".

- **BP 48. Prior analysis of requests** (Topic: 5.3). The suitability of a request should be properly examined and empirically tested, so that once formalized it is as stable as possible.
- **BP 49. Seeking opportunities to collaborate with administrative sources** (Topics: 5.3 and 5.4). Vigilance is always required to find the most convenient times for cooperating with any institution or enterprise that might be able to provide administrative data.

Additional comment: as an example, the social security administration in Spain had a problem with an inhouse classification of economic activities that it used for its own purposes, and it asked Spain's National Statistical Office for help in implementing the Spanish version of ISIC Rev. 3 in its administrative records. It was given all the help it needed to make the change: documentation, training, computer software and assistance in codifying its records. The good relationship established meant that first ISIC Rev. 3 and then ISIC Rev. 4 were satisfactorily implemented.

**BP 50.** Usefulness of chambers of commerce as a source for the directory of enterprises and establishments (Topic: 5.4). Chambers of commerce can be an alternative source for some variables in the directory, particularly those relating to enterprise demography.

<u>Additional comment</u>: these will usually be secondary sources, as they can be an alternative source for some specific variable. In some countries they may even be principal sources, an example being the Netherlands.

## 6. Dissemination and use of directories of enterprises and establishments

**BP 51. Dissemination of the directory** (Topics: 6.1 and 6.4). The directory must be disseminated in the form of tables with aggregated data. The general methodology of the directory must also be published on the web.

**BP 52. Dissemination of enterprise demography** (Topic: 6.1). In view of its importance, information on enterprise demography must be disseminated.

<u>Additional comment</u>: the Organization for Economic Co-operation and Development (OECD) has developed an international methodology for this.

**BP 53.** Custom requests (Topics: 2.5 and 6.3). Custom requests to the national statistics office in relation to the directory of enterprises and establishments will be considered individually to see how the requester's needs can best be met.

Consideration 1: standard methods of exploiting the directory will not suffice for requests of this type.

<u>Consideration 2</u>: users can often request information that would compromise confidentiality and that exceeds their actual needs.

**BP 54. Conditions of data provision** (Topics: 2.5 and 6.3). When data are provided, the conditions and restrictions on their use must be notified at the same time.

Consideration: example of a possible wording for the conditions of provision:

Anyone using data files undertakes:

- 1. Not to disclose the data to third parties.
- 2. Not to attempt to identify individual statistical units, directly or indirectly.
- 3. To use the files only for the purposes notified when they were requested, without directly reproducing on any support the basic information supplied (in particular, any administrative use is excluded).

- 4. To cite the national statistics office as the source for the primary data when products are created for distribution from the files requested, and to state that the accuracy or reliability of the information processed from these by the authors is the exclusive responsibility of the latter.
- 5. Not to publish data disaggregated enough for specific units to be indirectly identified when a product is obtained from these files for distribution.
- 6. To send the national statistics office a copy of all research projects or reports for public release that are produced from the data supplied.
- 7. To keep the information in a secure area, with access restricted to authorized personnel.

**BP 55.** Meetings with users (Topics: 6.2 and 6.3). Meetings must be held with internal and external users as deemed appropriate, with the twofold objective of users informing those in charge of the directory of enterprises and establishments about the strengths and weaknesses they have encountered when using it, and of those in charge of the directory informing users about the legal and technical constraints and issues affecting them.

<u>Consideration 1</u>: meetings should be held with internal and external users or, failing this, there should be telephone or e-mail contact with the users making the most substantial requests to the directory of enterprises and establishments. The type of use they plan to make of the directory and their level of satisfaction with it should be ascertained.

<u>Consideration 2</u>: user comments about the information in the directory of enterprises and establishments should be analysed over time and the information on offer progressively improved accordingly.

**BP 56. Release of aggregate tables** (Topic: 6.1). When macrodata or aggregate tables come to be released, the basic categories taken should be followed by all the countries in the interests of data comparability (these can be disaggregated if that is considered helpful).

<u>Consideration 1</u>: tables can be produced in a whole variety of ways. What needs to be understood as a general principle is that the more one variable is disaggregated (municipal-level geographical codes, for example), the harder it is to disaggregate the others if a degree of quality and confidentiality is to be maintained.

