UNECE

HANDBOOK
on the Use of Administrative Sources and Sample Surveys to Measure International Migration in CIS Countries

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Handbook on the Use of Administrative Sources and Sample Surveys to Measure International Migration in CIS Countries

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Preface

Migration is a powerful driver and important consequence of economic, political and social change, and therefore needs to be adequately measured and understood. International migration and the need to improve its measurement are very important in countries of the Commonwealth of Independent States (CIS) where migrant stocks and flows are large. However, the improvement of statistical systems to measure migration has been a slow process because of weak coordination between migration statistics producers, discrepancies in the applied definitions, and challenges related to data collection.

Chief statisticians of CIS countries discussed these matters at the High-level Seminar on Population Censuses and Migration Statistics in October 2013 in Gelendzhik (Russian Federation). They concluded, among others, that statistical offices should aim at integrating the different sources of migration data into a system where the different components complement each other, and that guidance is needed on the use of administrative data and household surveys for improving the measurement of international migration in CIS countries.

The present handbook addresses this need for guidance. It was prepared under the responsibility of the United Nations Economic Commission for Europe (UNECE) in the framework of the project "Preparation for the 2020 round of population censuses and the production of better migration data in CIS countries", funded by the Russian Federation. A draft version of the handbook was discussed at the UNECE workshop on migration statistics in Minsk in May 2015. Further inputs were received from an electronic consultation among CIS countries.

The objective of the handbook is to guide statisticians and other professionals in producing and using data on international migration from administrative sources and household surveys in CIS countries. Chapter I of the handbook describes the key concepts and definitions for the measurement of international migration. Chapter II provides practical information on the sources of administrative data and their use, and highlights the related methodological and organizational challenges. Chapter III addresses the use of sample surveys to measure international migration and provides an inventory of migration surveys and best practices. Chapters II and III conclude with concrete recommendations for national statistical offices and other migration data producers.

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Abbreviations and acronyms

ADETEF	Assistance pour le Développement des Échanges en Technologies Économiques et Financières [Association for the Development of Exchanges of Economic and Financial Technologies] (France)
AIS	Automated information system
APRS	Administrative population registration system
AST	Advanced Social Technologies (ONG, Armenia)
BEMIS	Border Electronic Management Information System of the Republic of Armenia
CARIM	Consortium for Applied Research on International Migration (EUI)
CBX/AXA	Centre of Sociological Investigation and Marketing (Moldova)
CDBFCSP	Central Data Bank of Foreign Citizens and Stateless Persons
CIS	Commonwealth of Independent States
CIS-STAT	Interstate Statistical Committee of the Commonwealth of Independent States
CIVIS	Centre of Sociological, Politological and Psychological Analysis and Investigations (Moldova)
CP	Checkpoint
CST	Centre Sampling Technique
DESTATIS	Federal Statistical Office [Statistisches Bundesamt] (Germany)
DHS	Demographic and Health Survey
EAPS	European Association for Population Studies
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EEU	Eurasian Economic Union
ETF	European Training Foundation
EU	European Union
EUI/RSCAS	European University of Florence, Robert Schuman Centre for Advanced Studies
Eurostat	Statistical Office of the European Commission
FMS	Federal Migration Service of Russia[1]
GEOSTAT	National Statistics Office of Georgia
HBS	Household Budget Surveys
IASCI	International Agency for Source Country Information
ICMPD	International Centre for Migration Policy Development
IDP	Internally Displaced Person
IHSN	International Household Survey Network (project)
IIAIS	Integrated inter-agency information system
IIN	Individual identification number
IIS	Integrated information system
ILCS	Integrated Living Conditions Survey (Armenia)
ILO	International Labour Organization
IMISCOE	International Migration, Integration and Social Cohesion

[1] Transferred to the Russian Federation Ministry of the Interior on 5 April 2016. Currently, Department of Migration.

INED	Institut National d'Etudes Démographiques (National Institute for Demographic Studies) (France)
INIPA	Insurance number of individual personal account
IOM	International Organization for Migration
IOS	Institut für Ost- und Südosteuropaforschung [Institute for East and Southeast European Studies] (Germany)
IPEC	International Programme on the Elimination of Child Labour (ILO programme)
IPS	International Passenger Survey (United Kingdom)
LMM	Labour Migration Module (ILO module for LFS)
LFS	Labour Force Survey
LSMS	Living Standards Measurement Survey
MAFE	Migration between Africa and Europe (project)
MED-HIMS	Mediterranean Household International Migration Surveys
MEDSTAT	Euro-Mediterranean Statistical Cooperation (EC cooperation programme)
MERIT	Maastricht Economic and social Research institute on Innovation and Technology (UNU)
MFA CD	Consular Department of the Ministry of Foreign Affairs
MICS	Multiple Indicator Clusters Survey (UNICEF survey programme)
MIEUX	Migration EU Expertise (EU programme)
MIREM	Migration de Retour au Maghreb [Return migration in the Maghreb] (project)
MIRPAL	Migration and Remittances Peer-Assisted Learning (World Bank programme)
MoI	Ministry of the Interior
MPC	Migration Policy Centre (EUI)
NBS	National Bureau of Statistics (Moldova)
NIDI	Netherlands Interdisciplinary Demographic Institute
NSCKG	National Statistical Committee (Kyrgyzstan)
NSO	National statistical office
NSSRA	National Statistical Service of the Republic of Armenia
OECD	Organization for Economic Cooperation and Development
OSCE	Organization for Security and Co-operation
PIN	Personal identification number
PPES	Probability Proportional to Estimated Size (probability of selection proportional to estimated population size)
PROMINSTAT	Promoting Comparative Quantitative Research in the Field of Migration and Integration in Europe (project)
PSU	Primary Sampling Unit
RDP	Return Migration and Development Platform (EUI)
RF	Russian Federation
RLMS	Russia Longitudinal Monitoring Survey
RO	Registry office
RoA	Republic of Armenia
RoK	Republic of Kazakhstan
Rosstat	Federal State Statistics Service of the Russian Federation
SIDA	Swedish International Development Agency
SIRAS	Sociological Institute of the Russian Academy of Sciences (Russia)
SMRIS	State migration registration information system (Russia)
SMS of Ukraine	State Migration Service of Ukraine

SSC	State Statistical Committee (Azerbaijan, Belarus and other CIS countries)
TAJSTAT	Agency on Statistics under the President of the Republic of Tajikistan
TEMPER	Temporary versus Permanent Migration (project)
THPS	Tajikistan Household Panel Survey
TIN	Taxpayer identification number
TRP	Temporary residence permit
UAU	Ultimate Area Units
UkrStat	State Statistics Service of Ukraine
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNSD	United Nations Statistics Division
UNU	United Nations University
USAID	United States Agency for International Development
WP	Work permit

Introduction

1. Improvement of the collection and quality of migration data has been a long-standing concern for data producers, users and policymakers. The ability to measure international migration accurately is imperative for evaluating and monitoring policy decisions related to a wide range of topics, like regional population growth and decline, out- or in-migration of highly skilled workers, impact of migration on the local labour market, socioeconomic integration of migrants, working conditions for migrant workers, and the economic impact of remittances. However, the improvement of statistical systems to measure migration has been a slow process because of weak coordination between migration statistics producers, discrepancies in the applied definitions, and challenges related to data collection.

2. International migration and the need to improve its measurement are very important in CIS countries where migrant stocks and flows are large. The countries share a number of common historical, cultural and linguistic patterns, which facilitates movement between countries, including movement of labour.

3. In addition to population censuses, the primary data sources for measuring international migration include a wide variety of administrative data and sample surveys. There are other potential sources being investigated, such as “big data,” but the aforementioned sources remain the primary means of gathering information. Improving their use is thus critical for improving the measurement of migration.

4. The objective of the handbook is to guide statisticians and other professionals in producing and using data on international migration from administrative sources and household surveys in CIS countries. Chapter I of the handbook describes the key concepts and definitions for the measurement of international migration. Chapter II provides practical information on the sources of administrative data and their use, and highlights the related methodological and organizational challenges. Chapter III addresses the use of sample surveys to measure international migration and provides an inventory of migration surveys and best practicesб including information about different survey types, methodological processes to govern the use of surveys to collect information on migration, as well as an inventory of migration surveys and best practices. Chapters II and III conclude with concrete recommendations for national statistical offices and other migration data producers.

Chapter I Key concepts and definitions for the measurement of migration

5. A critical question to address is how statistical systems operationalize and define international migration. Thus the first step towards creating comparable migration statistics is to come to agreement on common terms and definitions. Lack of uniform definitions on migration is an important reason for inconsistency in migration statistics between countries. Even within countries, data comparability issues exist, as many individual systems are set up to respond to specific administrative objectives, not for accurate measurement of international migration. Tackling these challenges is necessary to improve migration data at the national, regional and global levels.

6. Migration, both internal and international, is often studied by looking at its size, characteristics of migrants, and the impact migration has on both migrants themselves and areas from which they come and to where they go. At its most basic level, migration consists of two primary units of analysis, the person (who moves) and geography (where the person moved from and where the person moved to). Migrants are normally defined as persons who have changed their place of usual residence. For the purposes of international migration, a person's country of usual residence is that in which a person lives, that is to say, the country in which the person has a place to live where the person normally spends the daily period of rest (United Nations Recommendations on Statistics of International Migration, 1998). Whether the change of residence crossed international or local borders, as well as duration (time) and purpose (reason) of stay, are additional criteria for defining a migration typology.

7. Statistics on the size of the migrant population are normally collected on the basis of migrant stock or flow. Simply put, international migrant stock is the total number of international migrants living in a country at a particular point in time, while the international migration flow is the number of migrants entering or leaving a country over the course of a specific period (e.g. one year). The main criteria for measuring international migrant stock and flow are country of citizenship and birth.

1. Foreigners and the foreign born

8. Depending on whether one is trying to measure movement to or from a country, as well as whether primary interest lies in the movement of nationals or non-nationals, different operational issues exist. Nationals and non-nationals (foreigners) are normally identified by looking at their citizenship status. Foreigners are defined as those without citizenship of their current country of residence, thus "non-citizens" are distinguished from "citizens." While this distinction is often important from a policy perspective, a potential drawback to this approach is that it can include foreigners who were born in their country of residence, thus have never moved and should not technically be considered international migrants (have never changed country of usual residence). This approach also includes naturalized immigrants as citizens, which could be less useful from a policy perspective, depending on what is of interest.

9. Alternatively, or in addition, many countries look at a person's country of birth to identify migrant status. Those born in their country of residence (natives) are distinguished from those born outside of their country of residence (foreign born). Use of the foreign born classification has the advantage of corresponding to actual change of residence if a usual

resident of a country was born in another country. Relative to policy relevance, people born outside their country of current residence, but citizens of this country at birth (e.g. born abroad of national parent(s) living abroad) are often excluded from "foreign born" tabulations. The foreigner and foreign born criteria apply to measurement of migrants in terms of both total stock and flows over specified periods.

2. Measurement of migrant stock

10. According to the United Nations Recommendations on Statistics of International Migration (1998), a country's stock of migrant population can be measured by all persons who have that country as their country of usual residence and who are citizens of another country (foreign population) or whose place of birth is located in another country (foreign born population). Although slightly different from the stock of international migrants (those who have ever changed their country of usual residence), the stocks of foreigners and foreign born are deemed highly relevant for the study of international migration.

11. Thus, the foreign born are the group of persons who were born in another country. This group corresponds to the stock of international migrants that migrated at least once in their life and reside outside of their country of birth. Persons born in the country are defined as natives. Foreigners are the group of persons who do not have citizenship of the country of residence. Foreigners can be foreign born or native born. Persons having citizenship of the country are defined as nationals who can be foreign or native born. Regarding measurement of the foreign born, geography at time of data collection should be used, thus it is important that those who have never moved, but whose country of birth changed due to international boundary changes, not be counted as foreign born.

12. Both methods of measurement have advantages and disadvantages. The advantage of using citizenship-based criteria to measure migration is that it is often policy-relevant, is a relatively objective measure, and is commonly reported across many countries. Disadvantages of using citizenship to measure migrants are that citizenship is fluid (can change over time), the possibility of dual-citizenship (persons can be citizens of more than one country), and the aforementioned fact that foreigners are not necessarily migrants, if they were born in the country of residence. The advantages of using country of birth as a measure are permanence (place of birth does not change, though country borders can objectivity (though some countries use the measurement of the mother's place of usual residence at time of birth, rather than actual place of birth), and direct relationship to changing country of residence over one's lifetime. However, this variable is often deemed less policy-relevant than citizenship, can include nationals (born abroad of native parents or naturalized citizens), and as already mentioned, country borders can change over time (possibly making someone foreign born who has never made an international move).

13. In addition to population groups identified on the basis of place of birth and citizenship, information on these groups is often not sufficient to monitor and analyse the impact of international migration over time, particularly from an integration perspective. Therefore an additional population group, descendants of the foreign born (persons with foreign/national background), is often identified, which includes those persons born in the country whose parents were born outside the country. Persons in this group may or may not have directly experienced an international migration event. Several generations of descendants can theoretically be distinguished, that is: persons whose parents, grandparents, etc., were born

abroad. However, in practice, data collection is generally restricted to those persons whose parents were born abroad (often referred to as the "second generation").

14. These different criteria for measuring migrant stock are important for understanding the size of migrant populations and their descendants. While change of usual residence is the underlying theoretical assumption for measurement of international migrant stock, it is even more essential, combined with duration of stay, for determining the size of migration flows. The United Nations recommendations on measuring migration flows are discussed in the following section.

3. Duration of stay and measurement of migration flows

15. Duration of stay for migrants, either actual or intended, is a critical criterion for measurement of migration flows. According to the United Nations Recommendations on Statistics of International Migration (1998), for the purposes of measuring migration flows, an international migrant is defined as "any person who changes his or her country of usual residence." As shown earlier, a person's country of usual residence is that in which the person lives, that is to say, the country in which the person has a place to live where he or she normally spends the daily period of rest. Temporary travel abroad for purposes of recreation, holiday, business, medical treatment or religious pilgrimage does not entail a change in country of usual residence.

16. The United Nations Recommendations further define two types of migrants by duration of stay criteria. In brief, long-term migrants are defined as those who move to a country other than their country of usual residence for a period of at least one year, while short-term migrants are people who move to a country for a period of at least three months but less than one year. In practice, most countries collect migration flow data on a yearly (12-month) basis, though some survey based questions use a five-year period. In terms of international migration data availability, in-flow data (immigration) are much more common than out-flow data (emigration).

4. Long-term and short-term migrants and data considerations

17. In practice, the distinction between short- and long-term migrants is often difficult to make, particularly given different data collection systems used by different countries. The complete United Nations definition for long-term migrants is "a person who moves to a country other than his or her usual country of residence for a period of at least one year (12 months), so that the country of destination effectively becomes his or her new country of usual residence." The complete United Nations definition for short-term migrant is "a person who moves to a country other than that of his or her usual residence for a period of at least 3 months but less than a year (12 months) except in cases where the movement to that country is for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment, or religious pilgrimage."

18. These recommendations potentially make migrant flow classifications difficult to collect using current data systems, either administrative or survey based. Not only does country of usual residence need to be determined, but so does the migrant's duration of stay. Per the United Nations recommendations "the act of being inscribed in a population register or country other than their own, being granted a permit to reside in country, or declaring

intention of staying for at least one year, are all ways of making the concept of change of usual residence measurable." This means countries can use different methods to determine duration of stay, which further complicates data comparability at the international level.

19. The duration of stay criterion for a long-term migrant can be determined by either actual or intended duration of stay of at least 12 months, thus is subject to practices used by different national data collection systems. For example, different countries have different time criteria for entering migrants into their population registers (e.g. 3 months, 6 months, 12 months), which can complicate determination of change of usual residence. While duration of stay is often inferred from visa types or permit lengths, various work and residence permits have varying lengths of duration, depending on type and formal agreements between countries (e.g. many countries now have visa free regimes, which allow persons to move to countries for up to 3 months without visas or registration). In addition, migrant self-declaration of length of stay upon entry will not necessarily correspond to their actual time spent in the country.

