Current practices of compiling and using statistical business registers in the CIS countries: evidence from the UNECE Questionnaire Surveys (1996-2006)

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INTRODUCTION

This note aims to assess the status and improvements made by CIS countries in the development of their statistical business registers. Using the Eurostat model of the questionnaire, the UNECE collected data and information from a number of CIS countries in 1995, 1998, 2000, 2002, 2004 and 2006. The form of the questionnaire was modified substantially in 2000, and some additional questions were introduced in surveys thereafter that make comparisons over time somewhat problematic, especially referring to the years before 2002. The results of the previous rounds of UNECE's questionnaire surveys including CIS countries were presented at the Joint UNECE/Eurostat meetings on business registers in 1999, 2001, 2003 and 2005, respectively.

This note portrays the preliminary results of the UNECE's collection of 2006 business register questionnaire data. Replies were received from the following 10 CIS countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, and Ukraine. Turkmenistan and Uzbekistan did not respond to the questionnaire. Data reference periods vary from country to country but in most cases the end of year 2005 is indicated. The verification of certain aspects of data remains to be done in some cases.

The first part of the note briefly describes the structure of the UNECE questionnaire indicating some recent changes to it. It also draws attention to certain characteristics of CIS countries that affect responses to the questionnaire and comparability of collected data. The second part of this note is devoted to the analysis of the 2006 Questionnaire Survey results with an emphasis on the sources used to compile national statistical business registers and their observed evolution. The availability of data on four types of statistical units by variable and according to the sections of NACE/ISIC is also assessed and briefly analysed across the

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countries and in comparison with the results of the previous Surveys. The note concludes with observations on the use of statistical business register (based on the results of 2004 Survey) and suggestions for possible further improvements in utilizing the existing administrative sources for its maintenance.

I.   STRUCTURE OF THE QUESTIONNAIRE

Although the questionnaire has been modified somewhat since 2002, its body of main areas remains essentially the same. These areas are designed to provide a synthesized picture of the state of the art of the business register in a UNECE member country, while at the same time allowing comparisons with the business register systems in other countries.
Key areas covered in the questionnaire are:

- use of different sources (by country and by unit typology);
- number of units, persons occupied, and turnover by NACE/ISIC sections;
- coverage by variables of the register.

Unlike in the previous questionnaire, for the 2006 survey the questions on the "use of the business registers" and on "dormant units" were not included.

The section of the questionnaire on "sources" serves to collect information on sources used by country for detecting the existence of a unit or (changes in) any relevant variable attached to it. Four types of units are identified: legal unit, enterprise, local unit, and enterprise group. Since countries may have different names for what is essentially the same source, e.g. same type of administrative register, the questionnaire provides a listing of various types of administrative registers and asks the respondent to identify those within the list that are used, and to provide the equivalent name for it in the country. A category "other sources" is provided so that the country can include sources that are not on the suggested list.

The section "number of units by NACE/ISIC" shows the attribution for each unit type to the sections of the NACE Rev. 1 (or ISIC Rev. 3.1) activity classification. This Survey part facilitates overall analysis of the most active and populated activities and helps to examine the nature of relationship between local units, enterprises and legal units in a country. The table also contains information on the number of public enterprises. For enterprises, local units and public enterprises the questionnaire requests data on persons occupied. Additionally, data on turnover by NACE/ISIC sections is collected for enterprises. Countries could choose to provide data in national currency or in Euros.
An additional box in this section of the questionnaire seeks information on cut-off thresholds. Countries are asked to explain if there are any legislative, administrative or practical reasons for which some units may remain outside of the scope of the business register.

The section of the questionnaire referring to "variables" serves to provide information on the availability or non-availability of each of the twelve internationally most often used (officially mandated in the EU) business register variables (a detailed list is provided at the end of the

questionnaire), including the number of units for which the variable is available and future plans in that respect. As this information is broken down by unit type, main variable characteristics by unit type can also be determined.

Characteristics of CIS Countries Affecting Responses to the Questionnaire
While the Eurostat model of the business register questionnaire was designed primarily for a set of countries sharing common regional goals and geared toward the implementation of a standardised business register, CIS states and the business registers they have adopted are much more diverse. This diversity is due to a number of factors: geographical size of the countries, disparate stage of economic development, existence (or lack of) of legislation conducive to business register development, to name a few. Nonetheless, it should be mentioned that steps forward have been made by some CIS countries in developing their registers and implementing internationally adopted standards.