<u>Definition</u>: custom request: the standard release does not contain all the tables that the directory of enterprises and establishments can offer. We can often use our files to respond to user requests for information (unpublished special tabulations, data with a higher level of territorial, sectoral or other disaggregation).

<u>Consideration 2</u>: variables relating to the age of enterprises can also be important, enabling analyses to be carried out in the light of this information (survival, growth, etc.).

**BP 57.** Georeferencing (Topic: 6.1). Georeferencing is a tool that opens up numerous possibilities in the analysis and dissemination of information from the directory of enterprises and establishments. To facilitate implementation of this best practice, partnerships should be sought with institutions to economize on resources. <sup>11</sup>

The last sentence of this good practice was added at the final workshop to validate the Regional Strategy and Action Plan.

## 7. Quality management

**BP 58.** Updating of the country's documentation (Topics: 6.1 and 7.2). Ongoing updating of documentation, and particularly anything entailing information processing.

<u>Additional comment</u>: a very precise definition of the process would allow auditing to be carried out, something that could be considered as part of the quality aspect.

- **BP 59.** Access to documentation (Topic: 7.2). Ease of access to documentation for all those working on the directory of enterprises and establishments.
- **BP 60. Workers' knowledge of the process** (Topic: 7.3). The process of preparing the directory of enterprises and establishments must be understood by the members of the unit. There must be a chart showing the whole process.
- **BP 61. Working plan** (Topics: 1.1.2 and 7.2). There needs to be a working plan with a timetable that is known to the directory of enterprises and establishments team, and this will have to be followed up with scheduled stages or phases. It is helpful to have a timetable of periodic meetings to encourage communication and teamwork among those working on the directory of enterprises and establishments.
- **BP 62. Monitoring for large enterprises** (Topic: 7.5). There must be a system for monitoring information on large enterprises, given their importance in the economy.
- **BP 63. Monitoring of stratification variables** (Topic: 7.5). Special monitoring must be in place for the economic activity variable and the persons employed and employees variable, as these are the variables that will be used in the stratification for the sample design.

<u>Consideration</u>: if these variables are of poor quality there will be greater problems with data gathering, requiring sample sizes to be increased.

- **BP 67.** Coverage controls (Topic: 7.5). In the information process, coverage by economic sectors and by geographical criteria must be monitored in relation to previous years.
- **BP 68.** Methodology of the directory of enterprises and establishments and quality components (Topic: 7.4). The traditional components of quality (relevance, completeness, timeliness, punctuality, consistency, comparability and accessibility) must be included in the directory methodology published for the information of users. The institution must have a shared quality management framework. <sup>12</sup>

<u>Additional comment</u>: in the European Union, there is a recommendation for the standard methodology based on the standards proposed by the Statistical Data and Metadata Exchange (SDMX).<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> The last sentence of this good practice was added at the final workshop to validate the Regional Strategy and Action Plan.

See "Commission Recommendation of 23 June 2009 on reference metadata for the European Statistical System (Text with EEA relevance) (2009/498/EC)" [online] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:168:0050:0055:EN:PDF.

**BP 69. Directory of enterprises and establishments quality control surveys** (Topic: 7.6). It is advisable for the directory of enterprises and establishments unit to carry out directory quality control surveys. These may be designed to complete information or to detect possible systematic errors.