20. The United Nations recommends using actual duration of stay rather than intended duration of stay, since it provides a more accurate picture of long-term migration. Obviously, some migrants' intended duration of stay will not match reality (either determined at 12 months and leaving earlier, or determined at less than 12 months, and staying longer). Thus it is recommended that migration figures be retroactively adjusted (using a lag of one and a half years to produce migration flow statistics), which is often difficult methodologically, and especially difficult to explain from a policy perspective. These "status changes" include short-term migrants who become long-term, foreigners originally admitted as non-migrants, irregular migrants who have become regularized as long-term migrants, as well as asylum seekers whose refugee status has been determined.

21. The difficulty of determining change of usual residence and duration of stay is even greater when measuring the flow of short-term migrants. Short-term migrants are presumed to be a rapidly growing and increasingly important group of migrants, particularly for labour migration, coinciding with increased globalization and frequent repeated moves back and forth across international borders (e.g. circular migration). Technically, short-term migrants do not normally change their country of usual residence (which remains their country of origin), but for the purposes of international migration statistics, the country of usual residence of short-term migrants is considered to be the country of destination during the period they spend it in. In addition, the 1998 United Nations recommendations make an effort to distinguish short-term migrants from tourists, which is often misinterpreted to mean that short-term migrants only include those who move for work or study-related reasons. In fact, asylum seekers or other humanitarian migrants, those moving for family reunification or formation, or even climate-related migrants, would be counted as short-term migrants if the duration of their moves were greater than 3 and less than 12 months. Also note these definitions exclude many temporary migrant workers (e.g. some seasonal migrants), who often move to a country for a period of less than 3 months.

22. Another related group of interest, but not migrants per definition, are cross-border (or frontier) workers. These are foreigners who have been granted permission to be employed on a continuous basis in a receiving country provided they depart at regular or short intervals (daily or weekly) from that country. This group could also include those without formal permission (informal) to work in another country, but none-the-less commute across borders to work on a regular basis. Information on both citizens and foreigners working under these

arrangements are of interest to many countries. In addition to change of usual residence and duration of stay, the final dimension for measuring migrants is based on their reason for move.

5. Purpose of stay

23. While many would agree that people have mixed and multiple motives for migrating, there is no simple answer to the question of why people move. An individual's reason to leave a country of origin could differ from their reason to come to a country of destination. Some basic groups defined by purpose of stay are those moving for work-related, family-related, education-related, and for humanitarian reasons. As such, in addition to distinguishing between short- and long-term migration, migration flow statistics are also often further disaggregated by purpose of stay.

24. Employment-related migration is one of the most important categories for defining migrants and includes foreigners admitted or allowed to remain in the country for employment reasons. This group includes migrant workers, either seasonal, contract workers, project tied workers, or temporary, as well as those with the right to free establishment (e.g. citizens of the EU) or long-term settlement based on high-skilled qualifications. As noted before, people may move for temporary work for a period of less than three months, thus are not counted as migrants. Another category of migrants are those admitted for education or training, including students, trainees, and interns. A third major group of migrants are those who move for the purposes of family reunification or formation. This group includes foreigners admitted because they are immediate relatives or fiancé(e)s of citizens or other foreigners already residing in the receiving country, or because of other family ties. The fourth major group of migrants are those admitted for humanitarian reasons, which include refugees, asylum seekers, foreigners granted temporary protected status, and persons admitted for humanitarian reasons. Additional migrants may be granted legal permission to move to (or live in) a country based on criteria like ancestral ties, retirement, entrepreneurship, or by having their irregular migration status regularized.

6. Irregular migration

25. Irregular migrants remain the most difficult migrant group to measure. In theory, international migrants should be determined by change of country of usual residence, thus if the duration of stay criterion is met, irregular (or illegal) migrants should be counted. In practice, this is much more difficult, as irregular migrants, by the nature of their irregular status, are often missing from regular data sources used to measure migrants.

26. It is also important to distinguish between irregular entry and irregular stay. Many irregular migrants enter a country through legal means but overstay visas (or had refugee status rejected) and remain in a country without authorization (irregular stay). Others bypass formal methods altogether and enter a country via invalid travel documents or through non-controlled borders, which are examples of irregular entry. Because irregular migrants often use informal methods of entry, it is extremely difficult to measure this population, especially seasonal migrants and others who repeatedly move back and forth between two or more countries, leading to under measurement of this group when regular data sources are used. Given the inherent difficulties measuring this population, sources often rely on border apprehension data (plus police records on returns/deportation/expulsions). However, this

method is particularly limited in its accuracy as only a fraction of illegal border crossings are documented with apprehension data, and is highly dependent on fluctuations corresponding with the intensity of border enforcement. Since many irregular migrants are undocumented, it is only after regularization of migrants that an accurate "after the fact" measure of their size is obtained (based on the number of regularizations/amnesties granted). These same issues arise when looking at sub-groups of irregular migrants, such as trafficked or transit migrants. People who enter and stay in a country legally and work without the necessary permit form another category of illegal migrants.

27. It should also be noted that categories classifying migrants by purpose of stay are not mutually exclusive, which can create challenges when determining these groups. As people often move for many reasons, determining a single reason for move can be difficult. However, purpose of move can be gleamed from a number of different data sources, including both administrative and self-reported. One of the most common methods to determine a migrant's purpose of stay is to use visa or resident permit information, which includes the legal reason for a migrant's stay in the country. Another method is to ask migrants themselves as to their reason for move, through either a household survey or population census. However, the results of these two different methods can vary greatly.

28. As mentioned previously, the primary sources of data to measure international migration, aside from population censuses, are administrative data and sample surveys. The following chapters will address these specific sources in more detail, with particular application to CIS countries.

Chapter II Administrative Data

1. Role of administrative sources in producing international migration statistics

29. Amongst other migration data sources administrative sources have some clear advantages. Unlike population censuses or sample surveys, administrative systems collect data on a continuous basis and are more reliable because most personal data is document-supported and verifiable (date and place of birth, former place of residence, citizenship, etc.). The fact that administrative sources are under government control usually ensures that data collection, storage and processing methods are standardized. A big advantage of statistics produced from administrative sources is their relatively low cost, as they are already collected for other purposes, which helps reduce both financial and human resources, especially when compared to traditional data sources like censuses or surveys. This consideration is so important that even in countries where population and migration statistics are currently based on surveys and censuses, there has been discussion about the possibility of instead producing population registers[2].

30. Traditionally, administrative data contain information on both flows and stock of migrants. For example, a flow is the number of foreigners who acquired residence permits over a specified period of time, whereas the stock is the number of foreigners living in a country with residence permits at a given point in time. Censuses and surveys are better suited for measuring stocks of migrants living or staying in a country at a time of enumeration/survey.

31. Migration data suitable for generating statistics can be found in practically any administrative system which collects population data. All databases or primary data (forms, templates, etc.) with information on place of birth and/or nationality can become a source for generating statistics on migration. When an individual from abroad is registered the system records various information about this person, thus administrative data not only help to answer the question of how many migrants have arrived or live in the country, but can also provide a breakdown by other characteristics like gender, age, nationality, country of origin, country of former/subsequent stay, marital status and, sometimes, educational attainment, reasons of migration, etc. With these data tables can be generated showing several characteristics of migrants at once. Such statistics expand the horizon of analysis and help inform decisions on welfare or migration policies.

32. Most administrative systems can register both arrivals and departures of migrants. The completeness of such registration is affected by how data are collected. If registration is automatic (e.g. registration of entries and exits at electronic passport border control) then coverage is more complete. If registration is subject to self-declaration by migrants, there will be underestimation of exits, especially if migrants have no incentives to report their

[2] Bycroft, C (2010). A register-based census: what is the potential for New Zealand? Wellington: Statistics New Zealand Published in February 2011 by Statistics New Zealand. Wellington, New Zealand

departures[3]. Registration systems can be designed to cover wide or specific groups of migrants. Registers for the general population allow for reporting data on migrants who arrived for different purposes, e.g. for work, study or family reunification. These systems also allow disaggregating data by entry visas issued. However, if specialized administrative systems for keeping records, for example, on issued work permits or foreign students admitted to national educational institutions exist, preference should be given to data from such systems.

33. For population statistics it is better to rely on data from 'universal' population registration systems covering virtually all, if not all, migrants, while policy-making requires accurate statistics on specific groups of migrants who arrived in the country for work, study or asylum, etc. In this context it can be emphasized that unlike vital statistics, migration statistics are able to be compiled and compared using data obtained from different sources (including censuses and surveys). This allows for evaluating the completeness and quality of data on comparable categories of migrants and eventually leads to more accurate figures.

Table 1.
Major categories of migration data sources and subjects of measurement

Type of source in a country	*Type of data on migration (subject of measurement)*	
	Flows over time	*Stock (number) at a point in time*
Population registers or administrative systems of registration at the place of residence	Number of migrants registered or deregistered at the place of residence or stay over a period of time	Individuals permanently or temporarily living a country possessing nationalities of foreign countries, born overseas and having immigrant background
Specialized registration systems which contain data on issued entry or exit visas, residence permits, regulations of foreigners' access to the labour market, granting asylum, citizenship admissions of foreign students, enforcement of immigration legislation (including regularization campaigns), as well as other administrative data collection systems which contain data on migration	Number of filed applications, decisions made under different types of procedures (and number of applicants) including: number of issued entry or exit visas, number of issued or revoked stay permits, work permits, asylum permits, number of naturalized persons number of foreigners admitted to educational institutions, number of persons whose status was regulated during a regularization campaign, etc.; number of country's nationals abroad registered with consular offices	Number of persons residing with valid residence permits, number of expatriate employees (persons with valid work permits or employed in economy), number of foreign students, number of persons with refugee status, number of country's nationals abroad registered with consular offices

[3] The use of registers in the context of EU–SILC: challenges and opportunities. Edited by Markus Jäntti, Veli-Matti Törmälehto and Eric Marlier. Eurostat Statistical working papers. 2013

Type of source in a country	*Type of data on migration (subject of measurement)*	
	Flows over time	*Stock (number) at a point in time*
Data collection systems at borders (including registration based on passport control, landing and similar cards as well as surveys of international passengers at border checkpoints)	Number of trips (entries and exits) or number of persons who arrived in the country for various reasons and different periods of time (or who left the country), number of administrative procedures related to violations of entry or residence regulations, etc.	If registration is personalized, data on the number of persons who entered and stay in the country can be interpreted as a stock

34. The first choice for generating statistics on migration flows is data from population registration at the current place of residence (see Table 1). The number of individuals registering their arrival in, or departure from, a place of residence is captured by long-term migration administrative statistics. When technically possible, the same systems allow further disaggregation by short-term (length of stay) or temporary (migrant status) migration.

35. Conventional administrative sources of migration data include population registers and registers of foreigners, as well as national databases partially serving as registers[4]. In countries with no registers available, the source of flow statistics are various systems registering people at their place of stay or residence.

36. In addition to the sources listed above, in each country there are agencies dealing, within their mandates, with immigrants and have relevant statistics available. For instance, these can be ministries dealing with immigrants' integration issues, social welfare, etc.

37. A separate category of administrative data sources typically includes systems for collecting data at state border crossings, such as passport control and special cards filled in by passengers. These can be categorized as administrative sources since the primary purpose of such systems is administrative: they perform a government function to control entries and exits of foreigners and nationals through state borders.

38. Administrative systems of data collection, storage and processing, whether these are operated through card indexes, logs or modern computers, are tools which help the government to perform statutory procedures. Therefore, when we talk about administrative migration statistics we often refer to the national legal framework regulating migration and rules for registration of people at the place of stay and residence. Changes in legal framework can result in fluctuations in the number of registered individuals because some categories of migrants are added to or excluded from statistics. This needs to be taken into account when working with administrative migration statistics.

[4] This could be a database of social insurance or health care, if its underlying principle is universal and mandatory coverage of the entire population.

2. Methodological issues and definitions in administrative migration statistics

39. For comparable international migration statistics, the critical issue is about harmonized definitions and statistical methodology. The 1998 UN recommendations use the concept of place of permanent (usual) residence, and consider any person who changes his or her country of usual residence as an international migrant. In turn, a country of usual residence is that in which the person lives, i.e. the country in which the person normally spends the daily period of rest[5]. The recommendations of the Conference of European Statisticians clarify that this refers to daily night rest[6].

40. In migration statistics, the concept of place of usual residence is associated with the time a migrant intends to stay in the place of destination or to be absent from their place of former residence. The UN recommendations identify two main categories of migrants: long-term and short-term migrants. A long-term migrant is a person who moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence. A short-term migrant is a person who moves to a country other than that of his or her usual residence for a period of at least 3 months but less than a year (12 months) except in cases where the movement to that country is for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimage. The country of usual residence of short-term migrants is considered to be the country of destination during the period they spend in it, even if for a period of less than 12 months (UN Recommendations on Statistics of International Migration, 1998).

41. Short-term migration is an essential part of migration flows and its measurement is considered to be an important objective. In many countries, flows of short-term or temporary migrants, especially migrant workers, by far exceed the flows of migrants moving for permanent residence. Therefore measuring this segment of migration is a key issue for evaluating the consequences of migration and developing migration policies. It is difficult to have precise measurements of short-term migration, therefore various sources, including administrative ones, are used to produce estimates. One of the main users of short-term migration data are local governments; they use these estimates for planning and monitoring delivery of services to people, allocating resources and managing budgets[7]. However, regular production of statistics on short-term migration is still rare.

42. The difficulty of applying the 1998 recommendations is proven by the current situation in international migration statistics. Practice shows that countries where statistics of flows and stocks of migrants are based on administrative sources follow different methodological approaches, which consider both migrant status and period of stay in a new (or absence in a former) place of residence (country). In some cases, only foreigners who have acquired residence permits, without consideration of period of stay, are counted (Greece). In Belgium, apart from a residence permit, a foreigner needs to intend to stay for at least 3 months in the

[5] Paragraph 32, UN Recommendations on Statistics of International Migration (Rev. 1), 1998

[6] Recommendations of the Conference of European Statisticians for the 2010 Round of Population and Housing Censuses. UN, New York-Geneva, 2006

[7] See Short-term International Migration Annual Report, UK Office of National statistics Statistical Bulletin. May 2013

country, while in the Netherlands it is 4 months within half a year.[8] Norway counts immigration of both nationals and foreigners, but the latter need to have a residence permit or a work permit and intend to stay in the country for at least 6 months. Sweden and Turkey have set a threshold of 12 months for measuring migration. In the U.S. immigrants for permanent residence are persons who are already in the country and have acquired residence permits (i.e. change in immigration status is measured rather than actual migration). In Spain, the statistics of migration include all foreigners registered in municipal registers, irrespective of their legal status. Furthermore, some countries using administrative sources produce statistics for fiscal years rather than calendar years (e.g., from October to September in the U.S., from July to June in Australia).

43. As will be shown below, CIS countries also have no single standard approach to the collection of data on migrants and recent attempts to come closer to UN recommended standards have resulted in new challenges and poorer comparability of statistics on migration flows within CIS countries.

3. *Migration statistics based on registers and registrations of people at place of residence*

3.1. Overview

44. The basis of migration statistics is about measurement of flows and stocks of long-term and short-term migrants. In countries with available registration systems the main sources of such data are population registers and registers of foreigners. In countries where such registers do not exist or are still under development, data on flows are produced based on the registration or deregistration of migrants at their place of residence. Data on stocks, or numbers of migrants residing in a country at a point in time, are collected during censuses or sample surveys, or are also based on the administrative records of individuals who have residence permits in the country.

