UNITED
NATIONS



# Economic and Social Council

Distr. GENERAL

ECE/CES/GE.42/2007/SP/7 20 April 2007

**ENGLISH ONLY** 

#### **ECONOMIC COMMISSION FOR EUROPE**

#### STATISTICAL COMMISSION

CONFERENCE OF EUROPEAN STATISTICIANS

Meeting of Experts on Business Registers

Tenth meeting Geneva, 18-19 June 2007 Item 6 of the provisional agenda

QUALITY IMPROVEMENTS IN BUSINESS REGISTERS AND IMPLICATIONS OF REVISIONS OF NACE (NOMENCLATURE GÉNÉRALE DES ACTIVITÉS ÉCONOMIQUES DANS LES COMMUNAUTÉS EUROPÉENNES) AND INTERNATIONAL STANDARD INDUSTRIAL CLASSIFICATION (ISIC)

#### KEY OBJECTIVES IN QUALITY IMPROVEMENT OF THE STATISTICAL BUSINESS REGISTER IN SERBIA

Submitted by Serbia

The meeting is organised jointly with the Commission of the European Communities (Eurostat) and the Organisation for Economic Co-operation and Development (OECD)

#### **SUMMARY**

With the establishment of the first version of the Statistical Business Register (SBR) at the end of 2005, the Statistical Office of the Republic of Serbia (SORS) has started constructing a full statistical register according to EU recommendations. This process has brought about a new philosophy in the construction, maintenance and use of the business register.

The second year of use of the SBR, with the construction of frames, has demonstrated that users have increasing confidence in the SBR.

Improvements to the SBR are still required, in terms of its development and its use in statistics according to EU standards. On the way to reaching that goal, there are still many objectives that need to be achieved and major developments that will need to be implemented gradually. However, there are three key objectives which once met will show a decisive quality improvement of the SBR. The first is the consolidation of data take-on from administrative sources, mainly from the Serbian Business Registers Agency and the Tax Authority. The second is the creation of a maintenance system upon a unique frame which will replace the current uncoordinated maintenance of frames for each statistical survey. The final key objective is the application of the initial continuity rules in an elementary profiling of enterprises – creation of a system, whereby one enterprise could remain constant despite changes to the legal unit (identification number, legal form, name, activity code, ownership).

In an extensive presentation of the establishment and the characteristics of Serbian SBR this paper discusses relevant issues on the creation and the development of the SBR and consequently gives concise suggestions how the stated three objectives can be achieved.

# I. ESTABLISHMENT AND MAIN FEATURES OF THE SERBIAN STATISTICAL BUSINESS REGISTER

- 1. After several years of preparation, including the CARDS project in 2003 with involvement of ISTAT and self-education of the staff, the Statistical Office of the Republic of Serbia launched the project "The Establishment of the SBR" in 2005. General support has been obtained from the Central Bureau of Statistics (SCB) through the SIDA Balkan project "Partnership in statistics". At the end of 2005 the first version of the Serbian SBR was presented to the Statistical Office by the project team. In 2006 the SORS started with three activities:
  - (a) Use of the SBR in the statistical surveys;
  - (b) Maintenance of the SBR;
  - (c) Development of the Register in the direction of full harmonisation with the EU recommendation which is defined as the ultimate goal.
- 2. The establishment of the SBR is based on the EU Business Register regulations (Council Regulations (EEC)  $N^{\circ}$  2186/93 and  $N^{\circ}$  696/93, new draft Regulation/2005, Methodological Recommendations Revised version of the Manual / September 2003).
- 3. The SBR is based on several administrative registers (9 registers from 5 administrative sources):<sup>2</sup>
  - (a) The Register of Legal Persons and the Central Shop Register (from the SORS);
  - (b) The Register of Business Entities as legal persons and the Register of Entrepreneurs (the Serbian Business Registers Agency);

<sup>&</sup>lt;sup>1</sup> Last assessment from the SIDA Balkan Project: "Partnerships in statistics", Report from a mission to the SORS, 7-– 9 February 2007.

<sup>&</sup>lt;sup>2</sup> Data from the Register of Entrepreneurs and the Register of Budget Founders were included into the SBR from 2006.