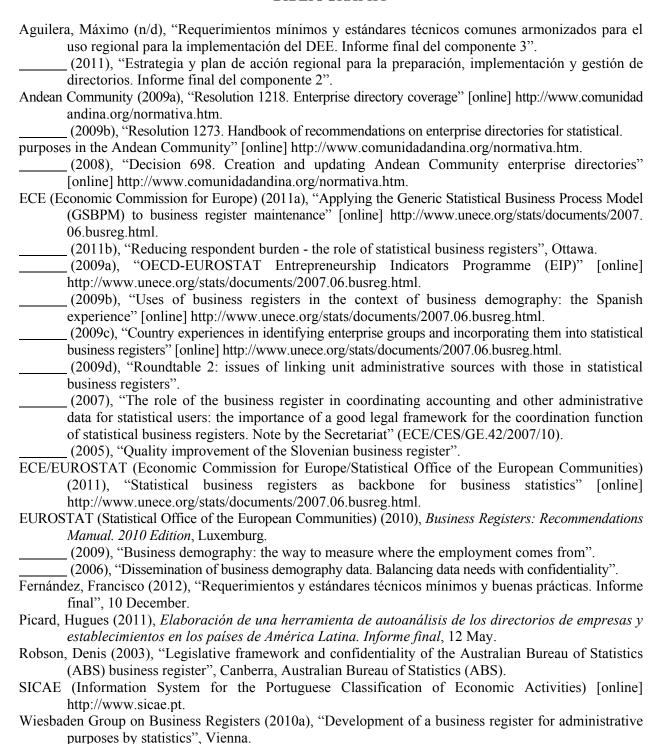
<u>Definition</u>: directory of enterprises and establishments quality control surveys are one of the most effective methods for analysing the accuracy of the directory. They are especially useful for checking the quality of the stratification variables and determining whether there is some systematic error in the sources, especially in terms of coverage, i.e., units wrongly listed as active in the directory.

<u>Consideration</u>: directory quality control surveys must have a good cost-benefit ratio and be supplemented by any surveys carried out using the directory of enterprises and establishments as a framework. These surveys can be used to identify and address weaknesses in the directory.

**BP 70. Directory of enterprises and establishments user surveys** (Topic: 7.6). Surveys of users of the directory of enterprises and establishments are a helpful way of improving its quality. Nonetheless, the most important thing is to be able to understand the needs of users. Given the state of the countries' directories of enterprises and establishments, surveys of this type should be introduced progressively as the users of the directory of enterprises and establishments consolidate.

#### Annex

#### **BIBLIOGRAPHY**



(2010b), "Lessons learnt from an administrative data failure", London.



#### **GLOSSARY**

Active

A unit is active if it produces goods, services or both.

principal production activities.

**Ancillary activity** 

An ancillary activity is an activity that exists only to support principal and secondary activities, supplying non-durable goods and services for the sole use of the legal unit (accounting or information technology services, for instance). Ancillary activities are not separately identified for enterprises that are relatively small and operate on only one site. For larger enterprises with multiple locations, it can be helpful to treat ancillary activities in the same way as secondary or even

Ancillary local unit

An ancillary local unit carries out ancillary activities only, on behalf of all the local units of the business.

**Business** group

A business group contains a number of enterprises bound by legal and financial links. It may have a variety of decision-making centres, chiefly for policies on production, sales and profits, among others, and may centralize particular aspects of financial management and taxation. It constitutes an economic entity which is empowered to make choices, particularly concerning the units it comprises.

**Business sector** 

A business sector includes all enterprises with the same principal activity code.

Classification of activities

Each country has its own classification of economic activities, whether based or not on the United Nations ISIC. The North American Free Trade Agreement (NAFTA) countries (Canada, Mexico and the United States) use their own classification, the North American Industry Classification System (NAICS), whose sections are compatible with the sections of ISIC Rev 4.

**Company** 

- (1) Legally constituted companies can be described in different ways: partnerships, incorporated companies, public limited companies, public companies, private companies, corporations, etc. A legally constituted company is a legal entity created for the purpose of producing goods or services for the market, and may be a source of profits or other financial gain for its owners. It is collectively owned by shareholders, who have the power to appoint the directors responsible for its general administration. It may also be an arrangement whereby two or more people agree to make contributions (in kind, money or labour) with a view to retaining all the profits. In this case the term partnership is used for the group of people coming together to carry out private activities, usually of a commercial nature.
- (2) In the System of National Accounts (SNA), the term company is given a broader meaning than its strictly legal one. In general, all organizations that are capable of generating a profit or other financial gain for their owners, legally recognized as a separate legal entity from their owners, with limited liability, or constituted with a view to carrying out market production, are treated as companies in the SNA, whatever term they themselves or others may use for them. In addition to legally constituted companies, the term "company" is used to group cooperatives, limited liability companies, notional resident units and quasi-corporations.