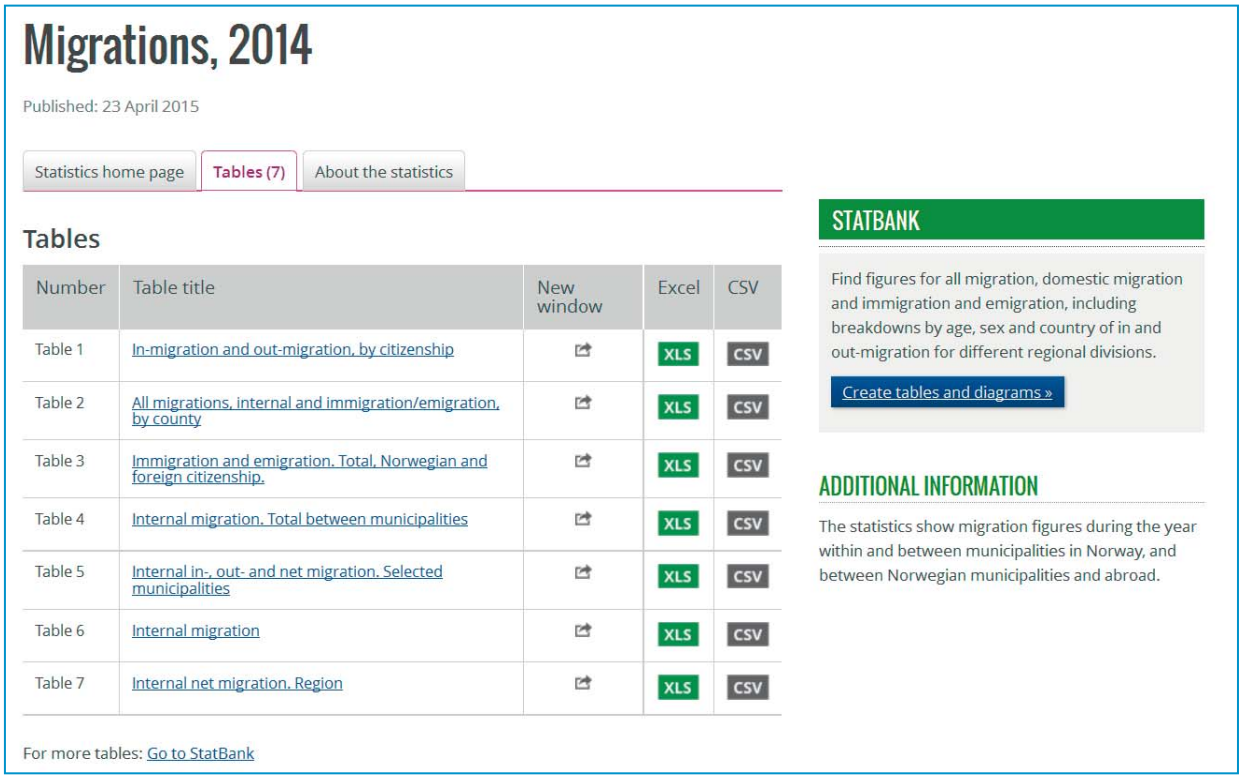
45. A population register is a continuously updated database recording all events in a person's life associated with change in civil status (marriage and divorce, child births) and change of place of permanent residence, from birth (or immigration) to death (or emigration). In countries with a long history of using registers, the National Statistical Office (NSO) has access to continuous register data on population changes to produce migration statistics.

46. An alternative way to produce statistics from register data is to have the agency responsible for the data use aggregate data to produce tables developed by statisticians. Population registers can be managed by different government agencies, such as the Tax Ministry, Ministry of the Interior, Ministry of Justice, the agency responsible for vital statistics, national statistics office, etc. Some countries have a centralized population register (e.g. Scandinavian countries); while others have regional or municipal registers (such as in Germany). Under any arrangements, registers perform their primary function: they collect and process data on each resident of a country required for fiscal and other needs at the regional and local levels.

[8] OECD International Migration Outlook 2014, p 339

47. For a movement event to be counted in the register a person needs to intend to stay in the new place of residence (or to be absent in the previous place of residence) for a defined period of time. These thresholds of time vary from country to country. Statistics of persons registered and deregistered due to a change in the place of permanent residence (using the threshold of time) over a period of time, reflect migration flows.

Figure 1.
Screenshot from Statistics Norway's (Central Bureau of Statistics) website. Main tables with statistics of international and internal migration flows in 2014[9]



Migrations, 2014

Published: 23 April 2015

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Tables

Number	Table title	New window	Excel	CSV
Table 1	In-migration and out-migration, by citizenship		XLS	CSV
Table 2	All migrations, internal and immigration/emigration, by county		XLS	CSV
Table 3	Immigration and emigration. Total, Norwegian and foreign citizenship.		XLS	CSV
Table 4	Internal migration. Total between municipalities		XLS	CSV
Table 5	Internal in-, out- and net migration. Selected municipalities		XLS	CSV
Table 6	Internal migration		XLS	CSV
Table 7	Internal net migration. Region		XLS	CSV

For more tables: Go to StatBank

STATBANK

Find figures for all migration, domestic migration and immigration and emigration, including breakdowns by age, sex and country of in and out-migration for different regional divisions.

Create tables and diagrams »

ADDITIONAL INFORMATION

The statistics show migration figures during the year within and between municipalities in Norway, and between Norwegian municipalities and abroad.

48. Population registers can produce migration statistics at low levels of geography, including municipalities, and be used to calculate not only in-migration and out-migration flows, but also the stock of international and internal migrants and persons with immigrant background living in the country at any point in time. Data on place of birth show the number of lifetime migrants born abroad. As population registers also often contain data on the parents of residents, data on parental place of birth allows identification of persons with immigrant background, even if he or she was born in the country of residence and is a national of this country. Data on the nationality of permanent residents show the stock of foreigners residing in the country. In addition, registers can provide data on demographic events of both migrants and non-migrants (e.g. marriages, divorces and number of children born, etc.). One example is the Central Population Register of Norway. Figure 1 shows a web page from Statistics Norway with the statistics of international and internal migration flows based on population register data. Table 2 shows the capabilities of registers to provide data on several generations of immigrants. Immigrants are all persons born in Norway whose both

[9] http://www.ssb.no/en/befolkning/statistikker/flytting/aar/2015-04-23?fane=tabell

parents and all grandparents were born abroad. Such level of details in the register allows for in-depth studies of migration backgrounds of the population.

Table 2.
Immigrants and Norwegian-born to immigrant parents, permanent population as of 1 January 2015 (ranked by number of immigrants)

Population by immigrant category and country background	*Born in Norway to Norwegian-born parents**	*Immigrants**	*Norwegian-born to immigrant parents***	*Foreign born with one Norwegian-born parent*	*Foreign born with one foreign born parent*	*Foreign born to Norwegian-born parents*
Poland	2,250	90,962	8,462	255	5,159	65
Sweden	31,898	36,887	2,229	6,552	36,909	5,417
Lithuania	28	35,901	3,404	40	857	1
Somali	27	27,333	10,298	10	738	7
Germany	12,416	24,611	2,554	2,471	14,377	868
Iraq	49	21,965	8,695	20	1,089	12
Denmark	30,482	19,973	1,763	3,896	30,417	1,293
Pakistan	1,078	19,219	15,973	118	5,035	20
Philippines	975	19,076	2,022	826	8,000	633
Russia	456	16,803	2,611	190	3,351	212
Iran	205	16,608	3,712	37	2,402	35
Thailand	376	16,555	759	844	6,796	390
Eritrea	169	14,741	2,393	20	311	103
United Kingdom	14,981	14,294	829	3,748	19,577	1,229
Vietnam	536	13,701	8,360	81	1,953	201
Bosnia-Herzegovina	172	13,453	3,708	8	1,306	1
Afghanistan	7	13,440	2,880	1	133	0
Romania	202	11,923	1,233	27	1,162	146
Turkey	537	11,049	6,559	102	3,279	24
India	1,281	10,506	3,581	185	1,719	1,296
Kosovo	124	10,016	4,699	18	1,105	5
Norway	3,874,281	0	0	0	0	0
Other	73,660	210,364	38,859	15,064	96,542	25,961
Total	**4,046,190**	**669,380**	**135,583**	**34,513**	**242,217**	**37,919**

Source: Statistics Norway

* The foreign country background is related to grandparents' country of birth. The person may have 1 to 4 grandparents born abroad.

49. Countries with well-established population registers can obtain much of their needed data from administrative sources rather than traditional censuses and household surveys. As registers use personal identification numbers, there is a possibility to link data about a person between different registers, combine data from various sources, and obtain data on migrants, their educational attainment levels, type of housing, and car ownership, for example. Comparing various characteristics of migrants and non-migrants allow for the recognition of similarities and differences, and to evaluate success in the integration of migrants and their descendants over time.

50. In countries without population registers, the similar function of such registers are partially fulfilled by systems of registration at place of stay and place of residence, which are not necessarily linked with databases of other ministries and agencies. These systems can provide measures of migration flows and sometimes even migrant stocks. However, the potential of these data is much lower than that of population registers. For example, in general, these systems contain no data on the parents' place of birth and nationality. Further additional variables reported in these sources are limited.

51. *Registers of foreigners*. National population registers contain data on the resident population, including foreigners who have acquired resident status. Many countries have special databases on foreigners. Aggregate statistics from these registers can show the number of filed applications regarding foreigner's status or grounds for being granted a permit to live in the country. In some cases the foreigner's record is linked to data on his/her relatives who arrived together with him/her. Registers of foreigners are the main sources of statistics on types of residence permits, which can be disaggregated by a number of variables: major demographic characteristics, nationality, place of birth, as well as purpose of entry and residence. In some countries, statistics of long-term migrant flows and stocks are based on data from residence permits. Flows reflect how many foreigners acquired status during a certain period (e.g. one year), whereas the stock of foreigners shows how many holders of residence permits live in the country at the end or at the beginning of a reporting period.

52. Registers of foreigners are usually centralized;[10] otherwise it would be difficult to perform immigration control in the country. Similar to population registers there are often certain requirements needed to be included into a register of foreigners, such as period of residence and migrant status (type of a residence permit), though some countries count all foreigners in the country irrespective of purpose and length of stay[11].

53. Agencies responsible for immigration control and registration of foreigners both provide data to national statistics office and also generate statistics and publish reports themselves.

54. One should bear in mind that registers of foreigners are better at capturing and reporting data on the adult population since data on minor children are often added to parental records and are not always included in aggregate figures.

55. In addition to universal registers of foreigners, also important are administrative systems designed for registration of specific categories of migrants and migration-related events – migrant workers, asylum seekers, etc. Some countries have separate registers or databases for refugees and participants in special migration programmes (e.g. associated with repatriation, or specific subcategories of labour and student migration). When producing immigration statistics these types of migrants can be included or not included in immigration statistics, depending on when they obtain long-term residence status. Special systems which are associated with registers of foreigners usually keep records of applications (e.g. for entry and exit visas or citizenship) and relevant outcomes (e.g. acceptance or denial). These

[10] Centralized registers collect information from all regional and municipal units of the country, while some countries have separate local or regional registers which are not entered into a common database.

[11] For instance, based on the Central Data Repository, the Russian FMS produces monthly data on the length of foreigners' stay in Russia from the last entry, see the report for 4 months of 2015. http://www.fms.gov.ru/about/statistics/data/details/54892/ Accessed on 15 May 2015

administrative data not only include records of actions taken for documenting newly registered migrants, but also include actions taken by those already in the country, such as permit renewals, etc.

56. Differences between the number of documents issued and the actual stock of migrants holding valid documents are not only dependent on changes in migration trends (e.g. increase in forced migration from another country), but migration statistics from administrative sources can also be affected by changes in legislation, e.g. introduction or waiving of requirements to citizens of some countries to have residence permits, or work permits. During campaigns to regularize irregular migrants, one-time residence or work permits are often issued to migrants who have been living in the country for a long time without documentation. This may result in sizeable growth of 'immigration' numbers based on these data during such campaigns, while in fact it is merely officially documenting migrants who have been living in the country for a long period of time without documentation.

3.2. Migration statistics based on population registration systems in CIS countries[12]

57. The situation with administrative sources of migration data in CIS countries varies considerably from country to country. Some types of record systems remain almost unchanged since the Soviet period; while other types emerged following the development of national legislation on legal status of foreigners, border management, freedom of movement and travel, etc. To date each country has relevant resources; however, the use of these resources is still very uneven. One can say that out of the diverse sources of administrative statistics related to migration, CIS countries have only a few types available (see Annex II).

Table 3.
Availability of registers and personal identification numbers in CIS countries and use of PINs for producing international migration statistics

	Availability of population register	*Availability of PIN*	*Is PIN used for registration at the place of stay or residence?*	*Is PIN used for producing migration statistics?*
Azerbaijan	yes	yes	yes	no
Armenia	yes	yes	yes	not yet
Belarus	yes	yes	yes	no
Kazakhstan	yes[13]	yes[14]	yes	no
Kyrgyzstan	no	yes	no	no

[12] To collect and update information about the current situation in the field of administrative migration statistics in the CIS countries, a questionnaire was sent to experts from national statistical agencies or migration services. Description of the situation regarding data availability and the main issues associated with administrative statistics of migration in each country to a large extent is based on responses received from the experts of Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova and Uzbekistan. Information for other countries was obtained from public sources and publications

[13] Statistical Population Register was created and started operation in Kazakhstan in 2013.

[14] In Kazakhstan, an individual identification number (IIN) is assigned at birth. IIN for foreigners is assigned when they obtain residence permits. Temporary residents are assigned a IIN if they have income in Kazakhstan. Individual identification number is used for registration, though when a person fills in an arrival card IIN is not indicated.

	Availability of population register	*Availability of PIN*	*Is PIN used for registration at the place of stay or residence?*	*Is PIN used for producing migration statistics?*
Moldova	yes	yes	yes	no
Russia	no	no[15]	no	no
Tajikistan	no	no	no	no
Turkmenistan	no	n/a[16]	n/a	n/a
Uzbekistan	no	no	no	no
Ukraine	no	no	no	no

58. In some countries there are already operational population registers and a gradual transition towards using such registers for producing migration statistics (Table 3). In countries without such registers, there are other administrative systems where the registration of population movements is one of their key functions.

Current measurement of migration flows based on registration at place of residence and place of stay: Measurement techniques

59. In most CIS countries existing systems to collect data on long-term international migration flows were inherited from the former Soviet Union. Apart from Moldova, where the main source of migration statistics was already the Population Register at the end of 1990s, and Armenia which started using population registers very recently, migration flow statistics in CIS countries are still based on special paper forms of statistical monitoring: forms of statistical registration of migrants. Figure 2 shows examples of forms used in Kyrgyzstan and Belarus. Arrival forms are used for immigrants and departure forms are used for emigrants; both forms contain almost identical questions which enable comparing the profiles of immigrant and emigrant flows.

60. Such forms are filled in when a person is registered or deregistered at the place of residence in MoI departments, migration or registration offices and similar agencies responsible for registration of the population. The list of variables included on statistical registration forms is sufficient to obtain major descriptive characteristics of migration flows (see Annex III).

61. Data on children without passports used to be included on the statistical form of one of the parents (with indication of gender, age and name), while a separate statistical form was used for a child moving separately from his/her parents. Today many countries still follow this practice, whereas others use individual forms for each migrant, irrespective of age. Separate statistical forms (with different titles – like "a form for statistical registration of a migrant", a "coupon to the address form of arrival/departure" etc.) were usually filled out for departures and arrivals: a departure form – when a migrant was de-registered from the place of residence, and an arrival form – when the same person is being registered in a new place of

[15] Insurance numbers of individual personal account (INIPA) are increasingly used in Russia; this is the number assigned to a person when he/she is registered in the social insurance system. However, coverage is not yet universal and the decision to use it as a universal identifier has not yet been made.

[16] n/a – information is not available

residence. Thus statisticians used to estimate flows of in – and out-migration on the basis of separate arrays of paper forms, containing information on migration of the same persons. The method to collect statistical data was the same for both international and internal migration, but in the mid-1990s Russia started using only arrival forms. Since these statistical forms contain information about previous place of residence, and they are entered into Rosstat's database, it is possible to measure internal out-migration by place of origin. Departure forms are filled in only if a person emigrates for permanent residence abroad. This practice has now been adopted by some other CIS countries as well.