Before highlighting the results of the 2006 round of data collection, a word of caution is due on interpreting and comparing the information. The business register provisions as set forth in the questionnaire serve as a guideline. Some CIS countries have made considerable effort to align the framework of their business registers with those existing in EU member and candidate countries, both with regard to the definition of statistical units and their variables. Others have followed their own statistical and business practices in development of their business registers, particularly in regard of certain types of units (Kazakhstan, Belarus, the Russian Federation).

Some of the CIS countries are still in relatively early stages of developing a statistical business register. Consequently, data remain unavailable for a number of sections in the questionnaire, and certain areas which are of concern for more developed registers remain neglected in favour of more pressing needs, such as the basic setting up of business register foundations.

As a result of the mentioned differences and of differing statistical and national legislation among countries, full comparability of information is not always possible. Nonetheless, analysis of the questionnaire responses offers a good opportunity to obtain a preliminary overview of the level of development of business registers among CIS countries

II.   2006 SURVEY RESULTS

The replies to the 2006 UNECE questionnaire are presented in the Annex to this note. Except for a few minor corrections, the tables present a summary of the replies as received. For the final report some revisions of the data might be done later but only after they were communicated back to and agreed by the country.

Use of Sources
A variety of sources are used by the CIS countries for detecting the existence of units and/or of changes in their variables. Although in most countries the legislation requires central registration

of units and the administrative sources seem to be quite developed, only four out of ten countries obtain the information on births, deaths and change of activity from tax, social security, commercial and other registers. This information is further supplemented by feedback from surveys conducted by the statistical offices. The rest of the CIS countries tend to rely predominantly on register surveys or other surveys with their own objectives but which contain also data on business register units.

Three principal sources are most often mentioned by CIS countries:

   (1) feedback from surveys,
   (2) single business register,
   (3) other sources.

Various tax registers are used as a common source of information in Ukraine, and to a lesser extent in Kyrgyzstan, Republic of Moldova and Tajikistan (see table 1 in the Annex).

All countries use feedback from surveys as a key source for at least one of their units. While earlier versions of the questionnaire indicated only that feedback from surveys was a key source, the last four questionnaires were modified so that countries can indicate specifically what type of surveys are being used.

In 7 replies, *special register update surveys* are shown as the main source to set and maintain the statistical business register, in particular for legal units. For enterprises and local units, however, *feedback from other surveys* is used predominantly. Although these surveys are primarily designed to collect data for other purposes, they also provide information on the status of these units. This type of source is mentioned by 7 out of 10 statistical offices, specifying mainly regular structural business surveys or employment surveys with annual or quarterly frequency. Economic census of enterprises, conducted usually at longer intervals is mentioned only by the Russian Federation. Other *ad hoc* business surveys and employment surveys or censuses are also mentioned by some countries.

As replies indicate, countries seem to rely on *other sources* as well – five out of ten responses point them out. However, these results should be interpreted with care. It appears that some of the CIS countries were not able to relate their practice to tax registers in the form explicitly specified in the questionnaire and, instead of distinguishing between different types, mention their tax register/information provider under "other sources" (Armenia, Kazakhstan). Different departmental information is also used; among them are records (registers) of the Ministry of Justice, Ministry of Industry and Energy, other licensing authorities and organisations.

Six countries use the *single business register* as a key source. Even if certain units are often not covered there, this register constitutes, along with feedback from surveys and other sources, the main component of the statistical business registry system.

Four CIS countries use either various tax registers and/or social security data. There seems to be no qualitative change in this practice since the last two surveys: only Ukraine uses all five tax-related sources, Kyrgyzstan and Tajikistan relies on one of the tax registers and social security

data and Republic of Moldova – on the Personal income tax register. In addition, only Kyrgyzstan and the Russian Federation indicate the use of records of customs and excise authorities. Apart from Kyrgyzstan, none of the responding countries has indicated the use of records of the chamber of commerce and professional organisations or central population register. Such limited use of the various administrative sources for statistical business registers might, on one hand, indicate inconsistencies in data management systems and, on the other, a lack of coordination and cooperation between the government institutions.

Regarding unit typology, the most frequently used sources for each type of unit appear to be approximately the same as above. For legal units, enterprises and local units, the most common source is feedback from surveys. For local units, "other sources" is as frequently used as single business registers. Only Kyrgyzstan and the Russian Federation have information on enterprise groups in their business registers, for which they obtain data exclusively from "other sources".