- (c) The Tax Payers Register, the VAT Register and the Register of the income tax of sole proprietorships (the Tax Administration);
- (d) The Register of Final Statements (the National Bank of Serbia the Solvency Centre);
- (e) The Register of Budget Founders (the Treasury Administration).
- 4. Statistics of National Accounts and Labour force statistics were, as statistical sources, included primarily for imputation of the number of employees. The foreign trade statistics have been involved as a statistical source from 2006.

#### 5. The main features of the SBR are:

- (a) The use of 5-digits national Classification of Activities which is harmonised with the classification NACE Rev. 1;
- (b) The SBR covers all sectors of NACE classification and includes non-profit institutions;
- (c) The legal unit (LeU) in the SBR is formed from legal persons and physical persons (entrepreneurs);
- (d) The statistical units are derived from the legal unit as active units and have their own identification number;
- (e) Enterprise (ENT) and local unit (LoU) are defined for each legal unit with active Tax identification number (TIN):
- (f) The relationship between units (Legal unit, Local unit and Enterprises) is defined as "1-1-1" and is adopted for the beginning;
- (g) The implementation of the Enterprise group, the Kind of Activity Unit (KAU) and the Local Kind of Activity Unit (LKAU) has been postponed;
- (h) Maintenance variables are designed and are mandatory for all stratification variables. Those are: Data source, Referent data, Date of updating, UserID;
- (i) Demography variables are now limited only on births and deaths;
- (j) Continuity rules have not yet been adopted;
- (k) There is no any survey in the SBR;
- (l) Number of active units in 2006 is:Legal units: 459 893; Enterprises: 340 732; Local units: 421 843;<sup>3</sup>
- (m) Annual data from the SBR are available for 2004, 2005 and 2006;
- (n) Number of user requests for frames or reports is between 30 and 50 per year;
- (o) Updating with data from main administrative sources was monthly but is temporarily reduced to quarterly frequency in 2007;
- (p) The organisational unit for the SBR exists with 4 dedicated staff;
- (q) There are protocols on collaboration with main administrative sources.

# II. HIGHLIGHTS OF ESTABLISHMENT AND DEVELOPMENT OF THE SBR

6. This chapter describes the situation during the creation of the SBR. Three key factors have directed the establishment and development of the SBR. These factors are:

<sup>&</sup>lt;sup>3</sup> The number of local units is under revision due to ongoing updating of local units.

- (a) The influence of international support on the development of official statistics;
- (b) Changes in the system of registration of legal and physical persons (entrepreneurs); and
- (c) Development of key administrative sources for the SBR during the transition period in the country.
- 7. This chapter provides an overview of particular benefits and deficiencies of the previous and renewed system of registration. The creation and the use of the SBR have highlighted certain benefits and deficiencies which are relevant for the further development of the SBR.

# A. <u>International engagement</u>

- 8. When the international community first examined ways to improve the official statistics in the former federal Republic and Republic of Serbia, the review produced a global assessment of the existing statistical system and a related Master Plan for the development and harmonisation of the official statistics by EUROSTAT and UNECE. In addition, the necessity for the creation of the SBR in the Statistics Office was highlighted. The SBR, mainly based on data from administrative sources, is defined in the assessment as an infrastructure of the statistical system which has to provide a unique frame for statistical surveys. In addition the assessment states that the SBR must comply with EU regulations. Although the Master Plan for Serbia was officially adopted only at the end of 2006 by the Republican Parliament, development and harmonisation of official statistics with EU standards has been in progress since 2003.
- 9. In 2003 ISTAT, through the CARDS programme of the EU, transferred knowledge for implementation of a provisional SBR to the SORS. An in-depth analysis of the data from several administrative sources and some statistical surveys as basic elements for the SBR was quickly undertaken, along with a design for the future provisional register. Unfortunately the CARDS programme was cancelled at short notice and the designed register was never implemented.
- 10. The next opportunity for implementation of the SBR came with the involvement of Swedish experts who started in 2004 activities supporting the official Serbian statistics through the SIDA programme. The significant preparation effort included involvement of a large number of SORS and SCB experts in education, study visits and missions and resulted in set-up of the one year lasting SORS Project to establish the SBR. This project was adopted by the top management of the SORS at the end of 2004. In 2005 the design of SBR project was completed and subsequently the implementation of the SBR finished at the end of the same year.
- 11. Experts from the SCB have been continuously supporting SORS through knowledge transfer and with careful planning and monitoring of the development of the SBR. With their engagement the SORS team has gained confidence in the design and implementation of changes in the SBR. Consequently, the SBR is based on the Swedish experiences adjusted to the Serbian situation.