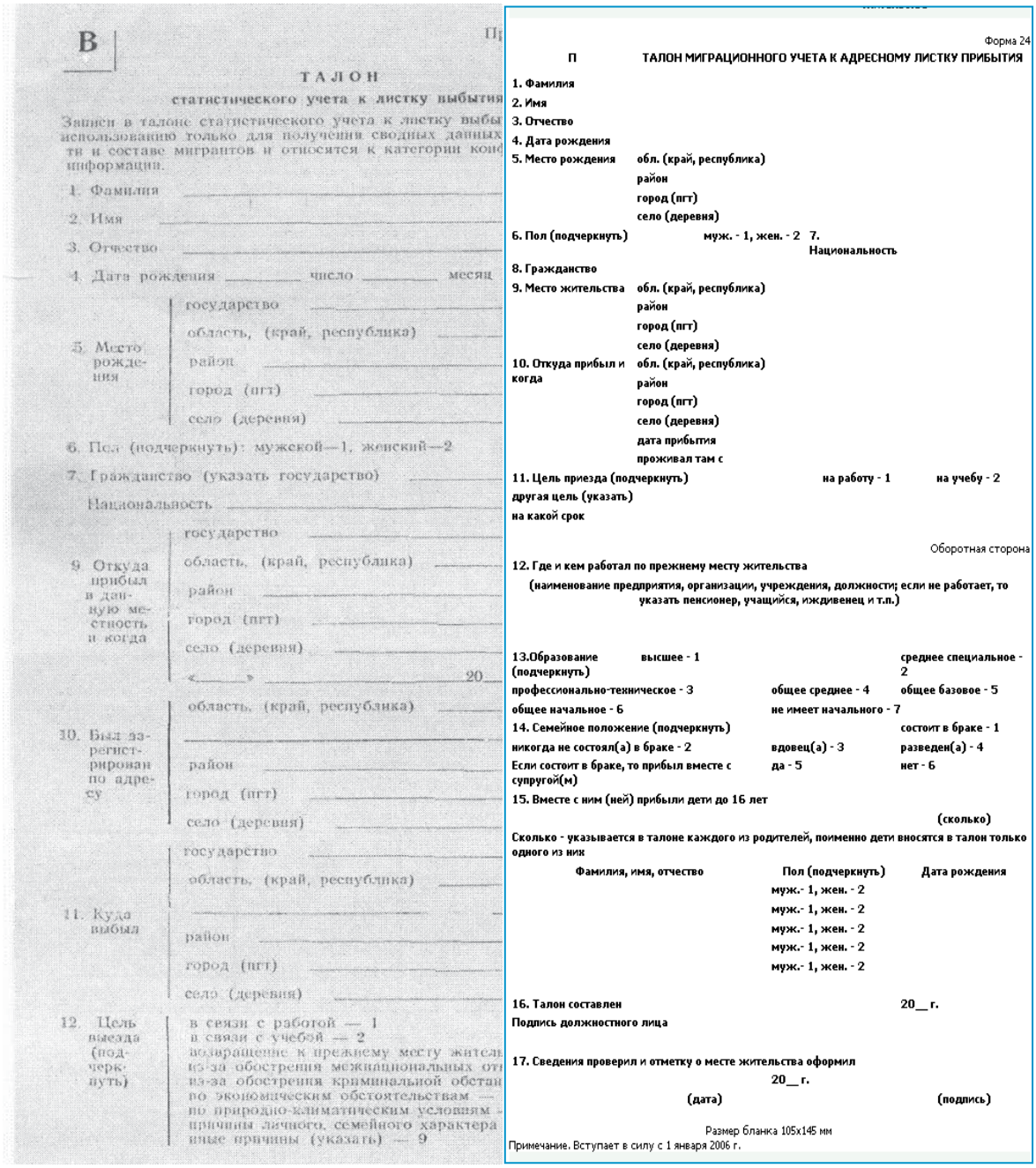
62. Statistical forms are submitted for processing to statistical authorities at regular intervals (in most cases every month, but in some countries every quarter). The agencies responsible for collection of data and the principles of their interactions with national statistics offices are listed in Annex II[17] Original entry forms are usually submitted to statistical authorities on a monthly basis where the data are entered into the database and processed further. The National Statistics Bureau of the Republic of Moldova receives tables with aggregate data from the Population Register every quarter. In Armenia, the National Statistical Service of the Republic of Armenia receives from the Population Register, also on a quarterly basis, anonymized individual-level datasets for further processing and production of migration statistics. From 2004, Ukraine, instead of special statistical forms with an extended list of variables, started using copies of arrival and departure forms filled in by the MoI or migration authority for internal use. These forms are filled in at the time of registration or deregistration and include quite a few variables. This simplified the design of forms, but limited the possibilities for obtaining additional characteristics of migration flows. In Kazakhstan, citizens are registered with the Ministry of Justice (such functions were recently transferred to its mandate), whereas foreigners are registered with the Ministry of the Interior. In this context statistics of foreigners' migration are based on receipts to migration cards. These receipts, as well as citizens' statistical forms, are submitted to the statistical authorities of Kazakhstan for processing.

63. The current method of migration measurement has not changed over the past few decades. Currently NSOs of CIS countries are gradually moving from a paper based to an electronic based data system. Countries (like Armenia and Kazakhstan, for example) which have started operating population registers plan to complete the shift to electronic data management in the near future.

64. The month and day of migration are determined by the date when an arrival or departure form or card was filled in, thus the actual time of movement is hard to know. Foreign immigrants might have lived in the country for some time before applying for or renewing temporary registration. These people will be only be considered as immigrants after they obtain long-term residence status, e.g. receive a residence permit. In other words, a change in status may be considered a reason for recording a foreigner as a migrant. In such situations, the exact dates of arrival (and departure) are not determinable under the existing paper data collection method.

[17] prepared by CISSTAT

Figure 2.
Statistical records of departure of the Kyrgyz Republic (left) and arrival of the Republic of Belarus (right)



В

ТАЛОН
статистического учета к листку выбытия

Запись в талоне статистического учета к листку выбы
использованию только для получения сводных данных
ти и составе мигрантов и относится к категории кон
информации.

1. Фамилия
2. Имя
3. Отчество
4. Дата рождения ____ число ____ месяц
5. Место рождения: государство; область, (край, республика); район; город (пгт); село (деревня)
6. Пол (подчеркнуть): мужской—1, женский—2
7. Гражданство (указать государство)
Национальность
9. Откуда прибыл в данную местность и когда: государство; область, (край, республика); район; город (пгт); село (деревня); «____» 20__
10. Был зарегистрирован по адресу: область, (край, республика); район; город (пгт); село (деревня)
11. Куда выбыл: государство; область, (край, республика); район; город (пгт); село (деревня)
12. Цель выезда (подчеркнуть): в связи с работой — 1; в связи с учебой — 2; возвращение к прежнему месту жител; из-за обострения межнациональных от; из-за обострения криминальной обстан; по экономическим обстоятельствам —; по природно-климатическим условиям; причины личного, семейного характера; иные причины (указать) — 9

Форма 24

П ТАЛОН МИГРАЦИОННОГО УЧЕТА К АДРЕСНОМУ ЛИСТКУ ПРИБЫТИЯ

1. Фамилия
2. Имя
3. Отчество
4. Дата рождения
5. Место рождения: обл. (край, республика); район; город (пгт); село (деревня)
6. Пол (подчеркнуть) муж. - 1, жен. - 2 7. Национальность
8. Гражданство
9. Место жительства: обл. (край, республика); район; город (пгт); село (деревня)
10. Откуда прибыл и когда: обл. (край, республика); район; город (пгт); село (деревня); дата прибытия; проживал там с
11. Цель приезда (подчеркнуть) на работу - 1 на учебу - 2
другая цель (указать)
на какой срок

Оборотная сторона

12. Где и кем работал по прежнему месту жительства
(наименование предприятия, организации, учреждения, должности; если не работает, то указать пенсионер, учащийся, иждивенец и т.п.)

13.Образование (подчеркнуть): высшее - 1; среднее специальное - 2; профессионально-техническое - 3; общее среднее - 4; общее базовое - 5; общее начальное - 6; не имеет начального - 7
14. Семейное положение (подчеркнуть): состоит в браке - 1; никогда не состоял(а) в браке - 2; вдовец(а) - 3; разведен(а) - 4
Если состоит в браке, то прибыл вместе с супругой(м): да - 5; нет - 6
15. Вместе с ним (ней) прибыли дети до 16 лет (сколько)
Сколько - указывается в талоне каждого из родителей, поименно дети вносятся в талон только одного из них

Фамилия, имя, отчество	Пол (подчеркнуть)	Дата рождения
	муж.- 1, жен. - 2	
	муж.- 1, жен. - 2	
	муж.- 1, жен. - 2	
	муж.- 1, жен. - 2	
	муж.- 1, жен. - 2	

16. Талон составлен 20__ г.
Подпись должностного лица

17. Сведения проверил и отметку о месте жительства оформил
20__ г.
(дата) (подпись)

Размер бланка 105x145 мм
Примечание. Вступает в силу с 1 января 2006 г.

Current measurement of migrants in CIS countries: methodology and definitions

65. In Soviet times migration measurement was based on a combination of time criterion (period of intended stay) for temporary migrants and status (type of residence) for people who often changed their places of permanent residence. A person arriving in a new place of residence for a period over 45 days (e.g. for a long business trip) was to obtain temporary registration through the local interior authorities and was recognized as a migrant. Migrant statistics also included all individuals who obtained permanent registration at the new place of residence, in which case period of intended stay was disregarded. When departing, migrants of both categories were required to deregister.

66. After the collapse of the Soviet Union almost all countries reformed their legislation on registration, as many countries adopted laws on the freedom of movement and travel, abandoned the permissive nature of registration and established rules applicable to when a person changed his/her place of residence and stay.

67. Today when generating statistics of migration flows, CIS countries face issues following international recommendations regarding the period of person's stay in a place of permanent or usual residence. When registering a person, and recognizing him/her as a migrant, the criterion of time (residence or absence) is not applied in all countries and is often applied selectively. The principle of a type of registration prevails: if a person was registered at or deregistered from the place of permanent residence he/she is considered to be a migrant.

68. For citizens of a country to be included in migration statistics the act of registration (deregistration) is necessary. To qualify for registration foreign citizens need to have a legal residence permit, which allows them to live in the destination country for a certain period of time. In Moldova the threshold for being considered a migrant is 90 days, in Kazakhstan and Kyrgyzstan – 6 months, in Azerbaijan – 30 days, and in Belarus – one year. For statistical purposes Armenia uses data on registration at place of residence, taking into account citizens of Armenia, including dual citizens, and foreigners with valid residence permits: temporary – for one-year and with the option for annual renewal; and permanent – for a period of five years: special – for a period of ten years.

69. In Russia, starting from 2011 the status of a migrant (permanent or temporary residence permit) is not taken into consideration for compilation of migration statistics. Statistical forms are filled in for all persons (both Russian citizens and foreigners) who have been registered at a place of residence or place of stay for a period of over 9 months. Prior to 2007, for registration at the place of residence, foreigners were required to have a permanent residence permit, whereas for Russian citizens it was sufficient to prove their right to use the housing unit. Starting from 2007, after the Law on Migration Registration of Foreign Citizens was adopted, permanent registration became available to foreigners holding temporary residence permits (valid for up to 3 years), whereas before these temporary foreign citizens were not included in migration statistics.

70. In CIS countries emigrants are considered to be persons who applied to the registration authorities and deregistered due to movement abroad for permanent residence. After conversion to the new methodology in 2011, Russian emigrants are also persons whose registration at the place of stay for 9 or more months has expired. In Moldova emigrants are measured based on applications made by those who leave the country; if such application was not made, for statistical estimates the population register automatically tracks the number of people who are absent in the country for at least three months (based on data on departure and one-way crossing of the border).

71. When attempting to apply international recommendations on international migration statistics, apart from the time threshold, often there are issues with the definition of place of permanent or usual residence. National legislation on registration define place of residence

without a reference to 'daily night-rest'. In most cases legislation refers to a housing unit (property) at a specific address[18].

72. NSOs attempt to compensate for the limitations of administrative data and align migration flow statistics within international recommendations. As mentioned above, starting from 2011 statistical forms of arrival in Russia are produced not only for registration at the place of residence but also for registration at the place of stay for 9 months and more. As registration rules allow foreigners to initially register for three months, while Russian citizens do not need to be registered at all the first three months, the subsequent registration for 9 months and more was to ensure that the threshold of one year is fulfilled.

73. It is difficult to determine whether the quality of data has considerably improved with the new methodology. Long-term migrants now include considerable flows of migrant workers with contracts for 9 months and more, who were previously considered temporary. The date temporary registration expires is indicated on their arrival form and is entered in Rosstat's database for immigration measurement. When temporary registration expires, temporary migrants are automatically considered to have left to the country of their previous residence, whether they have left the country or not. Some of them might have newly registered in another place, but this would only be seen in the Central Data bank of foreigners. There is no procedure for informing Rosstat about "early" de-registrations, and even if there were, it would not be possible to match information on deregistration with actual in-migrant, because Rosstat's data base is anonymous and does not include unique identifiers for migrants. In cases of overstay without renewed registration, a foreigner becomes subject to immigration law and their next entry will be forbidden.

74. The new methodology has resulted in higher numbers of both in-migration and out-migration (upon the expiration of temporary registration). The comparability of Russian statistics with the statistics of other countries of the region has considerably worsened, because temporary migrants in Russia are neither deregistered nor considered as emigrants in their home countries.

75. Figure 3 shows 'mirror' data on migration flows between Russia and Belarus from 2000 to 2013. For some years data were relatively close, however, variances arose in 2007 which resulted in a statistical paradox: both countries had positive net migration. From 2011 the inconsistency in figures appeared to be very high because of the aforementioned methodological changes introduced by Russia for measuring immigration.

[18] Legislative definitions in CIS countries are quite similar. For instance, Azerbaijan defines 'place of residence' as a house, apartment, employer-paid housing, dormitory, homes for the elderly and disabled where people live permanently or for a long time as owners or tenants. Kazakhstan: individuals are registered at the place of their permanent residence, including houses, apartments, dormitories, hotels, holiday houses, sanatoriums, health and recreation resorts, health facilities, residential buildings of dacha and horticultural cooperatives, care homes, and liveable office facilities.

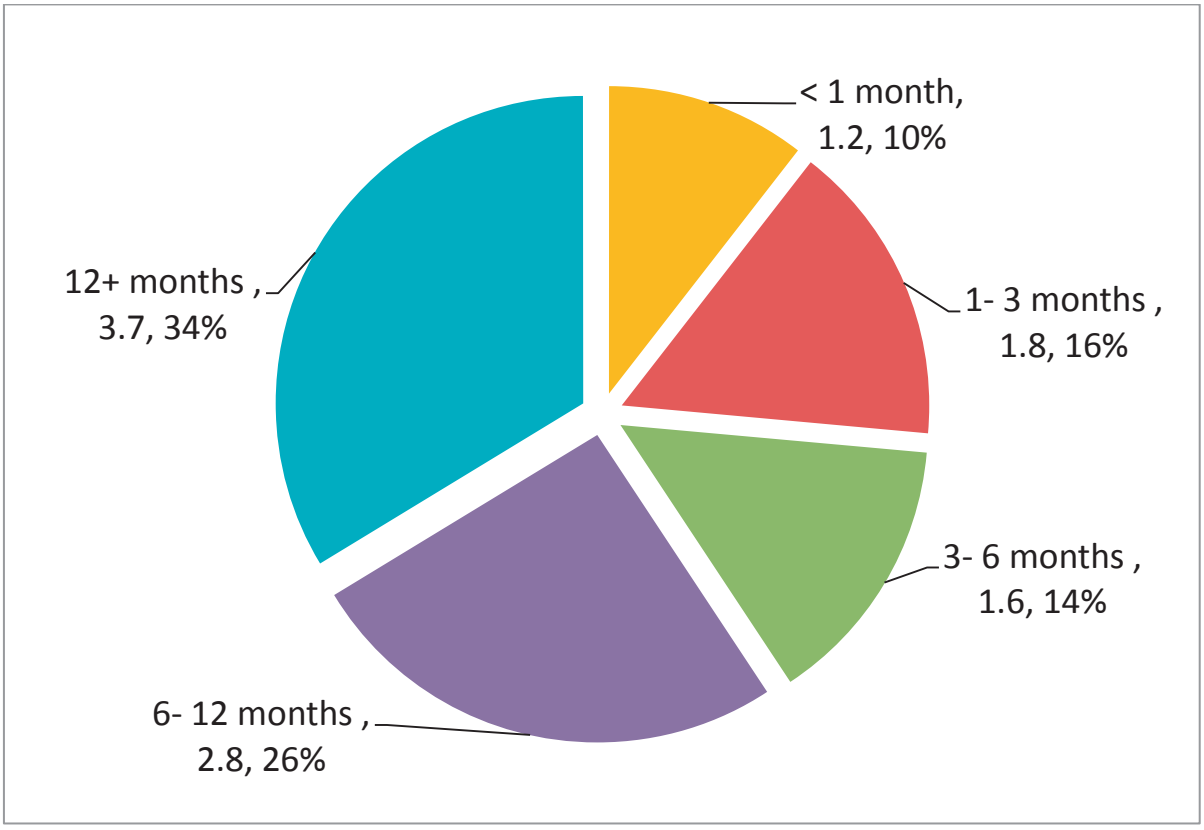
Figure 3.
Mirror data on migration flows between Russia and Belarus, 2000-2013, thousands)

Source: National Statistics Offices

76. CIS countries do not normally disaggregate data on short-term migrants for official statistical purposes, though technically such statistics can be produced if governments – either local or regional – are interested. The Federal Migration Service of Russia has been

producing, for several years already, monthly reports on foreign citizens in the country, by purposes of stay, length of stay (Figure 4), countries of nationality, gender and age groups[19]. These are very brief reports, which do not include breakdowns by both purposes and length of stay, but if desired more detailed distributions can be downloaded from the Central Data Repository for Foreign Citizens, and out of all Russia-based people, data on purpose and period of stay can be obtained.