Analysis by Section of NACE Rev. 1/ISIC Rev 3.1

Tables 2 to 13 in the Annex provide information on the units' attribution to NACE/ISIC sections together with data on unit size, measured by the number of persons occupied or turnover. As some countries are still in the process of constructing their business registers, financial constraints and changing legislation systems impose limits on their capacity for full coverage. Nonetheless, some countries have made progress in this area of statistics and report on further plans in setting and developing their business registers (Belarus, Georgia).

Several CIS countries seem to finalise their transition from CBNE (Classification of Branches of the National Economy) to NACE/ISIC classifications. In previous questionnaires they had to use a convergence key to fill in some sections of the questionnaire or were able to provide only the total number of units, as the breakdown by NACE sections was not considered reliable enough.

In most countries statistical business register displays a good coverage of the incorporated units for which sufficient information, coming from different administrative registers, licensing and supervisory authorities, exists. The coverage of small businesses or individual entrepreneurs, however, seems to be insufficient in a number of countries. Very often these units either fall outside of the scope of the administrative registers or their status is still unclear and the parts of statistical registers designed to cover them are not in practice yet (Armenia, Belarus, Georgia).

Among the CIS countries more efforts have been made to ensure good reporting of legal units and enterprises, and to a much lesser extent that of local units. (Note, that in Belarus, Republic of Moldova, and the Russian Federation, legal unit is identical to the enterprise.) Small countries like Armenia, Georgia and Moldova do not yet cover local units in their business registers, while in replies of some other countries the number of reported local units is much smaller than the number of enterprises. Therefore any assessment on local unit coverage and their distribution according to the NACE/ISIC sections should be made with great caution.

The 2006 Survey shows that in all ten countries there is a relatively good coverage of legal units and enterprises in all economic activities except for a few services sections, where small units prevail. In a few countries, agriculture may also be insufficiently covered (Armenia, Georgia).

The highest number of units is in section G of NACE Rev. 1/ISIC Rev. 3.1, "Wholesale and retail trade". It accounts for above 30 per cent of all legal units in 6 countries out of nine and reaches 44 percent in the Republic of Moldova (see Annex, Tables 3 and 4). Only in Tajikistan, and to a lesser degree in Kyrgyzstan, is the share of this branch in the total number of legal units well below the region's mean. Enterprise population shows a similar distribution by economic activities – wholesale and retail trade is the most populated activity in seven (out of 9) countries.

Other activities with a large number of registered units are "Manufacturing" (section D) and "Real estate, renting and business activities" (section K), where in addition there is lower variation among countries. "Manufacturing" is the second biggest branch in Armenia, Belarus and Georgia. "Real estate, renting and business activities" is the second most densely populated activity in Kazakhstan, Republic of Moldova and the Russian Federation. In Tajikistan, more than 60 per cent of legal units and enterprises are registered in "Agriculture, hunting and forestry" (section A). The agricultural sector has a high share in total number of enterprises (around 20 per cent) in Azerbaijan as well. In regard of units' distribution by activities, Kyrgyzstan seems to be an exception: the majority of registered units are reported in "Other community, social and personal service activities"(section O), with trade (section G) being the second.

Nine out of ten countries collect data on public enterprises in their business registers, although the definition may not strictly correspond to the internationally used definition of a public undertaking. In some cases it refers only to the state-owned enterprises and not necessarily include municipal enterprises, etc. Here the most populated activity is "Real estate, renting and business activities" (section K), followed by "Other community, social and personal service activities"(section O). In fact, enterprises in non-market services (sections L to O) account for three quarters of all registered public enterprises in Kazakhstan and the Russian Federation and for two thirds in Tajikistan (see Annex, Table 11).

The questionnaire also collects information on occupation and turnover by economic activity at the NACE/ISIC section level and by type of unit (enterprise, local unit, public enterprise) as included in the business registers of the countries. All countries except for the Russian Federation reported employment data for enterprises (see Annex, Table 6). The enterprise data show that the activities which employ most people are "Agriculture, hunting and forestry" (section A), "Manufacturing" (section D) and "Transport, storage and communications" (section I)". "Trade", "Manufacturing" and "Transport" produce the largest turnover in the surveyed countries (see Annex, Table 7). For public enterprises, the main activities in terms of people occupied are the industrial branches together with the non-market services "Education" (section M) and "Health and social work" (section N) (see Annex, Table 12).

Medium sized enterprises, employing between 20 and 30 people on average are typical for most of the countries (see Annex, Table 8). In Belarus bigger units dominate – the average number of persons occupied per registered enterprise is 68. However, it has to be borne in mind that the coverage of the business register can have significant influence on the estimated size of enterprises. As mentioned earlier, in some countries the business registers are less comprehensive or statistical units are differently defined. This could lead to omission of small units from the register, hence influencing the average number of persons occupied.

