I. INTRODUCTION

1. The interest in statistics on personal mobility and on international migration in particular has increased rapidly over the last two decades. The rising needs for comprehensive, comparable and consistent data on migration flows and stocks were brought about by the dramatic expansion of the phenomenon and its serious political and social repercussions for both countries of origin and destination. In destination countries for international migration, immigrants are seen to provide benefits (cheap labour or human capital, entrepreneurship and impetus for economic growth, cultural diversity, etc.) as well as incur considerable costs (on integration and social safety net, cultural conflicts, etc). Countries of origin of international migration experience a loss of human capital, skilled labour and young people. At the same time, emigrants ease the pressure on the labour market and compensate the loss of income of their families staying in the country of origin by sending remittances. A certain number of emigrants return to their country of origin bringing enhanced human capital and entrepreneurship.
2. The rising importance and complex nature of migration makes it necessary to go beyond the simple measurement of the number of migrants. Understanding migration certainly requires gathering more and better quality data about its myriad manifestations, causes and effects. Migration statistics are becoming increasingly important as a basis for political and European Union (EU) funding decisions. Migration data are an indispensable ingredient in the population projections that in turn have gained importance recently with the unfavorable demographic trends and ageing of the population that Europe is currently facing.

3. In response to the rising needs, various international organizations have made substantial efforts to set up a framework for comparable and consistent migration statistics. The elaboration of Recommendations on Statistics of International Migration by the United Nations (UN) was the first crucial step towards harmonization of statistics on migration in the world. It provides a common set of definitions so that the national statistics can be comparable at a global level. The adoption of Regulation No. 862/2007 on Community statistics on migration and international protection is another important step that laid down the grounds for improvement of the situation in collecting and compiling comparable data in the EU.

4. Despite the advances in the area, serious challenges still remain. Several factors make it difficult to implement regulations in practice. Firstly, the principles and definitions contained in the legal act are not always translated in a common and harmonized way in national legislation. Secondly, the implementation of regulations is often constrained by the non-availability of certain data sources in the countries and by the limitations of national statistical offices in their access to certain data. A serious challenge is to establish a cooperative environment with administrative bodies collecting data on migration (usually Ministry of Interior and Policy Departments). Finally, the multifaceted nature of migration implies tasks beyond the obligation to supply data to Eurostat in the scope and structure stipulated in Regulation No. 862/2007. In order to make well-informed decisions, official statistics has to provide data in various additional dimensions such as seasonal workers, detailed profile of migrants and situation of their dependents.

5. This paper provides comments on the above-mentioned challenges and suggests opportunities for meeting them with the ultimate goal of implementing the requirements of Regulation No. 862/2007 on Community statistics on migration and international protection in the EU. The paper summarizes the experience of the National Statistical Institute of Bulgaria (NSI) in the field. However, the issues and possible strategies to address these issues can be easily extended to many other countries and their NSIs.

II. BULGARIA AS A CASE STUDY

6. When current challenges in collecting and compiling comparable statistics on international migration are discussed, Bulgaria appears to be a good case study for a number of reasons. Bulgaria is among the EU countries that are most adversely affected by negative demographic trends and emigration. According to estimates based on various data sources in the period 1989-2002, about 715 000 people left the country, i.e. about 9% of the total population measured as of
1 March 2001 (Census data). The combination of low fertility rates and increased mortality, coupled with negative net migration flows, is expected to result in a further population decline over the next years. Forecasts for Bulgaria show negative growth of (-21%) by 2030.

7. The country will continue to be affected by accelerated population ageing. Statistics place Bulgaria among the countries with the highest proportion of the population aged 65 and over – 17% in 2002 compared to 16% in the EU-15 in 2000. The share of the elderly population is expected to grow further to 25% by 2020. Fertility rates below the replacement level and large emigration flows of young people have lead to a process of dejuvenation - while the number and share of older people is increasing, the number and share of young people (0-14 years) is declining in Bulgaria. The combination of dejuvenation in younger age groups, the expected further decline in the working age population and the ongoing trend of ageing are obscured in the total (demographic) dependency ratio. In Bulgaria, this ratio is forecasted to rise from 45% in 2004 to about 50.4% in 2020.