Figure 4.
Distribution of foreign citizens in the Russian Federation, as of 7 June 2015, by length of stay after arrival, million and percentage



Source: FMS of the Russian Federation

Statistics on permanent and temporary residence permits based on foreigner registration systems in CIS countries

77. These important types of statistics are produced by the migration departments or Ministries of the Interior of CIS countries. In most cases records are computerized and stored in special databases, but sometimes (e.g. in Kyrgyzstan and Tajikistan) due to the low number of cases records are still kept in paper format. In CIS countries the equivalents of registers of foreigners are, for example, the Central Register of Foreign Citizens and Stateless Persons (Russian Federation), a relevant module of the 'Berkut' system (Kazakhstan), and the State Population Register (Republic of Moldova).

[19] http://www.fms.gov.ru/about/statistics/data/

78. Statistics on issued residence permit types have high analytical potential, as these data reflect the application of migration legislation, changes in the legislation and enable the exploration of key characteristics of foreigners arriving in a country for temporary and permanent residence. For instance, Table 4 demonstrates a considerable increase in the number of issued residence permits in Russia to the citizens of Kyrgyzstan and Kazakhstan: almost seven times more in 2013 than in 2010. This rapid increase is due to changes in citizenship legislation rather than increased immigration flows from these countries. Prior to 2011, citizens of Kazakhstan, Kyrgyzstan and Belarus could acquire Russian citizenship almost immediately after arriving to Russia based on their national passports. In autumn 2011 a new citizenship requirement was introduced that when applying for Russian citizenship foreigners need to first establish residency, thus the large increase in residence permits since that time.

Table 4.
Number of foreigners who acquired temporary and permanent residence permits in Russia, 2010-2013, thousands

	2010	*2011*	*2012*	*2013*
Armenia	31.4	43.1	48.9	49.6
Azerbaijan	21.1	25.3	26.4	26.8
Belarus	2.2	2.5	6.1	7.1
Kazakhstan	6.4	10.2	39.6	45.1
Kyrgyzstan	2.4	2.6	14	16.1
Moldova	11.7	16.8	20.5	22.3
Tajikistan	27.8	34.4	37.5	37.4
Ukraine	37.2	50.0	56.2	56.2
Uzbekistan	37.1	46.5	52.6	55.8
Other	21.9	26.2	29.2	28.2
Total	**199.3**	**257.7**	**330.9**	**344.7**

Source: Russian FMS

79. In some countries prior to acquiring a residence permit a foreigner is required to acquire an immigration permit (e.g. Ukraine). In almost every CIS country two types of documents are issued: temporary and permanent, which have different validity periods and conditions for extension, except in Armenia where a special type of residence is also issued with a period of 10 years. In Russia, a temporary residence permit is issued prior to acquiring a permanent residence permit and is issued once, whereas a permanent residence permit is issued for five years and can be further extended. As both statuses assume that a person intends to reside in the country for over one year, the number of people who have temporary and permanent residence permits can be considered as part of the permanent population of Russia. For more accurate estimates one should also take into account the large stock of foreigners who are legally residing in the country based on work or study visas of long duration. Data on residence permit types capture not only flows, i.e. the number of documents issued in the reporting period (or the number of people who acquired such documents), but also the stock of foreigners who have valid documents and reside in the country at a point in time. Figure 5 shows an example of presenting data on the population of Moldova by countries of citizenship as of 1 May 2015.

80. Statistics on residence permit types should be differentiated by purpose of foreigners' residence in the country. As noted above, many countries estimate flows of family, labour, education and other types of migration based on such data. In CIS countries such differentiation of residence permits by purpose is available in Azerbaijan and Moldova[20], while Armenia intends to start producing such data by the end of 2015[21]. In Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan and Ukraine temporary and permanent residence permits are not differentiated by purpose.

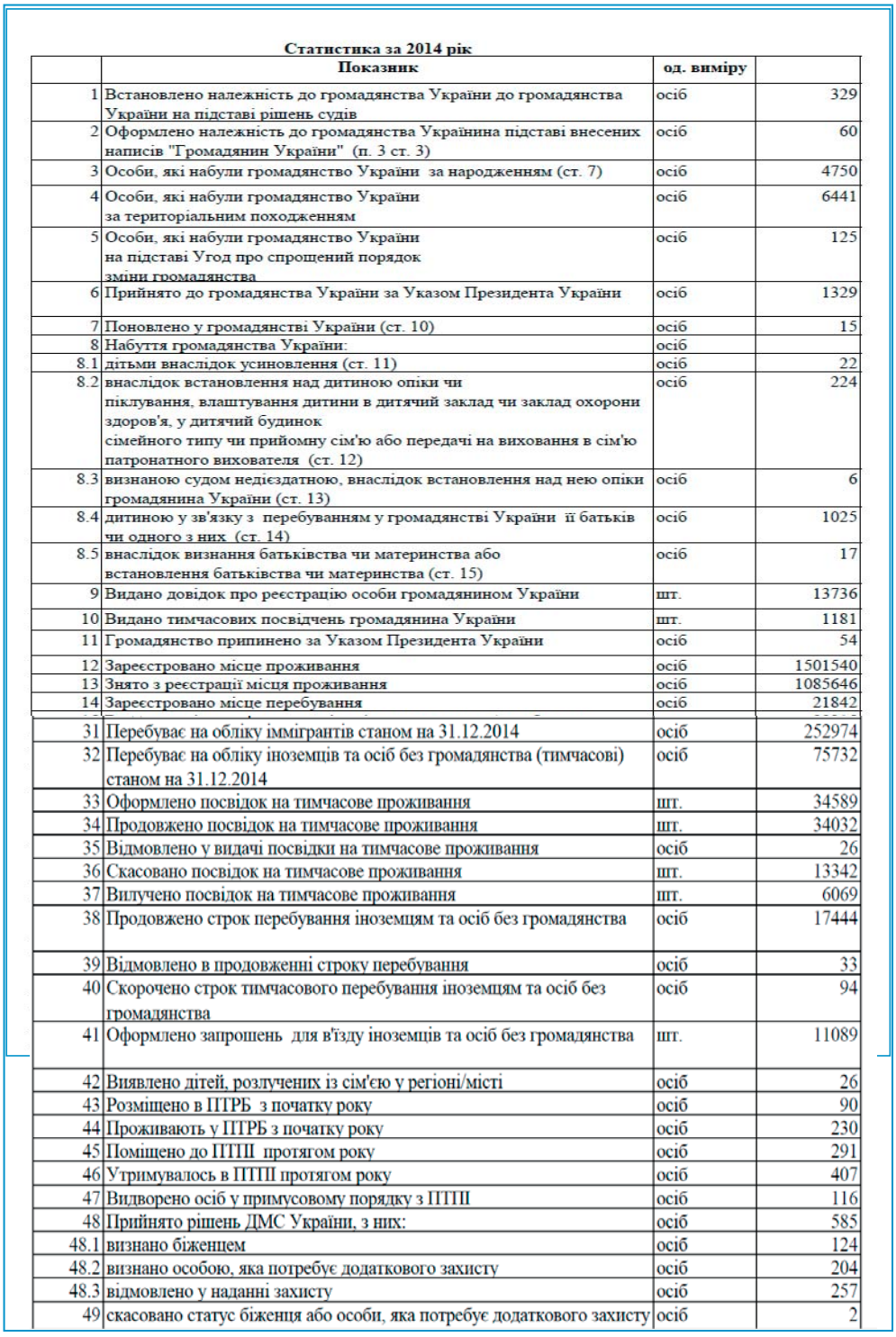
Figure 5.
An excerpt of a statistical report based on the State Population Register of Moldova

Source: State Population Register of Moldova http://www.registru.md/stat3_ru/ or http://www.registru.md/stat3_en/ (accessed on: 12 May 2015)

[20] The following purposes are distinguished: employment, study, family reunion, humanitarian, volunteer or religious activities, long treatment in a health facility, health resort or rehabilitation treatment; investment activities.

[21] By end of 2015 Armenia plans to start producing a new statistical report on 'individuals who obtained residence permits, by gender, age groups, countries of citizenship and grounds for granting residence permits'.

Figure 6.
Excerpt from the 2014 Statistical Report of the State Migration Service of Ukraine



Статистика за 2014 рік

	Показник	од. виміру	
1	Встановлено належність до громадянства України до громадянства України на підставі рішень судів	осіб	329
2	Оформлено належність до громадянства Українина підставі внесених написів "Громадянин України" (п. 3 ст. 3)	осіб	60
3	Особи, які набули громадянство України за народженням (ст. 7)	осіб	4750
4	Особи, які набули громадянство України за територіальним походженням	осіб	6441
5	Особи, які набули громадянство України на підставі Угод про спрощений порядок зміни громадянства	осіб	125
6	Прийнято до громадянства України за Указом Президента України	осіб	1329
7	Поновлено у громадянстві України (ст. 10)	осіб	15
8	Набуття громадянства України:	осіб	
8.1	дітьми внаслідок усиновлення (ст. 11)	осіб	22
8.2	внаслідок встановлення над дитиною опіки чи піклування, влаштування дитини в дитячий заклад чи заклад охорони здоров'я, у дитячий будинок сімейного типу чи прийомну сім'ю або передачі на виховання в сім'ю патронатного вихователя (ст. 12)	осіб	224
8.3	визнаною судом недієздатною, внаслідок встановлення над нею опіки громадянина України (ст. 13)	осіб	6
8.4	дитиною у зв'язку з перебуванням у громадянстві України її батьків чи одного з них (ст. 14)	осіб	1025
8.5	внаслідок визнання батьківства чи материнства або встановлення батьківства чи материнства (ст. 15)	осіб	17
9	Видано довідок про реєстрацію особи громадянином України	шт.	13736
10	Видано тимчасових посвідчень громадянина України	шт.	1181
11	Громадянство припинено за Указом Президента України	осіб	54
12	Зареєстровано місце проживання	осіб	1501540
13	Знято з реєстрації місця проживання	осіб	1085646
14	Зареєстровано місце перебування	осіб	21842
31	Перебуває на обліку іммігрантів станом на 31.12.2014	осіб	252974
32	Перебуває на обліку іноземців та осіб без громадянства (тимчасові) станом на 31.12.2014	осіб	75732
33	Оформлено посвідок на тимчасове проживання	шт.	34589
34	Продовжено посвідок на тимчасове проживання	шт.	34032
35	Відмовлено у видачі посвідки на тимчасове проживання	осіб	26
36	Скасовано посвідок на тимчасове проживання	шт.	13342
37	Вилучено посвідок на тимчасове проживання	шт.	6069
38	Продовжено строк перебування іноземцям та осіб без громадянства	осіб	17444
39	Відмовлено в продовженні строку перебування	осіб	33
40	Скорочено строк тимчасового перебування іноземцям та осіб без громадянства	осіб	94
41	Оформлено запрошень для в'їзду іноземців та осіб без громадянства	шт.	11089
42	Виявлено дітей, розлучених із сім'єю у регіоні/місті	осіб	26
43	Розміщено в ПТРБ з початку року	осіб	90
44	Проживають у ПТРБ з початку року	осіб	230
45	Поміщено до ПТПІ протягом року	осіб	291
46	Утримувалось в ПТПІ протягом року	осіб	407
47	Видворено осіб у примусовому порядку з ПТПІ	осіб	116
48	Прийнято рішень ДМС України, з них:	осіб	585
48.1	визнано біженцем	осіб	124
48.2	визнано особою, яка потребує додаткового захисту	осіб	204
48.3	відмовлено у наданні захисту	осіб	257
49	скасовано статус біженця або особи, яка потребує додаткового захисту	осіб	2

Source: State Migration Service of Ukraine http://dmsu.gov.ua/statistichni-dani

81. In most CIS countries the agencies responsible for issuing residence permits, granting citizenship, etc. provide some aggregate data to the official statistics authorities. They provide tables with a limited number of variables.

82. The Migration Department of Azerbaijan provides the NSO quarterly data on those who acquired temporary and permanent residence permits (as well as citizenship), with breakdowns by citizenship, gender and age. In Russia, FMS provides, upon request from different users, data on individuals who acquired temporary and permanent residence permits, and publishes brief reports on its web site[22]. The National Statistics Committee of Belarus regularly receives aggregate statistics on residence permits from the Citizenship and Migration Department. In Kazakhstan, Kyrgyzstan and Tajikistan data on residence permits are available on request but not published. By the end of 2015, the National Statistical Service of Armenia plans to produce regular statistical reports on persons who acquired residence permits, by gender, age, countries of citizenship and grounds for granting residence permits. Data for the first quarter of 2015 is available in the monthly report "Socio-economic situation of the Republic of Armenia, January-September 2015" in Armenia and in Russian[23]. Some data obtained on demand from the Armenian Police are available on the website of the Migration Department.

83. In other CIS countries statistics on residence permits are only published by some migration departments, and when published, only in aggregate form without breakdowns by countries of citizenship, purpose of arrival or population characteristics[24]. More detailed data are available on request, though mainly to other government authorities rather than external data users.

84. It seems the best example of statistical reports available on websites of migration departments of the CIS countries are reports published by the State Migration Service of Ukraine, even though these data are insufficient for analysing or even describing the migration situation in the country (see Figure 6). Though many countries already collect a wealth of administrative data on foreign citizens, since the information is not disseminated, few countries take full advantage of this potential storehouse of knowledge to better understand migration processes[25].

4. Administrative sources of data on specific categories of migrants and associated events

4.1. Statistics of labour migration

Overview

85. Most data on labour migration are collected through sample surveys. However, the potential role of administrative sources should not be underestimated. The main categories of migrant workers of interest for statistics are foreigners arriving and residing in a country for work (flows and stocks of labour in-migration), as well as citizens of the country leaving and

[22] http://www.fms.gov.ru/about/statistics/data/details/135873/

[23] http://armstat.am/ru/?nid=82&id=1711, p.119

[24] An example of a summary report of the Ukrainian State Migration Department: http://dmsu.gov.ua/statistichni-dani

[25] Migrants Count Five Steps Toward Better Migration Data. Patricia A. Santo Tomas and Lawrence H. Summers, Co-chairs Michael Clemens, Project Director. May 2009 Report of the Commission on International Migration Data for Development Research and Policy

staying abroad for work purposes (flows and stocks of labour out-migration)[26]. It is also recommended to have data on return migrant workers in their countries of citizenship (or former residence), though it is difficult to keep track of such flows through administrative systems when short- or long-term migrants do not initially de-register from their origin country; it is possible only if migration takes place in an organized manner or is controlled by a sending country.

86. Potential administrative sources of labour migration data are listed in Table 5 and Table 6.

Table 5.
Administrative data on labour migration

Type of data	*Statistical category*
Visa statistics and statistics of invitations to enter a country for work	Flows
Statistics of work permits: number of work permits issued and valid at a point in time	Flows and stocks
Employers' reports on expatriate employees (total executed contracts, terminated contracts, valid contracts)	Flows and stocks
Statistics collected at the border (if purpose of entry is specified)	Flows
Data on the registration at the place of stay or residence (if work is specified as a purpose): total number of registered and registered at a point in time	Flows and stocks
Statistics on issued residence permits / temporary residence permits, if work is specified as a purpose, and the number of residents at a point in time (disaggregation by working age groups indirectly demonstrates the potential of labour resources)	Flows and stocks
Health insurance, taxation systems (total registered and registered at a point in time or new registrations over a period of time)	Flows and stocks
Data on the recognition of diplomas obtained abroad and permits for professional activities	Flows

87. Data on labour immigration flows more often than not are available even in predominately migrant sending countries. Such statistics are based on issued work permits and employers' reports on employment of foreigners. When working with such data one should bear in mind that double counting is common because one person may acquire, for instance, more than one work permit or be employed by several employers at the same time or over the same time period.