#### B. Period of transition of main administrative sources of the SBR

#### 1. The Tax Administration

- 12. The period between 2004 and 2006 when the Serbian SBR established and started to be used was a very hard and challenging period. Transition in the country brought up dramatic changes in the area of registration of business entities. Firstly, at the end of 2003 the Tax Identification Number (TIN) was inaugurated for all tax payers, which is the same for legal and physical persons and the TIN Register was established. The TIN number was incorporated soon by law into many administrative registers in the Republic, in parallel with the existing unique identification number (ID) for legal units. The VAT Register<sup>4</sup> had also been established shortly after.
- 13. The Registers from the Tax Authorities as administrative sources has been of great interest for the SBR as well as for economic statistics and statistics of National Accounts. From those sources the SBR has expected to provide primary information on economic activities, turnover, number of employed persons, and TIN as a link from the SBR to other registers and identification characteristics (address, phone or fax number etc). Most of this data has been used in the SBR for interpolation of missing values. At the beginning data from the Tax Administration was used for creation of units in the SBR for entrepreneurs that were not present in the Central Register of shops (entrepreneurs). This problem with over-registered units, which was steadily about 10 per cent of the total, has been fixed recently with take-on from the new Register on Entrepreneurs (from the SBRA).
- 14. The SBR during its creation and maintenance has faced a number of difficulties in data take-on from the Tax Authorities. Data has been taken-on at regular intervals. However, about 400.000 units for all business entities up to 10 per cent of the overall total have had certain errors or mistakes, which can be classified as follows:
  - (a) Duplicity among identifiers (TIN, ID);
  - (b) Missing values (number of persons employed for entrepreneurs);
  - (c) Introducing and dissemination of ID numbers for business entities that are never legally assigned (truncated pension ID numbers for entrepreneurs) to the other registers;
  - (d) Non reliable values (activity code, turnover for entrepreneurs);
  - (e) Wrong assignment between TIN and ID for entities;
  - (f) Differences in status activity for entrepreneurs recorded in databases of the Tax Administration and in administrative database of the SORS.
- 15. Protocol on collaboration between the Tax Administration and the Statistics has recently been adopted. It has reinforced existing collaboration, although there is plenty of opportunity for improvements, especially at the operational level. The SBR, with limited staff resources, has not yet succeeded to have complete control in dealing with information from the Tax Administration

<sup>&</sup>lt;sup>4</sup> Threshold for VAT registration, as mandatory obligation, is total sales for the past 12 months greater then 25000 Euro. The voluntary VAT payer can also be only those business entities whose total sales for the past 12 months have been greater or estimated to be greater than 12500 Euro.

in the process of data take-on. This is especially true when we talk about methodological and data quality aspects.

# 2. <u>The Serbian Business Registers Agency</u>

- 16. Crucial changes in the registration of business<sup>5</sup> and other entities and institutions<sup>6</sup> in the Republic happened when the Serbian Business Registers Agency (SBRA) took over the registration of business entities as legal persons from the Trade Courts and the SORS, and the registration of entrepreneurs (physical persons) from the Municipalities and the SORS. Re-registration of business entities for legal persons and registration of new entities, in accordance with the new Law, started at the beginning of 2005. Re-registration finally finished in the middle of 2006 with de-registration of business entities which had not had any economic activity for years.<sup>7</sup> The same has happened with re-registration of business entities for physical persons (entrepreneurs) and registration of new entities, but with a delay of one year. The start was at the beginning of 2006 and the procedure is planned to finish in the middle of 2007.
- 17. A single unique identification number exists for all registration bodies such as business entities, governmental bodies, non-profit institution, etc. and for both legal persons and physical persons. This ID number is inherited from the system of registration used in the former Federal Republic. The ID number has 8 digits, a special structure and a control digit. Its presence in administrative sources is mandatory by law.
- 18. The inclusion in the business register of foreign businesses with an assigned unique ID number is one of the benefits coming from the SBRA.
- 19. The most important benefit of the SBR is the emphasised administrative role of the SBRA in the process of registration, that is the direct result of the statement from the law. The law specifies that the SBRA cannot change genuine data from the registration application, bearing in mind that the client will suffer the consequences of incorrect information. This fact strengthens the existence of the SBR. Namely, it does mean that the SBR can modify administrative data in accordance with its needs. It is important for statisticians to realise that kind of activity, names or other registration data could be different from the data from the SBRA.
- 20. Although data from the SBRA has steadily improved in quality, there are certain deficiencies in the maintenance of registration by the SBRA, which affects data take-on for the SBR. The SBRA has shown the following deficiencies:
  - (a) Inconsistence in ID numbers between databases of legal persons and entrepreneurs;

<sup>5</sup> Business companies (general partnerships, limited partnerships, limited liability companies, joint stock companies, public enterprises, socially-owned enterprises), cooperatives and cooperative unions and entrepreneurs.