8. In the context of demographic tendencies described above, a debate was launched recently in Bulgaria as to whether recourse to immigration has to be undertaken in order to ensure population growth and to fill in the current gaps of particular skills on the labour market. However, this is not enough in itself to solve all the problems associated with ageing and it is no substitute for economic reform. This means that the admission mechanisms for third country nationals must be managed effectively and transparently, and proactive integration and equal opportunity policies must be ensured in order to achieve a balance between the respective rights and responsibilities of migrants and Bulgarian society. In order to design such policies, timely and comprehensive statistics of immigration are needed.

9. The large emigration has affected the regional composition of the population. Distribution of emigrants by place of usual residence is becoming an important precondition for compiling correct numbers of population by settlement and for regional population projections.

10. Since 1 January 2007, Bulgaria has become an external border of the EU that imposes additional requirements on immigration statistics. The country appears to be an attractive place for temporary stay of non-EU residents on their way to other (internal) EU countries. In the last 5 years, Bulgaria has become an attractive destination for a new type of immigrant - retired people from North European countries, United Kingdom, Netherlands and Germany. These people usually populate small villages in the mountains and on the Black Sea coast, generating the need to develop various services (construction, cleaning, restaurants, health and recreation, etc.) that in turn has serious implications for the local economic development and labour demand.

11. The free movement of people across borders in the EU makes it even more difficult to measure migration. With fewer restrictions and controls, there are less administrative sources available. A new type of migration has gained importance over the last 2-3 years, namely

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1 The largest wave of emigration took place in the first three years after abolishment of the restrictions to travel abroad imposed by the communist regime. One third of the emigration flow (218 000) were ethnic Turks that left the country in 1989 and moved to Turkey led by political reasons.

2 Measured as ratio between the number of aged 0-14 and 65 and over and the size of the population between 15 and 64.
seasonal workers that stay in the host country within the period allowed by the regulations on stay (usually 3 months) and who are not registered with the administrative bodies, thus remaining “invisible” as far as statistics on migration based on administrative records are concerned. Providing reliable statistics on the size, composition of skills and the remittances they regularly bring home is of crucial importance for designing policies in the country.

12. All the above-mentioned manifestations of migration make Bulgaria a good case study for implementing all the definitions and approaches to data collection and compilation of indicators for international migration concerning both emigration and immigration. Bulgaria has accumulated experience in measuring and studying migration since the topic has always been high on the agenda of researchers and official statisticians.

13. The first Statistical Yearbook of the Bulgarian Kingdom published in 1910 contained data on emigrants to North America. Over the period 1912-1930, official statistics had not published regular statistics on international migration. In 1930, publication began again with the publishing of data on both emigration and immigration monthly flows disaggregated by age, occupation and destination/country of origin. During the communist period, the borders were closed with the exception of two waves of emigration of Bulgarians of Turkish origin to Turkey and of Bulgarians of Jewish origin to Israel in 1947-1951 and later on over the period 1969-1978. A system of border admission/control was the main source of data on external migration until 1991 when it was abolished. Since then, there has been no systematic way of collecting and compiling statistics on migration. Various administrative sources (i.e. continuous population register) and data collection methods including population census, international passenger surveys, household surveys and specialized surveys on intentions to emigrate have been used to quantify and characterize migration. All the lessons learned over the years might be of interest to other countries.

IV. CHALLENGES IN USING ADMINISTRATIVE SOURCES FOR PRODUCTION OF MIGRATION STATISTICS

14. EU Regulation No. 862/2007 adopted in July 2007 introduced harmonized definitions on basic concepts such as emigration, immigration, and place of usual residence that will allow to compile comparable migration data across European countries and will substantially increase the quality of official statistics on migration. The definition used by Eurostat – based on the United Nations Recommendations – is that a migrant is somebody who changes their country of usual residence for 12 months and more. The practical implementation of the Regulation requires each country to review the available data sources and respective data collection methods in order to choose the most appropriate ones and to organize them in a system that can be used to produce official statistics on migration.