88. General population registration systems can be used as additional sources of data on labour migration if the system records the purpose of movement, grounds for acquiring a

[26] E. Hoffmann. and S. Lawrence. Statistics on International Labour Migration. A review of sources and methodological issues. ILO Geneva, 1996.

residence permit or visa type. For instance, based on the population register, Norway produces statistics of immigrants, for which they report persons who arrived for work. However, population register data capture the number of people who arrived for long-term residence, whereas labour migration involves short-term migrants as well. As per data from Statistics Norway, 25,500 foreign immigrants arrived in the country in 2012 for work, whereas the Immigration Department issued 49,000 work permits in 2012, almost 40,000 of which were issued to citizens of the European Economic Area[27]. Thus, definitions and categories measured are essential in analysing labour migration statistics.

89. Administrative systems for issuing documents for professional activities of foreigners often appear in a subsystem of registers of foreigners or similar systems for measuring foreign population. They reflect the results of processing of foreigners' applications for work permits, including data on applicants and employers. With respect to labour migration statistics, administrative sources are more effective for measuring specific subcategories of migrants employed in the formal sector, as opposed to estimating migrants in the total labour force[28].

90. In countries with common labour markets administrative statistics on work permits often only capture citizens of so-called 'third' countries. In such cases the only complete sources of data on labour migration are labour force surveys or population censuses[29]. But some countries with common markets still require registration of job seekers from partner countries, thus are still able to measure and publish statistics.

91. The Department of Jobs, Enterprise and Innovation in Ireland publishes monthly reports with aggregate data on work permits issued, by nationalities, sectors of the economy, counties, as well as statistics on companies licensed to hire foreigners (Figure 7).

92. Main sources of administrative data on labour migration are considered to be *specialized* systems which register: the process for issuing permits for work to migrants, permits to employers for hiring expatriates, and employers' reports on employment (executed and terminated labour contracts). If a country has special programmes for seasonal labour migration, or for hiring employees in specific sectors or regions, etc., there should also be statistics capturing the implementation of such programmes.

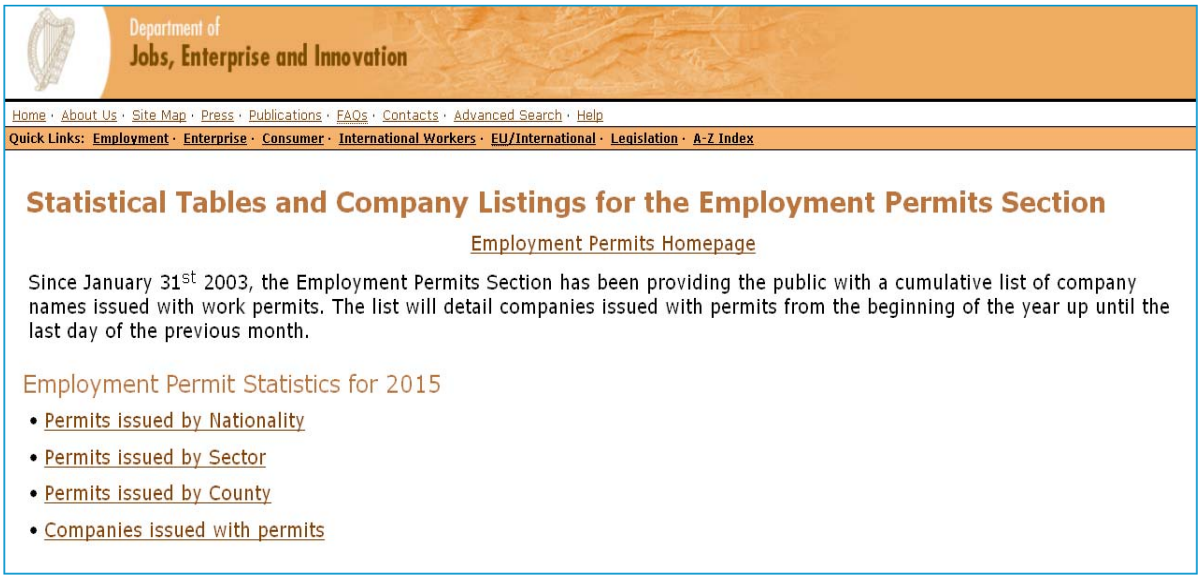
[27] Norwegian Directorate of Immigration. Migration 2012. Facts and analysis. http://www.udi.no/en/statistics-and-analysis/annual-reports/annual-reports-from-previous-years/arsrapport-2012/

[28] Guide on developing an international labour migration statistics database in ASEAN: Tripartite Action for the Protection and Promotion of the Rights of Migrant Workers in the ASEAN Region (ASEAN TRIANGLE Project)

Regional Office for Asia and the Pacific Towards more effective data collection and sharing

[29] EU example can be cited: the 2012 Labour Force Survey (LFS) showed that of 15.2 million. foreign workers in the EU countries, 6.6 million. were citizens of other EU countries, whereas the rest were non-EU citizens. See Teichgraber M. European Union Labour force survey – annual results 2012. Statistics in focus 14/2013; ISSN: 2314-9647 Catalogue number: KS-SF-13-014-EN-N. http://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Labour_force_survey_overview_2012

Figure 7.
Screenshot of a web page from the Department of Jobs, Enterprise and Innovation in Ireland[30]



93. The issue of definitions is also important for labour migration statistics. The 1998 UN recommendations define migrant workers as 'foreigners admitted by the receiving State for the specific purpose of exercising an economic activity remunerated from within the receiving country. Their length of stay is usually restricted as is the type of employment they can hold. Their dependants, if admitted, are also included in this category'[31]. While this definition is often not followed when compiling migration statistics, national legislation also introduces their own definitions. Specifically, the Law of the Republic of Kazakhstan on Migration defines labour migration as 'temporary movement of individuals from other states to the Republic of Kazakhstan and from the Republic of Kazakhstan, as well as within the state, for employment'[32]. The Law of the Russian Federation on Legal Status of Foreign Citizens says that a foreign employee is a 'foreign citizen who is temporarily in the Russian Federation and performing work in due manner'[33].

94. Regarding labour migration, many countries consider not only foreigners in the labour force, but also those trained abroad (both native and foreign citizens). When studying migration of trained specialists they use not only the criterion of citizenship (foreigners), but the criterion of place where they were trained (those who were trained abroad are "foreign-trained"). The latter becomes important when admitting such specialists to the national labour market for work in specific professions.

95. It is more difficult to collect data on the flows or stocks of country's citizens who departed for work abroad, thus the quality of such data is not very good. The main administrative sources of labour out-migration statistics are considered to be the following (Table 6):

[30] http://www.djei.ie/labour/workpermits/statistics.htm

[31] UN Recommendations on statistics of international migration (Rev. 1) 1998

[32] Law of the Republic of Kazakhstan on Migration (December 1997).

[33] Russian Federal Law on Legal Status of Foreign Citizens in the Russian Federation

Table 6.
Administrative data on labour out-migration

Type of data	*Statistical category*
Contracts executed in the country of origin (reports of employment agencies or responsible government agencies)	Flows and stocks
Exit permits	Flows
Border crossing data (if work is specified as a purpose of exit)	Flows
Indirect methods – statistics of professional training, medical examinations, etc. prior to exit[34]	Flows

96. In most cases only a small proportion of migrant workers sign contracts before they leave abroad, as most migrants leave through independent channels and find jobs themselves. Therefore these data capture only a small amount of the total volume of moves. Apart from considerable underestimation, the statistics of contracts signed in the country of origin may only capture a specific flow of migrant workers, such as in a particular industry or occupation. Given these limitations it would be inappropriate to measure labour out-migration solely based on these data.

97. Countries that send many migrants are interested in accurate statistics on labour out-migration. There are some successful global examples of measuring labour out-migration, with the best known example in the Philippines. Many citizens of the Philippines who move abroad for work sign contracts with future employers before they leave the country, which are then registered in the Philippine Overseas Employment Administration, which operates together with the Overseas Workers Welfare Administration. Both agencies are part of the Ministry of Labour and maintain a shared Information System for Migration. Various data are entered into the database: date of birth, gender, civil status, educational attainment, dependants and beneficiaries, contract data, and employer data[35]; thus enabling detailed statistical analysis[36]. However, one should realize that the fact that the Philippines is an island, and that there are clear incentives for registering with the Ministry of Labour, has a role to play in their ability to collect information.

Labour migration statistics in CIS countries

98. Most CIS countries (excluding Moldova and Armenia) have developed rather similar systems of administrative reporting on labour migration, often even using the same names for forms. Reports on hired foreign labour force are based on issued permits and in some cases via employers' reports, though sometimes sources are combined. For example, in Russia, between 2010 and 2014 data on migrant workers from countries with visa regimes were

[34] Although some countries provide such services for potential out-migrants, these certificates as a rule are not recognized in the country of destination, and such practices are limited and cannot be considered a source of statistics on outflows.

[35] See Lina V. Castro. Measuring international migration in the Philippines. WP18, United Nations Expert Group Meeting on Measuring international migration: Concepts and methods. 4–7 December 2006 United Nations, New York; Jeremaiah M. Opiniano, Statistics on Filipinos' International Migration: Issues and Steps Towards Harmonizing the Data. 10th National Convention on Statistics (NCS), 1-2 October 2007, Manila, Philippines.

[36] http://web0.psa.gov.ph/content/statistical-tables-overseas-contract-workers-ocw-2014

based on issued work permits, whereas data on migrant workers not requiring a visa to enter the country were based on employers' notifications. This practice was done to more precisely measure actual working migrant workers, because 'visa' employees arrived in the country with employer's assistance and guaranteed employment, whereas visa-free migrants could acquire work permits by themselves, but not all of them were able to find jobs. To this end, Tajikistan has a special reporting form based on employer's reports. The main issue associated with the production of reports supplied by employers is the impossibility of measuring employment by private households, when in fact such employment is quite common in migrant receiving countries.

99. Over the past several years many countries have revised existing reporting forms. In 2011, Rosstat changed the format for reporting by the Federal Migration Service because according to the old form the sum of the number of work permits at the beginning of the year (stock) and new permits issued during the year (inflow) was used to measure total workers during the reporting period. It disregarded the fact that a work permit is valid for one year and those who had valid work permits at the beginning of the year might have also acquired a new work permit during the year after the old one expired. At the same time, it was not clear how to interpret such an indicator, as it is a sum of a flow and a stock which is not practiced in migration statistics.

100. The issue of aligning statistical definitions of labour migration with administrative data sources can be problematic. If citizenship is applied as a main criteria, and we consider everyone who is pursuing (or plans to pursue) paid activities outside of the country of his/her citizenship as labour migrants, then it is not applicable in all cases, such as in the European Union or the Eurasian Economic Space. As noted above, citizens of partner states are not captured by work permit statistics as they do not require work permits, while their presence in the national labour market can be quite sizable.

101. Data on labour immigration are produced in standard tables and regularly submitted to NSOs. As a rule, tables contain breakdowns of foreigners by countries of citizenship while more detailed statistics can be provided upon request. The CIS Statistics Committee (CISSTAT) also collects summary statistical reports on labour migration with summary data on flows.

102. Starting from 2007, Russia's FMS has produced standard statistical reports with major indicators, including labour migration. In addition, information from the Central Data Bank of Foreigner Citizens and Stateless persons (CDBFSP) is used. Considerable data are available upon request and enable analysis of foreign employees by gender, age and professional groups. Citizens of the Eurasian Economic Union[37], which is in fact a common labour market, are not included in work permit statistics. Lack of data from these countries can only be compensated by indirect statistics from other sources, such as migration registration data, assignment of TIN, labour force surveys, etc.

103. To date, among CIS countries only Armenia has no administrative sources of labour migration data, since no legal framework has been put in place to regulate the presence of

[37] Treaty on the Eurasian Economic Union, signed by presidents of Belarus, Kazakhstan and the Russian Federation, entered into force on 1 January 2015. Armenia joined the Union on 2 January 2015 and Kyrgyzstan on 12 August 2015.

foreigners in the national labour market, while the practice of Armenian citizens signing pre-departure job contracts for work abroad is also not regulated.

104. Statistics on pre-departure contracts s are collected in all CIS countries except Armenia. Employment agencies, which are licensed to perform this work by the government (Migration Department or MoI), recruit personnel to meet specific employers' requirements and submit statistical reports to national migration offices (or responsible agency). However, flows of regulated departures for employment purposes are very small because most migrants leave their home countries without assistance from employment agencies. Estimates using data provided by NSOs demonstrated that in 2006-2009, out of all Ukrainian migrants who acquired work permits in Russia, only 2% went to Russia with the assistance of employment agencies.

4.2. Statistics on international students

Overview

105. Statistics on international students are important not only because they are considered by many countries to be potential immigrants, but also since educational services have emerged as a profitable sector of the economy and quantitative measures are needed to guide its development. Though it seems simple, measurement of international students is not limited to one indicator showing the number foreign citizens studying in the destination country. Meaningful statistics require data on enrolment, graduation, fields of study and levels of education in accordance with international classifications.

106. Student migration statistics can be found in various administrative systems. The UK Council for International Student Affairs can be cited as an example. Major sources of administrative information include: the Higher Education Statistics Agency – which develops data on the higher education system; Universities and Colleges Admissions Service (UCAS) – which collects statistics on applications and enrolments; and the Home Office – which publishes statistics on issued student visas[38].

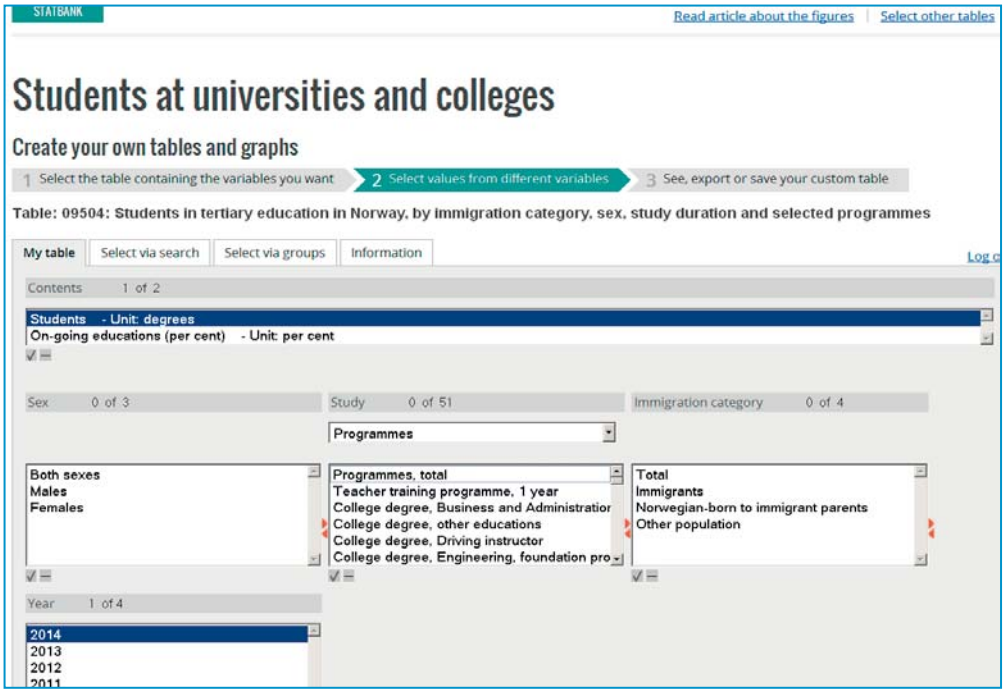
107. In countries which have population registers, student migration statistics show not only current student migrants, but also students with immigrant background (Figure 8). Data are often available by gender, age, field of study, level of education (as completed in the destination country) and years of enrolment[39]. Publications on these topics are often supported with brief analysis[40].