<sup>6</sup> Government bodies, judiciary bodies, bodies of the units of the local government, political organizations, social organizations, citizens associations etc.

<sup>&</sup>lt;sup>7</sup> About 150 000 business entities were de-registered according to legislation. This amount is almost two-third of all business entities among legal persons which the SABR is faced with, as heritage from the previous system of registration. Most of those entities did not show economic activity or never started business and mostly did not have any assets (propriety). Only 15 per cent of those entities opened a bank account.

- (b) In the introduction of ID numbers in the process of re-registration of business entities that were not agreed with SORS, who is the owner of ID numbers;
- (c) Missing values for ID numbers for founders;
- (d) Reluctant registration of all parts of business entities (branches) and, the most important;
- (e) Databases missing status changes (except birth and death) related to demographic events.

Due to the excellent mutual understanding between the SBRA and the SORS, it is anticipated that the stated deficiencies will be overcome soon.

## 3. The Solvency Centre from the National Bank of Serbia

- 21. The Solvency Centre (SC), part of the National Bank of Serbia, has been managing the Register of Final Statements (RFS)<sup>8</sup> and it is able to provide the Statistical Office and other users with relevant data for the most important business entities. For the SBR, it has been the primary source for the number of employees and turnover.
- 22. The deficiencies previously identified that have now been resolved, or anticipated to be resolved shortly, are the result of the relentless pursuit of quality improvements of the SC and a consequence of the hard work of the SBRA. These improvements are:
  - (a) Exclude the use of the ID number for entities that ceased their activity according to the administrative register, before the relevant yearly statement;
  - (b) Increase the coverage of all business entities, especially of entrepreneurs that keep double-entry books;
  - (c) Exclude duplicity of the ID numbers among the set of units related to trade unions.
- 23. However, one of the reasons for under-coverage is when the business entity evades submitting of the final statement and takes a risk to be punished according to legislation. Those possible cases result in missing data for the SBR and for Statistics in general from that source.
- 24. An important deficiency in the use of data from the RFS is missing values for the number of employees and turnover. For the final statement of 2005, 40 per cent of units were missing the number of employees, 29 per cent were missing turnover values and 25 per cent were missing both the number of employees and turnover values. Almost all missing data is linked to small enterprises, of which half of the enterprises affected were for entrepreneurs.

<sup>&</sup>lt;sup>8</sup> The following entities should be able to submit a final statement: companies, cooperatives, banks, and other financial organisations, insurance companies, providers of financial leasing, voluntary pension funds, voluntary pension fund management companies, stock exchanges, broker-dealer companies, other legal entities and entrepreneurs that keep double-entry books as well as branches and other organisational units of foreign legal entities with their head office located abroad, and engaging in an economic activity within the Republic of Serbia.