## Company ownership and control

Ownership of a listed company is divided between the institutional units that own its shares in proportion to the number of shares they hold. It is possible for a single institutional unit, another company, a household or a government unit to own all of a company's equity or shares, but ownership of a company is usually split between several, and probably many, institutional units.

## Continuity

Two units of the same level (business or local unit) are "in continuity" if:

- one unit is among the successors of the other, or counts the other among
- it is possible to say that there are few differences between the two units, according to certain economic criteria.

Continuity allows one unit to be replaced by its successor without the need to splice the calculations of the temporary statistical indices or indicators.

The continuity rules and economic criteria to be used are determined in each country.

### Coverage

The coverage of an archive or directory is determined by the set of units to be included in it. This set is determined by the common characteristics the units must have and by limitations for certain characteristics (e.g., all enterprises whose principal activity is the production of information technology services, but limited to enterprises employing over four people), i.e., the list of variables applying to the units.

#### Current status of a unit

The status of a unit indicates whether the unit is active or not active (or inactive). If the unit is not active, it can be in any of three possible situations:

- the unit has been created (birth) but has not yet begun to operate,
- the unit is going to disappear (death) but has not yet done so,
- the unit is temporarily inactive (dormant) but is going to recommence its activity (reactivation).

### Date of birth

Date of creation of new production facilities for a unit with no predecessor, date of constitution of a unit not in continuity with a predecessor or date of birth of the predecessor unit if the unit concerned is in continuity with it.

## Date of commencement of operations or activities

Date of the first act of production. There might be some delay between a unit being created and actually commencing production activities.

Date of creation (or constitution) of a legal unit

Date on which physical persons are administratively recognized as economic operators or date of constitution for legal persons. This is the date of first registration, since it is a prerequisite for a business to trade legally.

#### Date of final cessation

The date a unit ceases all production activities.

## Date of winding up

When the business is legally recognized as having ceased. There might be some time lapse between the cessation of activities and legal recognition that the business has been wound up.

## **Directory updating process**

The set of regular operations prescribed for obtaining an up-to-date directory on the basis of regular updating sources. Operations include application of computer programs, computerized or manual data control and the use of prepared tools such as surveys, telephone calls or archives to check doubtful data. The outcome of the process is an updated directory.

#### Effective date

This is the date on which the value of a given type of variable present in the directory becomes effective or applicable.

## **Employee**

Employees are subordinate workers carrying out a task for their employer and receiving a wage in return for the work done. Workers' subordination to their employer is one of the main characteristics for defining the relationship between employer and employee.

The number of persons employed is sometimes hard to ascertain. Using social security sources can make it easier to find out the number of employees (the business will be paying contributions to social welfare organizations). For the purpose of classifying or stratifying enterprises, the number of employees can replace the number of persons employed.

#### **Establishment**

- (1) The name given in some countries to the local unit.
- (2) In the System of National Accounts and ISIC, an establishment is defined as a business, or part of a business, which is located on a single site and where only one production activity is carried out, or where the main production activity accounts for the bulk of value added.

To avoid confusion, EUROSTAT and the Andean Community do not use "establishment" in case (2) but the concept of a "local kind of activity unit".

## External identification number

For updating purposes, the countries have a common business identification number, usually issued by the fiscal authorities, and this makes it easier to connect statistical business records with other records. This number could be included in the directory of enterprises and establishments to make it easier to update the information on legal units. This number can change for administrative reasons, however, and it is advisable to assign an identifier specific to the directory of enterprises and establishments that should remain unchanged over the whole lifetime of the unit identified.

## Falsely active

A unit is falsely active if it is listed as active in the directory but is not in fact active.

## Foreign ownership or control

A non-resident unit controls a resident unit if it owns more than 50% of its equity. Subsidiaries of non-resident companies are always under foreign control by their very nature. However, control can also arise with a holding company owning less than half the equity if the non-resident unit can exercise some of the powers referred to as indicative of government control.

### Geographical address

This is the address where the unit is located (the address that would be given to a taxi driver to visit the unit).

## Geographical or geodesic coordinates

These are the latitude and longitude data used to locate a place on a map.