[38] http://www.ukcisa.org.uk/Info-for-universities-colleges--schools/Policy-research--statistics/Research--statistics/International-student-statistics/

[39] For example see Statistics Norway web site https://www.ssb.no/statistikkbanken/selectvarval/Define.asp?subjectcode=&ProductId=&MainTable=Studium&nvl=&PLanguage=1&nyTmpVar=true&CMSSubjectArea=utdanning&KortNavnWeb=utuvh&StatVariant=&checked=true

[40] See, e.g. Students at universities and colleges, 1 October 2014. Published: 4 May 2015 https://www.ssb.no/en/utuvh

Figure 8.
Screenshot from Statistics Norway's web site with data on students in universities and colleges



108. When producing student migration statistics one should bear in mind that not all foreign students arrived in the country to study, as many already have permanent resident status in their countries of study, or were even born here[41]. To get a clearer picture of student migration, OECD disaggregates graduate education data by foreign students arriving for educational purposes and foreigners who arrived prior to entering university [42]. Most countries have these data in their administrative systems.

Student migration statistics in CIS countries

109. All CIS countries measure foreign students studying in higher educational institutions (and in some countries – secondary education as well), through data collection systems inherited from the Soviet period and reports by educational institutions. Though there are small differences, the systems for measuring foreign students in CIS countries are very similar. In some countries the collection of statistics has been fully delegated to the Ministry of Education which submits reports to the NSO. For instance, in Russia, until a few years ago data on students were collected by the Rosstat's regional offices, with each university sending a detailed statistical report at the beginning of each academic year. Now this task in performed by the Ministry of Education, who conduct parallel data collection using a similar form, after which data is sent to Rosstat for reporting on educational institutions. Some CIS countries still have sectoral universities and until recently the Ministry of Education could not obtain data for them, though educational institutions of security forces are still exempt from reporting requirements.

[41] And vice versa, some students who used to live abroad before enrolment are e citizens of the country where they study and most probably would not be considered as international students.

[42] http://stats.oecd.org/Index.aspx?DatasetCode=RGRADSTY

110. Though there are some minor differences, systems for measuring foreign students are quite similar in CIS countries. The reporting form contains several sections: enrolment, graduation and stock of students from other countries. Several years ago most countries stopped collecting information on 'country of residence' and now only collect data on students' citizenship. In Tajikistan, the form remained unchanged and is still called 'Stock of students permanently residing in the CIS and other countries'.

111. Statistics of student migration in CIS countries are faced with some difficulties, related to the fact that some countries are in transition from the Soviet education system[43] to a western one (that divides tertiary education programs to bachelor and master levels). As a rule, statistical reports on foreign students in higher educational institutions in CIS countries do not provide breakdowns for Bachelor, Master students or students studying to become "specialists". One can assume that with the implementation of the Bologna process[44], to which several countries have already joined, statistics will be differentiated (as has been done in Ukraine) by these levels in the future. This will help both to avoid double counting (if a Bachelor graduate progresses to a Master programme, he/she is currently counted as enrolled twice but in different years), and ensure comparability student migration statistics between countries.

112. One should note that all CIS countries publish statistics on foreign students. The level of detail varies: some countries provide data only on the stock of foreign students at the beginning of academic year (by countries of citizenship), while others publish data on enrolment, stocks and graduations (see Figure 9).

113. Ukraine's Ministry of Education and Science receives detailed lists of foreign students from universities; such data contain: student names, citizenship, date of birth, gender, enrolment year, expected graduation year, mode of study, field or profession, and source of financing. In education statistics collected by Ukraine (Figure 10) foreign students are shown by type of higher educational institution, subject to level of accreditation – one report contains data for secondary and tertiary vocational educational institutions, while reports from the Ministry of Education and Science include ownership (public and private) and modes of study (full-time, evening-time, in-person, etc.[45]).

[43] The Soviet system consists of 10-11 years of secondary school or secondary vocational school and then 5-6 years of tertiary education. Graduates' diplomas did not specify any degree ("bachelor" or "master")– just the title of profession: "statistician", "engineer", "teacher of English language" etc. This system is still implemented in many tertiary education institutions, even those with bachelor and master programs. Transition to the new system of education led to an increase of enrolment (and graduation) because many bachelor graduates immediately entered master programs, thus making it possible that the same student could be counted twice in the same time period.

[44] A series of international agreements and consultations to harmonize tertiary education systems in Europe to ensure equality of educational standards and comparability of qualifications http://www.ehea.info/

[45] http://минобрнауки.рф/%D0%BC%D0%B8%D0%BD%D0%B8%D1%81%D1%82%D0%B5%D1%80%D1%81%D1%82%D0%B2%D0%BE/%D1%81%D1%82%D0%B0%D1%82%D0%B8%D1%81%D1%82%D0%B8%D0%BA%D0%B0

Figure 9.

Excerpt from the table "Number of foreign students in the tertiary educational institutions of the Republic of Moldova"

7.1.46. NUMĂRUL STUDENŢILOR STRĂINI CARE ÎŞI FAC STUDIILE ÎN INSTITUŢIILE DE ÎNVĂŢĂMÎNT SUPERIOR DIN REPUBLICA MOLDOVA
ЧИСЛЕННОСТЬ ИНОСТРАННЫХ СТУДЕНТОВ, ОБУЧАЮЩИХСЯ В ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЯХ РЕСПУБЛИКИ МОЛДОВА
NUMBER OF FOREIGN STUDENTS STUDYING IN HIGHER EDUCATION INSTITUTIONS OF THE REPUBLIC OF MOLDOVA

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Total / *Всего* / *Total*	**1646**	**1383**	**1219**	**1300**	**1372**	**1632**	**2028**	**2138**
din care, din: / *в том числе из:* / *of which, from:*								
Belarus / *Беларуси* / *Belarus*	16	20	15	13	15	11	10	5
Bulgaria / *Болгарии* / *Bulgaria*	82	66	53	44	47	24	16	4
China / *Китая* / *China*	5	4	4	7	2	3	1	9
Iordania / *Иордании* / *Jordan*	89	45	9	5	6	7	8	7
Israel / *Израиля* / *Israel*	175	207	300	525	764	1068	1384	1551
Kazahstan / *Казахстана* / *Kazakhstan*	4	5	1	3	4	3	4	3
România / *Румынии* / *Romania*	130	100	78	48	36	80	155	108
Federaţia Rusă / *Российской Федерации* / *Russian Federation*	178	166	140	141	118	113	102	82
Siria / *Сирии* / *Syria*	223	159	103	62	23	10	14	16
Sudan / *Судана* / *Sudan*	39	28	24	14	7	1	3	4
Turcia / *Турции* / *Turkey*	190	163	149	146	76	57	60	71
Ucraina / *Украины* / *Ukraine*	421	354	271	235	202	157	165	164
Alte ţări / *Других стран* / *Other countries*	94	66	72	57	72	98	106	114

Source: National Bureau of Statistics of the Republic of Moldova

Figure 10.

Major indicators of higher educational institutions in Ukraine, 2014/15 academic year.

НАВЧАННЯ ІНОЗЕМНИХ СТУДЕНТІВ У ВНЗ НА ПОЧАТОК 2014/15 НАВЧАЛЬНОГО РОКУ

(осіб)

	Код країни	У ВНЗ I - II рівнів акредитації			У ВНЗ III - IV рівнів акредитації			У ВНЗ I - IV рівнів акредитації		
		Всього навчається	Прийнято на початковий цикл навчання	Випущено після завершення повного циклу навчання	Всього навчається	Прийнято на початковий цикл навчання	Випущено після завершення повного циклу навчання	Всього навчається	Прийнято на початковий цикл навчання	Випущено після завершення повного циклу навчання
А	Б	1	2	3	4	5	6	7	8	9
Всього		**122**	**38**	**54**	**56811**	**6908**	**7133**	**56933**	**6946**	**7187**
у т.ч. прибули з										
АФГАНІСТАН	4	1	1	-	43	7	12	44	8	12
АЛБАНІЯ	8	-	-	-	5	-	-	5	-	-
АЛЖИР	12	1	1	-	109	16	16	110	17	16
АНГОЛА	24	-	-	-	447	111	29	447	111	29
АЗЕРБАЙДЖАН	31	18	7	-	9239	1099	647	9257	1106	647
АРГЕНТИНА	32	-	-	-	33	18	-	33	18	-
АВСТРАЛІЯ	36	-	-	-	2	-	-	2	-	-
АВСТРІЯ	40	-	-	-	15	1	-	15	1	-
БАХРЕЙН	48	-	-	-	22	-	26	22	-	26
БАНГЛАДЕШ	50	-	-	-	48	7	5	48	7	5
ВІРМЕНІЯ	51	3	-	3	428	56	22	431	56	25
БЕЛЬГІЯ	56	-	-	-	4	2	-	4	2	-
БОТСВАНА	72	-	-	-	8	-	2	8	-	2
БРАЗІЛІЯ	76	-	-	-	7	3	-	7	3	-
БОЛГАРІЯ	100	-	-	-	132	9	27	132	9	27
М'ЯНМА	104	-	-	-	2	1	-	2	1	-
БІЛОРУСЬ	112	19	2	14	332	33	104	351	35	118
КАМЕРУН	120	2	2	2	366	80	37	368	82	39
КАНАДА	124	-	-	-	46	7	15	46	7	15
КАБО-ВЕРДЕ	132	-	-	-	1	-	-	1	-	-
ШРІ-ЛАНКА	144	-	-	-	64	1	3	64	1	3
ЧАД	148	-	-	-	3	1	2	3	1	2
ЧІЛІ	152	-	-	-	1	-	-	1	-	-
КИТАЙ	156	1	1	-	1749	252	821	1750	253	821
ТАЙВАНЬ, ПРОВІНЦІЯ КИТАЮ	158	-	-	-	2	1	-	2	1	-
КОЛУМБІЯ	170	-	-	-	3	3	2	3	3	2
КОМОРИ	174	-	-	-	3	-	-	3	-	-

Source: Statistical Bulletin. Kiev, 2015

114. Apart from Ministries of Education data, sometimes there are special agencies responsible for the collection and analysis of data on international students. For instance, such an agency in Ukraine is the Ukrainian Public Centre of International Education, while in

Russia there is an analytical agency under the Ministry of Education and Science, called the Centre of Surveys, which has been collecting and producing detailed statistics on foreign students in higher educational institutions. Such agencies can publish reports which contain more detailed information than compilations produced by NSOs.

115. Flows and stocks of student emigrants are harder to measure. All countries note that data on country's citizens who left for study abroad are available only for those who left the country under intergovernmental agreements and programmes. Most students leave the country by themselves and are not captured by these statistics. Like other types of emigration statistics, emigration of students could be better estimated through data from receiving countries or data collected by international organizations.

116. Though general measures for international student migration in CIS countries are available, there is consistency in statistical monitoring, and the information is quite open, there are still some outstanding issues related to data on student migration. Reviewing students' integration and migration strategies requires data on how many students stay in the country of study after graduation, change their status, acquire work permits, residence permits and later, citizenship. Educational institutions and the Ministry of Education are unlikely to be able to collect such information. In this context, administrative data are very valuable because it is possible to track real and documented changes in foreigners' status. The main provider of such data can be agencies responsible for immigration control (e.g. migration department), access to the labour market and obtaining residency status in the country. But the production of such statistics is something for the future because, as far as we know, migration departments are not doing this at the present time.

4.3. Visa statistics

Overview

117. Visa data have a number of limitations which need to be taken into account to be used for measuring migration. If a country is part of a visa-free regime, only a part of migration flows will be captured by statistics using these sources. Multi-entry visas, especially long ones, imply that the number of trips exceeds the number of visas issued. Some foreigners while being already in the country, for one reason or another, apply for a visa status change or a new visa. The above limitations make it difficult to interpret visa statistics, especially in CIS countries.

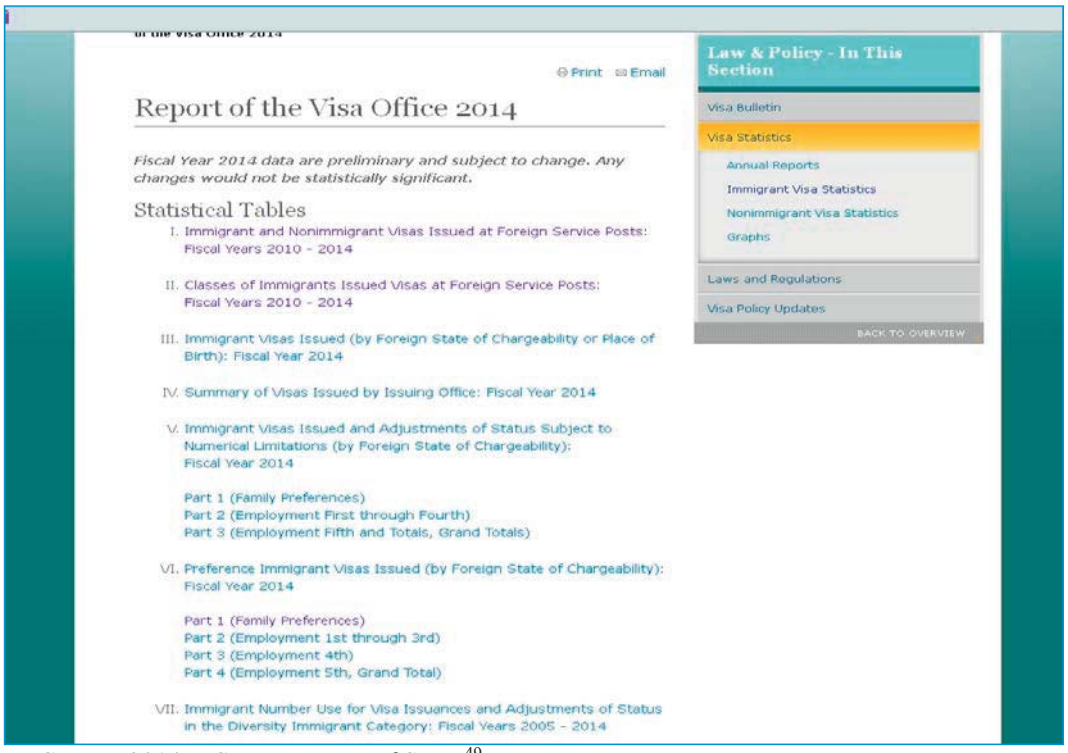
118. Nevertheless, even with freedom of movement associated with visa-free regimes, migrants usually have to acquire relevant visas to be able to study, to work, or to have a longer stay. This is an essential condition which makes visa statistics one of the key sources of data on long-term and short-term migration for specific purposes, primarily associated with study or work.

119. Despite globalization and growing freedom of movement, there are still countries which regulate departures of their citizens through exit visas or exit permits. Such practice can be applied differently to citizens and foreigners. For instance, to leave Saudi Arabia foreign labour migrants have to acquire a permit proving that they are free of any debts to their employers. At present, only a few countries apply this regulatory requirement.

120. When analysing visa statistics one should also take into account country requirements for issuing visas, whether visas are limited by quotas, or if there are limitations for specific

types of visas or countries of applicant citizenship[46]. Countries with a long tradition of immigration produce detailed statistical reports with data on countries, types of visas by purpose of entry,[47] and length[48] (see Figure 11).

Figure 11.
Screenshot detailing visas issued by the United States,



Source: 2014 U.S. Department of State [49].

121. A limited number of variables are available when producing visa statistics, including, as a rule, purpose, length, and countries of applicant citizenship (or countries where visa applications were submitted). The availability of data on duration of visa helps provide proxy information on short-term and long-term migration. Table 7 presents an example of a UK statistical report on visas issued in 2013[50].

[46] U.S. Department of State, Bureau of Consular Affairs http://travel.state.gov/content/visas/english/law-and-policy/statistics/immigrant-visas.html

[47] U.S.: http://travel.state.gov/content/visas/english/law-and-policy/statistics.html

[48] UK: https://www.gov.uk/government/publications/entry-clearance-visas-by-length/entry-clearance-visas-by-length#visas-by-purpose-and-length

[49] http://travel.state.gov/content/visas/english/law-and-policy/statistics/annual-reports/report-of-the-visa-office-2014.html accessed on 17 May 2015

[50] https://www.gov.uk/government/publications/entry-clearance-visas-by-length/entry-clearance-visas-by-length#key-facts-excluding-visit-and-transit-visas

Table 7.
Excerpt of the UK Government report on visas issued in 2013, thousand

Length	*Total visas (excl. visit and transit)*	*Including*		
		Work	*Study*	*Student visitors*
Short term (less than 1 year)	**235.4**	**61.8**	**62.2**	**77.6**
including:				
Less than 3 months	17.3	7.7	6.1	0
3 months to less than 6 months	144.5	25.4	25.4	64.6
6 months to less than 1 year	73.5	28.7	30.8	13
Long term (1 year or over)	**296.7**	**92.9**	**156.4**	**n/a**
including:				
1 year to less than 2 years	113.7	20.4	89.3	
2 years to less than 3 years	89.9	39.5	22.9	
3 years to less than 4 years	61.1	28.7	26.8	
4 years or more	32	4.3	17.5	
Total visas issued (excl. visit and transit)	**532.1**	**154.7**	**218.6**	**77.6**
Average visa length (number of years)	*1.6*	*1.7*	*1.7*	*0.6*

122. To provide a fuller picture data often include the total number of visa applications, approved applications and denials. Such data demonstrate from what countries the risk that migrants who legally entered a country on short-term visas will become irregular migrants. Some researchers combine visa statistics with data collected at borders[51]. This is done because type of visa and purpose of entry are checked during passport control, and then the data are used for producing border statistics.