### 4. The Administrative registers in the SORS

- 25. The Serbian Government in the period 2002-2005 launched a comprehensive reform of the system of business registration<sup>9</sup> while the SORS has remained responsible for registration of all non business institutions (i.e. governmental and non-profit). In the past the SORS was managing two administrative registers: The Register of Legal Persons (from 1970s) and the Central Shop Register (Entrepreneurs) (from 1995).
- 26. The Register of Legal Persons survived for several decades and was used as an infrastructure for several countries. This register was subjected to reforms by several laws on registration and has seen three implementations of Classification of economic activities, and was involved in two censuses (businesses and employees). It has provided a service for all government needs in coordination with many systems such as pension, social security, customs, financial, statistical etc., through use of a unique ID number for registration entities as the same identifier.
- 27. Although the registers have offered many benefits, they have displayed certain deficiencies. The main deficiencies of the administrative registers of SORS were:
  - (a) As a part of the system of registration, being high in cost and low in efficiency;
  - (b) The delay in updating the Central Shop Register due to the late submission of updates on entrepreneurs, sometimes for a year or more, by some municipalities acting as primary registration bodies;
  - (c) Maintaining in databases units that did not show their activities for several years and could be considered defunct (including entities, which did not reclassify their economic activities under NACE);
  - (d) Low quality of data for example addresses;
  - (e) Data produced that was too unreliable for statistical and economic analysis;
  - (f) Data on demography event (except birth and death).
- 28. These administrative registers, in spite of their deficiencies, were when used as a statistical infrastructure, an important source for statistical surveys. They were a base for making and renewing frames and address lists for surveys. One could argue that administrative registers did not manage to fulfil the requirements for statistical surveys. Certainly, the changes are necessary since it can not accept the theory that "If you don't have a better instrument in Statistics, the one you have is perfect".
- 29. Maintenance of the administrative registers from the SORS only occurs at the request of the client, rather than in response to a need from a statistical survey. This has resulted in statistical surveys, as integral parts of the SORS, being forced to maintain their own frames and address lists for years. Thus in the statistical system there exists the uncoordinated maintenance of frames for each statistical survey. The mission of the SBR is to overcome this situation.
- 30. The remaining role of the administrative registers from the SORS is to support the other registers in the country and the other users. This role involves offering them a unique

<sup>&</sup>lt;sup>9</sup> Jacobs, S. (2002): "Reforming business registration in Serbia (For final comment)", Jacobs and Associates, www.regulatoryreform.com

administrative picture, which is constructed from all the business entities from the SBRA and all entities from the SORS. This includes governmental and non-profit entities and the entities that still remain legally active while the re-registration in the SBRA has not been finished. This role is reducing over time, as the SBRA offers to all registers in the country more reliable data on business entities.

- 31. Because of this role, creation of the SBR has had to depend on the administrative registers from the SORS as an administrative source. However, the new development objective of the SBR is to separate units in the process of data take-on from the present administrative register in the SORS into two parts:
  - (a) Units and related variables coming from the SBRA; and
  - (b) Units coming only from the administrative register of the SORS.

The reason for this new approach is because the present administrative register is not a suitable administrative source for the SBR, for the units coming from the SBRA, since the administrative register of the SORS does not contain many of the variables that the SBRA offers to the Statistics Office.

# C. Creation of the SBR

- 32. The guidelines that the SORS has complied with in the process of the creation of the SBR, such as structure and function of the SBR and coverage of its units, are the highlights of this chapter.
- 33. The SORS has founded key guidelines for the creation of the SBR and its design (definitions, structure and functions) in the EU Regulations (N° 696/93N°, 2186/93 and new draft Regulation/2005) and BR Methodological Recommendations Revised version of the Manual / September 2003). Although the SORS has wanted it and it is in a draft design, all the units have not been created yet (Enterprise group, KAU and LKAU). The same applies for certain variables like: Institutional sector, Turnover for budget founders, Links with Register of Pension and Social Assurance, Variables on control of legal units, Shares of ownerships, Links for relationship "many to 1" between legal unit and enterprise and Number of employees in full-time equivalents.
- 34. The SORS has been trying to encompass all entities which are active and have been presented as administrative sources in the national economy (contribution to GDP at market prices). The inclusion of agricultural households was roughly designed but has been postponed since it involves a demanding engagement of the resources in a sensitive period of creation and development of the SBR. The climate for such an action has not matured yet, especially given that the statistical registers of farms are not in the focus at this moment.
- 35. In the past all enterprises and related local units in the SBR were not created since it was difficult to reconcile all necessary databases from the main administrative sources of the SBR. The reasons that have been mentioned in the paper above are concerning identification of primary and secondary keys for units in databases needed for links. These reasons include: (a) duplicity, (b) non existence, (c) mistakes in numbers, (d) wrong assignments, (e) generation

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of non permitted ID, (f) even existence of different kind of keys at the same place. (In the case where ID numbers for entrepreneurs as business entities were not known, the Tax Administration entered personal identification numbers for entrepreneurs as citizens).