#### **Government units**

Government units are unique classes of legal entities created through political procedures and endowed with legislative, judicial or executive power over other institutional units in a particular area.

#### Households

The household sector is constituted by all resident households. These include institutional households composed of people living in hospitals, old people's homes, convents, prisons and other such establishments for long periods. A business that is not constituted as a company and that is owned by a household is treated as an integral part of the latter and not as a different institutional unit, unless its accounts are detailed enough for its business to be treated as a quasi-company.

## **Identification number** in the directory

For updating purposes, the countries have a common business identification number, usually issued by the fiscal authorities, and this makes it easier to connect statistical business records with other records. This number could be included in the directory of enterprises and establishments to make it easier to update the information on legal units. The number can change for administrative reasons, however, and it is advisable to assign an identifier specific to the directory of enterprises and establishments that should remain unchanged over the whole lifetime of the unit identified.

The identification number in the directory of enterprises and establishments will change when there is no continuity.

#### **Identification variables**

All variables that do not change in time and that can be used to differentiate one unit from another.

#### Inactive

The status of a unit indicates whether it is active or not active (or inactive). If the unit is not active, it can be in any of three possible situations:

- the unit has been created (birth) but has not yet begun to operate,
- the unit is going to disappear (death) but has not yet done so,
- the unit is temporarily inactive (dormant) but is going to recommence its activity (reactivation).

## Industry

An industry consists of a set of establishments that carry out identical or similar classes of activities.

#### **Information provider**

This is the owner or whoever is responsible for a source used for directory updating or quality control.

## Institutional sectorization

Resident institutional units are assigned to one, and only one, of the following five institutional sectors:

- Non-financial companies
- Financial companies
- General government
- Non-profit institutions serving households
- Households

## Institutional unit

An institutional unit is an economic entity that is entitled to own assets, contract liabilities and carry out economic activities and transactions with other entities in its own right.

ISIC

The United Nations produces an international classification of activities known as the International Standard Industrial Classification of all economic activities (ISIC) and recommends that all countries should use either it or a classification based on a breakdown of it.

ISIC Rev. 4 has been available since 2008, but many countries still use ISIC Rev. 3. There are also countries that use ISIC Rev. 2 or their own classifications.

Legal form

This is the legal status of a business. It is defined in accordance with each country's laws. If it is not included, the physical (or natural) person will be recorded.

Legal person or moral person

By a legal person (or moral person) is meant a subject of rights and obligations existing physically, but as an institution rather than a human individual, having been created by one or more physical persons to perform a role. It is a body whose existence is recognized by law independently of the persons or institutions owning or composing it. In other words, a legal person is any organization that has the capacity to acquire rights and enter into obligations and is not a physical person.

Legal unit or business

Legal units (enterprises) are entities which the law recognizes as being entitled to own assets in their own right, enter into contracts with third parties and uphold their interests before the courts

Legal units that are wholly or partially engaged in a production activity may be:
(a) legal persons whose existence is recognized by law separately from the persons or institutions that own or compose them, or (b) natural persons who carry out an economic activity on their own account.

Local unit

A local unit (premises, establishment, etc.) is part of a legal unit (workshop, factory, storage facility, office, warehouse) located in a topographically delimited place. The legal unit (business) carries out its economic activities in or from that place.

Local unit sector

A local unit sector includes all local units with the same principal activity code.

Main local unit

The main unit which is the headquarters of the business or is declared as the main unit by the business.

NAICS

North American Industry Classification System, used by Canada, Mexico and the United States.

Natural or physical person

Self-employed persons conducting a regular economic activity on their own account and deriving some of their income from that activity.

Non-profit institutions

Non-profit institutions (NPIs) are legal or corporate persons created to produce goods and services whose legal status does not allow them to be a source of income, profits or other financial gain for the units that establish, control or finance them.

Non-profit institutions serving households (NPISHs) The sector of non-profit institutions serving households comprises all resident non-profit institutions, except those controlled and funded mainly by the Government, that provide households or society in general with non-market goods or services.

Person employed

The number of persons employed in a unit is to be defined as the total number of persons working in or for it, including employees, working owners, active partners and unpaid family workers, plus persons working outside the establishment when they are paid and overseen by the unit. Also included are managers and directors of registered companies who receive a salary, except when they are paid this solely for attending board meetings.