15. In Bulgaria, as in many other EU countries, the continuous Population Register is considered to be the most viable source of data to identify and count international migrants. The Population register (ESGRAON) has been functioning since 1978. Currently, according to the Civil Registration Act, the register contains data on:

3 With the explicit statement that the data source was the Ministry of Interior.
4 These emigration waves were based on bilateral agreements with the host countries.
(a) Bulgarian citizens;  
(b) Foreigners that receive residence permit;  
(c) Foreigners that live in the country in accordance with the legally allowed duration of stay; and  
(d) Asylum seekers and refugees.

16. The population register contains data on the permanent and current address of each person as well as any changes related to them. The register data can be used for counting the stock of emigrants for those that have been deleted from the national residence system and have been abroad for at least 12 months at the end of the reference year. The problem is that for persons leaving Bulgaria, there is no mandatory requirement to notify a change of address. So the emigration stocks compiled in this way are incomplete. The degree of completeness depends on the personal motivation of people to delete their names from the system. This refers to both the Bulgarian citizens and foreigners with usual residence in Bulgaria who have left the country for a period longer than a year. As a consequence, the counting of emigrants can not be based on the Population Register only.

17. An opportunity to obtain more reliable data on migrants flow is to introduce either compulsory deregistration for persons leaving the country for a period longer than a year or a set of incentives for doing so, such as linking the deregistration to tax relief, or access to social services. Since such an approach is subject to political concerns and requires time, currently the feasible options for compiling complete data on migrants stocks and flows is to link Population Register data with data from the border statistics and other administrative sources. A precondition for successful matching of data from different sources is the availability of the personal identity number that is unique in the Population Register and is used by other information systems in the country.

18. Border statistics are collected on persons crossing the border in order to enter or leave the country. By cross-checking these data with a person's identity number, it is possible to determine the duration of a person's stay abroad. Persons who left the country and were not recorded as re-entering at the expiration of the term set by the definition (i.e. one year) are recorded as emigrants. In addition to the border statistics, data from the Population Register can be linked to data from other administrative sources such as Tax Administration and Social Security Register where people may be more motivated to inform the authorities about their moving abroad and changing their address of usual residence. The advantage of matching data from different sources through the personal identity number is that it allows going beyond the simple counting of the number of migrants in a given period. Bringing together data from different sources ensures rich information on the socio-demographic profile of migrants, their labour market and family status. In addition, the matching of data ensures that data on distribution of migrants by region are obtained, which is a precondition to obtaining precise estimates of the local population and improving population projections – particularly at local area level.

19. The main challenge related to combining data from various sources is to establish gateways that allow to share data for statistical purposes, subject to agreement by the institutions.
concerned. This would open a completely new stage in the collecting and compiling of migration statistics in Bulgaria.

20. EU Regulation No. 862/2007 defines an immigrant as a person who establishes his or her usual residence in the territory of a Member State for a period that is, or is expected to be, of at least 12 months, having previously been usually resident in another Member State or a third country. A specific feature of the statistics on immigration is that the definition of immigrants cannot be separated completely from the legal categories in the field. In this respect, it is useful to define different categories of immigrants according to their legal status in the country and then to identify the possible data sources.

21. Citizens coming back to the country after being absent for at least one year are considered as immigrants and part of the usual resident population if they live or intend to live in the country for at least one year. In general, information about this category can be provided by the Population Register, since citizens living in Bulgaria are obliged to register. As of 1 January 2007, border statistics on persons entering and leaving Bulgaria have registered only “third country nationals”. According to the Foreigners Act, any foreigner who enters the country has to register within 48 hours in the municipality and to notify them of his/her address. In practice, many foreigners do not observe this rule because there is no effective system to enforce it. Therefore, in order to produce complete statistics on immigrants, it is necessary to obtain data from various administrative sources.

22. Data on foreigners are administrated by the Ministry of Interior in accordance with the Foreigners Act. The Ministry is responsible for the administrative control of the foreigner’s stay in Bulgaria and for the issuing of a residence permit or specific authorization to live in the country. Therefore, data on the number of foreigners in the country and their legal status can be provided by the Ministry of Interior. Another very important source of data on foreigners is the Population Register. As mentioned above, it contains data on foreigners with a residence permit or a specific authorization to live in the country. In order to be classified as immigrants, these persons should have been in the country for at least one year. Similar to the group of citizens, we assume that data are reliable in terms of completeness, bearing in mind that foreigners living longer than a year in the country are obliged to register. There is a specific group of non-citizens without residence permit but seeking asylum that are considered immigrants and also part of the usual resident population after one year of effective residence in the country. Information about this category of immigrants as well as for monthly asylum applications is provided by the National Refugee Agency. The data on persons seeking asylum are administered by the National Refugee Agency until the time of decision. In the case of asylum being granted, personal data of the person concerned are transmitted to the Population Register.