### D. Use of the SBR

- 36. Highlights on use of the SBR discuss the quality of data and service from the SBR. The users from the SBR can request data and service at either the micro level (variables and statistical units related to an enterprise and this is for the purposes of maintenance) or at the macro level (variables and group of statistical units related to many enterprises that have to be included into frames).
- 37. Until now, users have expressed a lot of dissatisfaction with use of the SBR at the micro level. Their complaints concern:
  - (a) Timeliness of information from the register;
  - (b) Completeness of units (problem with coverage); and
  - (c) Clarity and accessibility of the register. The users have not been provided with sufficient methodology of the register and with full user friendly IT application yet. 10

On the other hand, there is a belief within statistical surveys that the work undertaken in the regional offices can in general overcome the problems of accuracy of data in their own address lists. It is the reason why accuracy as a quality dimension is discussed in the second part of this paper

- 38. The users' quality assessment for timeliness and completeness of frames from the SBR, that concern the data and services that the SBR has been offering at the macro level, is the same as for the quality assessment at the micro level. However, there is a difference between the users' quality assessment on clarity and accessibility at the micro and the macro level. Through increased demand and using the frames from the SBR the users are demonstrating their increasing confidence in the SBR. This is the successful outcome of the policy of the SBR which is offering users frames with appropriate metadata that bridges the gap opened by the non-existence of a user-friendly application with a frames extraction function. Extracts from the methodology, self-quality assessments of the frames and maintenance variables as metadata of the SBR have been approved as crucial for future frames usage.
- 39. Sampling unit of the SORS is very important user of the SBR. The main complaints coming from sampling are on missing values for stratification variables such as the number of employees and turnover and on information about demography of the enterprises different from birth and death. The explanation for the latter deficiency is the non-existence of such information in the databases of the SBRA as the key administrative source. However, the RFS has traditionally been the main source for sampling by the Sampling unit. Through using the above register instead of the SORS administrative register or the SBR, Sampling has wanted to encompass only the most important active business entities that are of significant importance for

<sup>&</sup>lt;sup>10</sup> The first user friendly application APOLO 2006 is among several that are planned, and was launched in the beginning of 2007. This is a part of the system for updating the SBR from regional offices – Local units.

the economy of the country. In addition, another task unique to the Sampling unit is to find other information on the size of an enterprise, if the number of employees or/and turnover do not exist for certain units.

- 40. There are two main complaints on the sampling practice coming from the SBR. The first is the use of the size classification on enterprises from the RFS. Enterprises have administrative 11 rather than statistical attributes, since the size of an enterprise is accepted by the RFS as their own declaration of their clients. The second complaint concerns the use of data from the RFS that is at least one year old as compared to more recent and complete data given by the SBR.
- 41. The SBR have certain difficulties with users since it is becoming compliant with the EU recommendations before the users are. Therefore, the main misunderstandings are about:
  - (a) Use of the term for Enterprise- under the term for an Enterprise, users do not accept entrepreneurs;
  - (b) Size classification on enterprises users apply administrative classifications for their purposes instead of statistical classifications, which is based on the number of employees or turnover;
  - (c) Definitions from CR 696/93 and its recognition in the practice. For example, the users do not recognise a local unit. They ask the SBR to provide their frames and address lists with local units without employees, such as the example of water springs or agrarian grounds.

#### III. THE DEVELOPMENT OBJECTIVES FOR THE SBR

- 42. When a statistical business register is established, there comes a feeling of never endless work whereby each completed step to development of a better register defines two new steps forward. The staff maintaining the register performs a continual process of making quality improvements in the register through simultaneous maintenance and development.
- 43. At the beginning, a statistical business register represents only a collection of administrative and statistical data which has a sound name and a coherent structure. If it is the ultimate goal to create a business register according to EU recommendations, this goal can only be achieved after a number of objectives are met over a period of several years.
- 44. In a situation where each objective leads to quality improvements in the register, two questions arise for consideration within development strategy:
  - (a) Which objectives among many, when they are met, will show significant quality improvements in the register;
  - (b) Using a starting collection of administrative data as a register, which quality improvements will generate a real statistical business register that is in everyday use and maintenance by statistical or register surveys.

<sup>&</sup>lt;sup>11</sup> It should be noted that the administrative size classification is based on three characteristics of an enterprise: number of employees, value on annual income and value on assets. For example: all entrepreneurs by that classification are small and all banks, financial organisations and assurance companies are large.