Postal address

This is the address for sending mail.

**Principal activity** 

A unit may have more than one activity. The principal activity of a unit is the most important activity according to internationally or nationally prescribed criteria (in theory, it is usually the activity that contributes most to the unit's value added).

Principal source

A principal source is a regular source that serves to update the units in the directory and obtain all the active units that ought to be in the directory (often, it can also be used to determine which units are no longer active). This source can be used to report the "current status (unit situation code)" variable.

Public control and foreign control

A very common type of sectorization is to identify financial and non-financial companies that are controlled by the Government, termed publicly owned enterprises, and those controlled from abroad. What remains are the locally owned private-sector companies in the economy.

Quality Quality is the totality of features and characteristics of a product or service that

bear on its ability to satisfy stated or implied needs.

Quality indicator Statistical measurements that provide indications of the quality of the directory

(there are also process quality indicators). It is more valuable to track changes

in indicators over time than to know their levels.

**Reactivation or reactivated** The status of a unit indicates whether the unit is active or not active (or inactive).

If the unit is not active, it can be in any of three possible situations:

- the unit has been created (birth) but has not yet begun to operate,

- the unit is going to disappear (death) but has not yet done so,

 the unit is temporarily inactive (dormant) but is going to recommence its activity (reactivation).

**Recording date** The date of introduction of the first or new value or of the first or new type of

the variable in the directory.

**Reference directory** This is a theoretical directory to which the country's directory will be compared.

**Regular source** This is a source available on known dates with a set frequency that is used to

update the directory at set intervals.

**Residence** The residence of each institutional unit is the economic territory with which it has

the closest relationship, i.e., its predominant centre of economic interest.

**Secondary activity** A secondary activity is any activity that is not the main or an ancillary activity

of a unit.

**Secondary local unit** A local unit other than the main one.

Secondary source A secondary source is a regular source that can be used to update the variables

for the units in the directory. One source serves to update one or more variables.

**Source** A source is a document or archive that is used to update or check the directory

or part of it.

State ownership or control

of a company

A company is a publicly owned company if controlled by a unit of the Government, another publicly owned company or some combination of

government units and publicly owned companies. Control is defined as the ability to determine the general policy of the company. The expression "general policy of the company" is to be taken in the broadest sense, and means laying down key financial and operating policies in relation to the strategic goals of the company

as a market producer.

**Statistical business** A statistical business is the smallest combination of legal units that constitutes an

organizational unit for goods and services production and enjoys a degree of decision-making autonomy, mainly when it comes to employing the current resources available to it. The business carries out one or more activities in one

or more places.

**Stratification variables** Variables that can be used to classify a unit in a stratum of units defined by

the intersection of different fields of definition for each variable.

**Subdirectory** A directory constructed from another directory or directories.

## Subsidiaries

When a non-resident unit conducts a significant volume of operations over a long period in an economic territory without being a separate legal entity, this subsidiary can be identified as an institutional unit. This unit is identified for statistical purposes because all its operations have a close relationship with the place where they are located, with the exception of the place where it was constituted as a company.

## Trade name or identifying name of a local unit

The name of a local unit is independent of the corporate name or style of the business, although they may sometimes coincide. When the business regulates a number of local units, these might use different trade names.

### Turnover

The total sales of a unit during a period in the market for goods or services supplied to third parties.

## Type of local unit

There are three types of local unit:

- main unit, which is the headquarters of the business or is declared as the main unit by the business,
- secondary unit
- ancillary local unit, which only carries out ancillary activities on behalf of all the local units of the business.

## **Updated directory**

This is what results from the updating process. It is the directory that is made available to users.

## **Updating of the directory**

The process of updating a directory comprises different operations, carried out using an updating source:

- checking whether the units that ought to be in the directory are actually there,
- verifying the "existence" of the unit,
- including unrecorded units in the directory,
- removing units that no longer exist, if required by directory management rules,
- checking the values of variables,
- altering a value that has changed, if required.

#### Verification date

The most recent date on which the value or type of a variable was ascertained.