IV. CHALLENGES IN USING OTHER SOURCES FOR PRODUCTION OF MIGRATION STATISTICS

23. The upcoming new round of national censuses is an excellent opportunity to improve data collection in the field of migration. Bulgaria has experience with using population censuses for counting the stock of international emigrants. In Census 2001, all households were asked to report for a member that was abroad at the time of the interview. Analysis of the data collected shows that for some of the emigrants there was no one left to report on them. The data were
incomplete due also to erroneous interpretation of the responses with regard to duration and reasons for stay abroad and hence erroneous classification of some persons as emigrants. Nevertheless, Population Census 2001 provided useful estimates of the stock and flows of emigration in the early ‘90s. It also constituted a sampling frame for designing specialized sample surveys on migration later on. The upcoming Population and Housing Census in March 2011 can be used to gather detailed information about the international migrants and especially for short-term migrants. It is of particular interest to administer an attachment to the main form (questionnaire) of the Census in a sub-sample of households that report seasonal migration in the last 5 years, due to the rapidly expanding seasonal migration over the last years.

24. In order to fill in the existing information gaps in June 2008, the NSI plans to start regularly implementing International Passengers Survey (IPS) to estimate migration. The IPS is a voluntary survey of passengers entering and leaving Bulgaria based on face-to-face interviews. The interview is supposed to take up to 5 minutes. The questionnaire is short, containing basic questions about the passenger’s country of residence (respectively destination country), reason for visit, duration of stay, details on expenditures. The survey covers 8 crossing points – 3 main airports and 5 land crossing points. The passengers on the surveyed routines make up around 90% of all travelers entering and leaving Bulgaria. The survey will be conducted monthly during the second week of each month. The IPS aims to collect data on international migration as well as on travel expenditure and their impact on balance of payments. It also provides data needed for the purposes of tourism policy. Bulgaria accumulated some experience in conducting IPS surveys during the period 1991-1996 when such surveys were carried out regularly.

25. As interest in data on international migration is continuously increasing, the feasibility, methodology and organization of sample surveys on migration as supplement to the statistics based on administrative sources will attract more attention. One low cost opportunity for gathering data on migration is to add several questions to the sample survey of households or persons designed for other purposes. This, for example, is the case with the adding of more questions on international migration to the labour force survey or to the household budget survey. In 2008, Bulgaria introduced a few questions on remittances as a potential source of income of households in the household budget survey. The main advantage of the approach is the minimum additional costs due to the usage of the existing survey budget and infrastructure.

26. A key issue in deciding whether it is worthwhile to add questions on international migration to an existing survey is the sample size of that survey. In general, for a sample survey (of any type with another aim than to collect data on migration) to be a potentially reliable source of data on migration, it should be either fairly large or the country being surveyed should have a high prevalence of international migrants. In the ideal case, both these preconditions should be available. Unfortunately, the sample surveys in Bulgaria are too small to yield statistically reliable data on international immigration; they are more likely to provide reliable estimates on both long-term and short-term emigration. A notable exception is the labour force survey, firstly due to its large sample size and secondly due to the fact that most people emigrate in search of a better job and higher income.
V. CONCLUSIONS

27. International migration has been increasingly important for Bulgaria, being a country that has experienced a large-scale emigration in the last decade (almost 10% of its population) and now seeing a rising seasonal emigration and pressure for immigration by “third country nationals”. High demand for reliable and comprehensive data on migration statistics poses serious challenges to official statistics in the country. To this end, the Bulgarian NSI plans to move forward with the Population register as an integrated data source on documenting residency. The main challenge is to exploit and integrate data from various administrative sources and use them to improve the production of migration statistics. As personal mobility intensifies, enhancing international cooperation and especially conducting mirror estimations and bilateral projects become important tools for improving migration statistics.

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