More information on the average number of persons occupied per statistical unit (enterprise, local unit and public enterprise) by NACE/ISIC section is provided in the Annex, tables 8, 10 and 13, respectively. Usually, the largest enterprises are found in section E "Electricity, gas and water supply", ranging from an average of 115 empbyees in Kazakhstan to 697 employees in Belarus. Small businesses (in terms of persons occupied) are predominant in wholesale and retail trade (section G) and also in some other service activities, although specific differences between countries exist.

As a general rule the public enterprises are of bigger size. Here the average number of persons varies in the range between 52 in the Russian Federation and 286 in Belarus. Together with energy, sections C and I - "Mining and quarrying" and "Transport, storage and communication" - also have the largest sized enterprises (see Annex, Table 13).

Dynamics of indicators by type of units and according to the NACE/ISIC sections
The general dynamics of registered units in CIS countries is presented in Annex table 2. More detailed information on the dynamics of registered statistical units by NACE/ISIC section and by unit type is provided in Annex table 5 (for public enterprises, see Annex table 11). At the activity level, the growth is calculated on the basis of information available from the 2006 and 2004 rounds of the Survey. The reference period of the data in some cases are two subsequent years, and in others – two years apart, as indicated in the last column of the respective tables.

Overall with a few exceptions, between the 2004 and 2006 Surveys the changes in number of legal units and enterprises fall within the +/- 15 per cent interval. The growth rates of local units generally show a similar pattern as enterprises, although the sample is much smaller. Then again, the information on local units in the 2004 and 2006 Surveys do not seem to be of comparable level (at least in the case of the Russian Federation), and the apparent registered increase in their number might be related to improved methodology and coverage in the business register as well as to the organisational change rather than to growth in economic activity. Inconsistencies of the data for some countries imply a need for further investigation of the way local units are identified and treated in the business registers.

The comparisons with data reported on statistical units in earlier Surveys (1998 or 2000) are even more suspect for most CIS countries. For a number of countries the business register data during the period of economic transformation remain quite volatile.

Examination by Variables
According to the 2006 Survey, all countries include in their business registers variables foreseen in the national regulations, which in some cases only partly match the number of variables recommended internationally. For legal units, all nine countries reporting have integrated into their business registers the following variables from our list:

(a)- identity number
(b)- name and address
(d)- date of incorporation
(f)- legal form of unit

Only a few countries include variable *(e)*- date on which legal unit ceases to be legally responsible and/or all optional variables (see Annex, Table 14).

Regarding enterprise units, variables (a) to (f) are reasonably well covered by CIS countries. But variables (g), (h) and (i) are reported much more rarely (see Annex, Table 15). Compared to the information reported in the 2002 and 2004 questionnaires, variables for enterprises and local units seem to be slightly better covered in current business registers.

Enterprise Groups

Enterprise groups do not seem to be monitored for business register purposes in the majority of CIS countries. Only Kyrgyzstan and the Russian Federation provide regularly some information on them (see Annex, Table 17).

Concluding remarks

Use of the business register – what 2004 Survey found

There are a variety of purposes for which countries use their business registers (see Annex, Table 18). In their responses to the 2004 questionnaire, almost all CIS countries indicated that business registers were used as a basis for sampling frames. Use of business registers for grossing up survey results, survey editing and imputation, data tabulation and as an information source for research and development statistics were also often mentioned by the CIS countries. Most countries use the registers for production of data on business demography, but only Armenia, the Russian Federation, and to a lesser degree Tajikistan and Ukraine use them for deriving economic statistics as well. The information contained in the business registers is usually disseminated (mainly via publications).

Wider use of administrative sources is a necessity

In their responses to the questionnaire, several countries mentioned the utility of business register for monitoring and spreading the burden on businesses caused by statistical surveys. Enhancing this utility of business register, as well as increasing awareness of it among the business community, is an important task. The international practice shows, that one way to achieve this is better cooperation and information sharing amongst various governmental and municipal institutions. The initial step could be shifting the emphasis from special surveys as a main source of information for business registers to the tax and other administrative registers, and establishing common data monitoring and management systems. Certainly, such a shift may require changes/adjustments in the countries' legislation dealing with information sharing and confidentiality. There might also be cost implications for updating ICT equipment and software, re-training of personnel, etc., as well.

Using existing administrative sources and publicly available information (published accounts, annual reports to shareholders, etc.) could also improve the quality of business registers in both timeliness and coverage respect.