- 45. The answer that this paper offers is:
  - (a) Consolidation of data take-on from administrative sources;
  - (b) Creation of a system of maintenance upon a unique frame for statistical surveys;
  - (c) Set up of continuity rules for an enterprise in its elementary profiling.
- 46. Those objectives are chosen as milestones that are important to reach in the development of the SBR. Once they will be reached they will show decisive progress in quality improvements of the SBR since number of the objectives from the previous review already having been achieved, or in the process of being achieved.
- 47. Previous presentations on the creation and development of the SBR which listed benefits and deficiencies have highlighted the fact that there is still a lot of room for quality improvement within the SBR. Therefore, within the development strategy there is always a need for tuning of the objectives which will bring further improvements. Selecting certain key objectives for future development will provide focus on the ultimate goal before it is actually achieved.

# A. Review of development objectives

- 48. With the help of the SCB the following objectives have been selected for development in the period 2006 2008:
  - (a) Inclusion of missing variables;
  - (b) Increasing of quality improvements of variables;
  - (c) Creation of all local units as well as LKAU and KAU;
  - (d) Creation of a system of aggregation from LoU;
  - (e) Full design and implementation of updating rules;
  - (f) Development of a user-friendly interface for use and maintenance of the SBR;
  - (g) Profiling with focus on Enterprise, KAU and LKAU;
  - (h) Introduction of local unit questionnaire;
  - (i) Implementation of NACE Rev. 2;
  - (j) Maintenance of demography of the units;
  - (k) Introduction of Enterprise group and Coordination of samples.
- 49. There are also more objectives that will contribute to realisation of the previous objectives and make improvements in the SBR. Some of those additional objectives will be presented in the guidelines in the next paragraph.

# IV. GUIDELINES FOR THE ACHIVEMENT OF THE CHOSEN OBJECTIVES

- 50. The guidelines in summary for the achievement of the chosen objectives are as follows:
  - (a) For the Consolidation of data take-on from administrative sources:

- (i) Make additions in the existing Protocols on collaboration between the SORS and the main administrative sources with more details at the operational level;
- (ii) Create IT applications with browsing and data editing functions for each administrative source to enable the SBR to achieve a fast response on erroneous data from those sources:
- (iii) Strengthen efforts on collaboration with administrative sources which will lead to quality improvements in their databases;
- (iv) Implement a maintenance system with monthly updating of the SBR for all the units with data from the SBRA and the TA.
- (b) For the Creation of a system of maintenance upon a unique frame for statistical surveys:
  - (i) Implement LKAU;
  - (ii) Introduce a standard form for questionnaires used in statistical surveys, which will use the appropriate ID numbers for statistical units (enterprise, local unit and LKAU);
  - (iii) Introduce pre-printed questionnaires with data from the frames from the SBR:
  - (iv) Stabilise the creation and updating of locals units with data from administrative sources and the APOLO system;
  - (v) Design a coordination of links between the SBR and each statistical survey;
  - (vi) Change the existing IT applications to use of ID numbers for statistical units instead of using ID numbers for legal unit and its registered parts.
- (c) For set up of continuity rules for an enterprise in its elementary profiling:
  - (i) Introduce to the Statistical Office the philosophy of using continuity rules for statistical units, learning through examples from the SBR (It is not enough that only the SBR complies with continuity rules);
  - (ii) Make available to statistical surveys detailed information on demography events collected from the SBRA once a month by a report;
  - (iii) Follow-up all changes in administrative sources for large and medium enterprises;
  - (iv) Provide statistical surveys with regular reports on all events where an enterprise remains constant with the same ID despite changes to the legal unit (identification number or legal format);
  - (v) Provide stated reports to statistical surveys with an explanation for each case where continuity rules were adopted;
  - (vi) Provide IT support for the application of continuity rules in the maintenance of statistical units.

#### V. CONCLUSION

- 51. Whatever choice is made among many objectives in a strategy for the development of a SBR no one objective will lead to the achievement of the ultimate goal or accelerate the process of the development before all the targets have been met. The objectives in the development are connected together like a jigsaw puzzle. However, one can make such a choice among objectives which would lead to the decisive quality improvements of the statistical business register leaving behind attribute of the SBR as a collection of administrative and statistical data. When these objectives:
  - (a) Consolidation of data take-on from administrative sources;
  - (b) Creation of the system of maintenance upon unique frame for statistical surveys;
  - (c) Set up of continuity rules for an enterprise in its elementary profiling.

finally be met, the SBR will be in the position to offer much better quality in a service to statistical surveys. The final picture of the register will not be fished yet, though with those elements in the jigsaw its clear outline will show up earlier.

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