Visa statistics in CIS countries

123. So far visa data are used very rarely in CIS countries; such data are underexploited and difficult to access. This is due to low interest of users to use these statistics and the prevalence of a visa-free regime in CIS countries. Unlike many countries which apply visa-free regimes only to short-term trips not related to study or work, CIS countries, excluding Turkmenistan, apply a visa-free regime to nationals of CIS countries including long-term trips. To access the labour market, or to gain the right to study in secondary and tertiary educational institutions in a CIS country, nationals of partner countries may be required to have a work permit or a contract with an educational institution, rather than a visa.

124. One of the first agreements signed by CIS countries after the collapse of the USSR was the 1992 Agreement on Visa-Free Movement of Citizens of the CIS Member States on the Territory of CIS Countries. Later almost all countries signed relevant bilateral agreements, but some CIS countries also introduced a visa regime for some CIS member states. Similar

[51] Poulain, Perrin, Can UN Recommendations be Met in Europe? MPI, 2003
http://www.migrationpolicy.org/article/can-un-migration-recommendations-be-met-europe/

agreements with countries outside of CIS countries made before the collapse of the Soviet Union remained valid; while later newly independent former Soviet states signed bilateral visa-free agreements with states which were never constituents of the Soviet Union.

125. Methodologies for producing visa statistics vary from country to country. A central agency in a country may receive anonymized statistical reports from their consular offices abroad[52]. In CIS countries there is not yet an established practice to publish such data. A survey of NSOs demonstrated that almost all believe that although visas issued are registered by Ministries of Foreign Affairs, and data are differentiated by visa types, the outputs are not published.

Figure 12.
Screenshot from Russian MIA Consular Department with open data on major areas activities[53]

126. Some CIS countries issue not only entry but also exit visas (or exit permits), as well as exit-entry visas (e.g. Belarus)[54]. Exit visas (or exit permits) enable regulation of exits for both citizens of countries and foreigners. For example, the MoI of Uzbekistan reviews applications

[52] See the description of the methodology 'The Operation of the Immigrant Numerical Control System'. U.S. Department of State

[53] http://www.kdmid.ru/opendata/default1.aspx

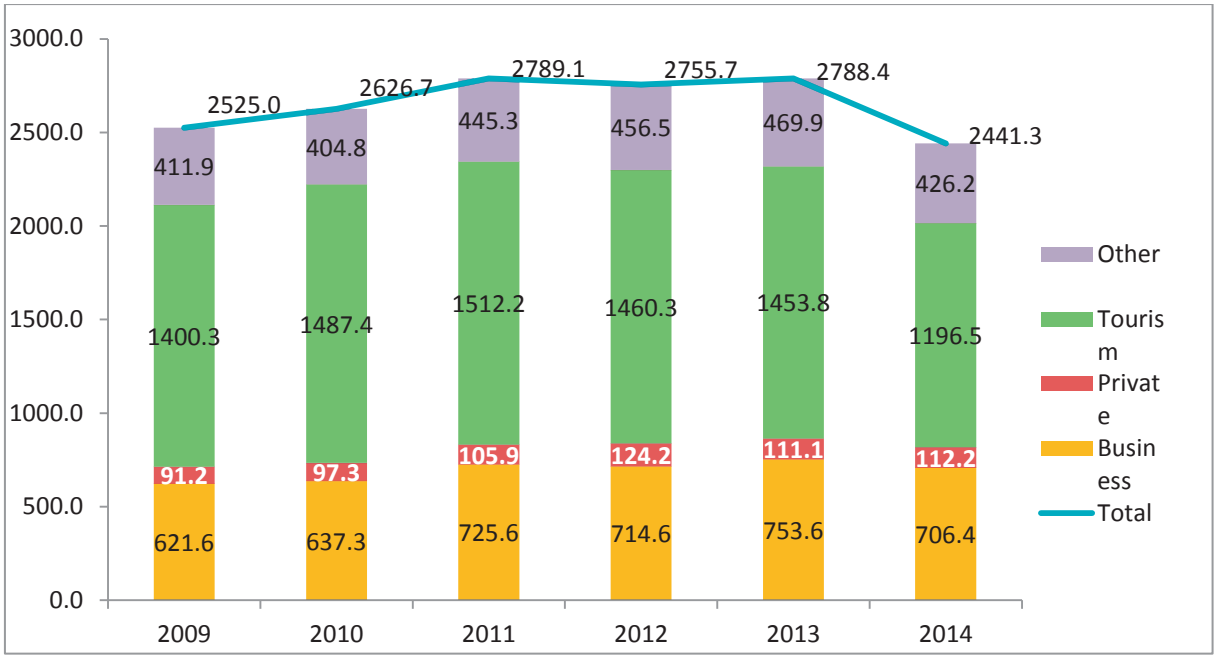
[54] Procedures and types of entry visas in Belarus, http://mfa.gov.by/visa/

and issues exit permits by means of a sticker which is placed in a passport[55]. Such stickers are valid for two years and can be renewed. Some countries issue special passports to their citizens who leave abroad for permanent residence (such practice existed during the Soviet period and was maintained in some post-Soviet countries, while Russia stopped this practice in the early 2000s).

127. The production of statistical reports on visa activities and publication of such reports is gradually becoming standard practice in some CIS countries (Armenia, Russia, etc.), and statistics on issued visas are available on the web site of the Russian MFA. In recent years government authorities have been pro-actively working to produce open data on their activities (see Figure 12).

128. Given the prevalence of short- and long-term movements within the CIS, one can say that most migration in the region occurs in a visa-free environment. This definitely affects the value of visa statistics for analytical purposes.

Figure 13.
Number of entry visas issued by the Consular Department of the Ministry of Foreign Affairs of Russia, 2009-2014, thousands



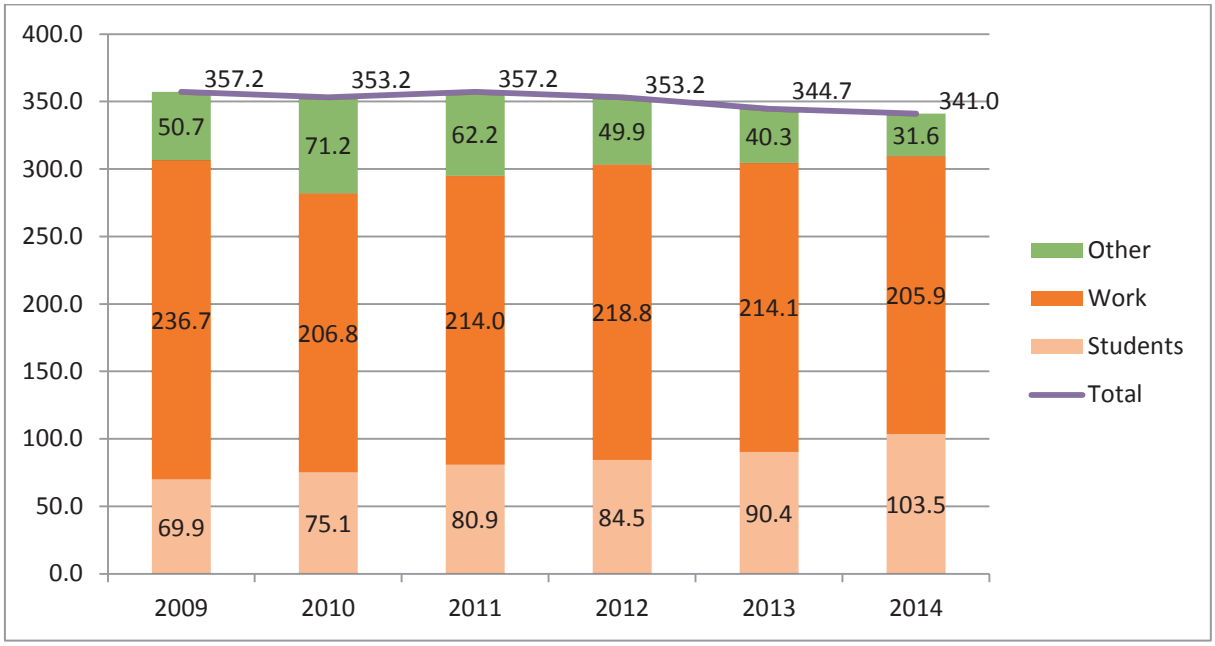
Source: MFA of Russia

129. Specifically, the Russian MFA provides access to a file with data on total visas issued in 2009-2013, by major type; however, there is no breakdown by countries where visas were issued (Figure 13). Furthermore, the important category of work-related visas is not shown separately. The limitations of aggregated statistics can be compensated by data from the Federal Migration Service on invitations for work visas, as most of them are used for this purpose.

[55] 'Permits to travel abroad' at http://www.mvd.uz/page/pasportno-vizovaya-deyatelnost

130. The Russian FMS issues several categories of visas, mainly related to work and study and publishes aggregated data in monthly reports (Figure 14). These data show the renewal of visas acquired by foreigners to enter Russia. If there are valid grounds (employment contract or a letter from an educational institution) a visa can be renewed until the foreigners' passport expires. The stock of foreigners holding such visas can be considered an additional component of the foreign population living in Russia (in addition to those who hold permanent and temporary residence permits).

Figure 14.
Number of visas issued in Russia: 2009-2014, FMS, thousands



Source: Form 1-RD of the Russian FMS

131. Some consular posts publish aggregate data on their visa activities: for instance, the Moldovan Embassy in the Russian Federation states that in 2014 it issued 182 entry/exit visas to/from the Republic of Moldova, while the Consular Section also issued 10,868 return certificates[56].

132. Unfortunately, no specialists confirmed that NSOs have experience publishing or working with this type of data. In all countries visas are differentiated by type and purpose; Russia uses a list of travel purposes with about 90 purposes grouped into several categories[57]. When a person enters the country, and goes through a passport check-point, his/her travel document is scanned and the purpose of entry is identified. The authors were not able to find standardized statistical reports on visas issued in CIS countries.

[56] http://www.rusia.mfa.md/statistical-information-ru/

[57] See Order of the Russian MFA, MoI and FSS No. 19723A/1048/922 dated 27 December 2003 'On approval of the List of Travel Purposes used by the authorized government bodies of the Russian Federation when processing invitations and visas to foreign citizens and stateless persons'.
GARANT system: http://base.garant.ru/12134972/#ixzz3aPe9aSBq

133. The specifics of visa statistics is that some CIS countries issue visas not only through their foreign establishments (consulates) abroad, but also in the country itself, if a foreigner who is already in the country needs to change visa type or renew it. For instance, several types of visas enabling longer stay in Russia due to work or study are initially issued by consulates for three months, but a foreigner may apply to the FMS with a request to change it to a multi-entry visa or extend its length up to one year (which can be renewed later). As of the moment, there is no practice of producing visa statistics by countries of applications or citizenships of applicants. Figure 13 and Figure 14 provide examples of visa statistics produced by the Russian MFA and FMS and are available to users.

4.4. Consular registration

Overview

134. The importance of statistics based on consular registration data should not be underestimated. This instrument allows a state to know how many of its citizens residing or temporarily staying abroad may require assistance, including, in case of emergency (both in the destination or home country). In addition, consular registration data show the number of persons eligible to vote during national elections in the country of citizenship. When looking at a phenomenon such as the diaspora, registered citizens of the country living abroad are significant because they maintain legal connection with their country of citizenship[58].

135. Consular registration data are maintained by almost all countries and are often supported by a legal framework. Countries have different views on whether such registration is voluntary or mandatory. Some countries require their citizens to register with consulates if their period of stay exceeds a certain threshold, e.g. 6 months. Such requirements exist mainly in countries which have operational population registers to ensure data accuracy. But in many countries such registration is voluntary, which directly affects coverage and implies that data are not complete.

136. One should note that statistics of individuals registered with consulates (either during or at the end of a year) do not necessarily capture emigrants only. Children of foreigners born in the country of residence and registered by their parents are not emigrants. The same is true for spouses, having citizenship of the country of destination who acquired citizenship of the country of their spouse's nationality. In addition, if a consulate is mandated to process citizenship applications, individuals who acquired citizenship can be also registered, even though they did not migrate and are still in their countries of origin. In this context consular registration data are not fully valid for measuring emigration. Reports on individuals registered with consulates are part of overall statistical reports on consular activities.

Consular registration data in CIS countries

137. Among CIS countries mandatory registration with consulates is required by several countries, having been introduced for example by: Armenia, if an Armenian citizen leaves abroad for a period over 6 months (in such case he/she has to 'notify a relevant embassy or consular office of the Republic of Armenia'[59]); Kyrgyzstan, if an individual stays abroad for

[58] This information should be, of course, complemented by statistics from the country of residence on the foreign population with relevant citizenships.

[59] http://russia.mfa.am/ru/consular-registration/

over 3 months[60], Uzbekistan (6 months abroad requires temporary registration and a departure for permanent residence abroad requires permanent registration), and Ukraine (if an individual travels abroad for 3 months and longer he/she has to be temporarily registered, and if he/she leaves abroad permanently he/she has be permanently registered at a place of residence[61]).

138. Belarus citizens who leave for another country for permanent residence are required to register with a consular office[62] (without any time limits specified). A similar approach is found in the rules set forth by the Kazakh MFA for the citizens of Kazakhstan living permanently abroad. Citizens of Tajikistan who leave abroad for permanent residence (no time period specified) must be registered with the Tajik consular office (if this is not done within five years after the move without any valid reasons, the person is considered to have lost his/her citizenship of the Republic of Tajikistan[63]).

139. Nevertheless, there is no evidence that countries which require consular registration of their citizens are able to enforce this requirement if a person is not interested in such registration.

140. Some countries (Azerbaijan[64], Russian Federation) consider registration with the consular office as a right rather than an obligation. The Russian MFA emphasizes that 'the registration of a Russian citizen with an establishment abroad is purely voluntary and is made upon his/her wish to do so, irrespective of the purpose and period of stay abroad." Current legislation sets no requirements for Russian citizens to be registered, and registration or non-registration has no any legal implications for individuals[65].

141. To register an applicant fills in a registration card which contains personal information. For instance, a card for Kazakh citizens contains data on date and place of birth, gender, educational attainment, occupation, date and purpose of travelling abroad, information on relatives, etc.[66] A Russian citizen card contains, in addition to the what is collected by Kazakhstan, information on employer in the country of residence. In theory these data could provide interesting information, but in practice have not been utilized yet

142. Without viable mechanisms to monitor registration with consular offices, whether voluntary or mandatory, statistics from these sources are often incomplete. These data have other limitations as well. First, registration with consular offices takes place even in cases where no migration occurs, such as children born abroad of foreign parents living in the country where a consular office is located. Another reason for non-migrant registration is acquisition of citizenship through a foreign establishment. This relates to individuals permanently residing outside of the country for which citizenship is acquired. Such practice is common in Russia: thousands of individuals residing in other countries become Russian citizens every year. After acquiring Russian citizenship (depending on the country where this

[60] http://www.fms43.ru/index.php?id=308:for-the-citizens-of-kyrgyzstan&option=com_content&view=article

[61] (http://zakon2.rada.gov.ua/laws/show/z1458-11

[62] For example, see the website of Belarus consulate in Germany: http://germany.mfa.gov.by/ru/konsul/registry/

[63] See Article 29 of the Constitutional Law on Citizenship of the Republic Tajikistan

[64] http://azconsulate-ural.ru/index.php/konsulskij-otdel/konsulskij-uchjot

[65] http://www.kdmid.ru/cons.aspx accessed on 10 May 2015

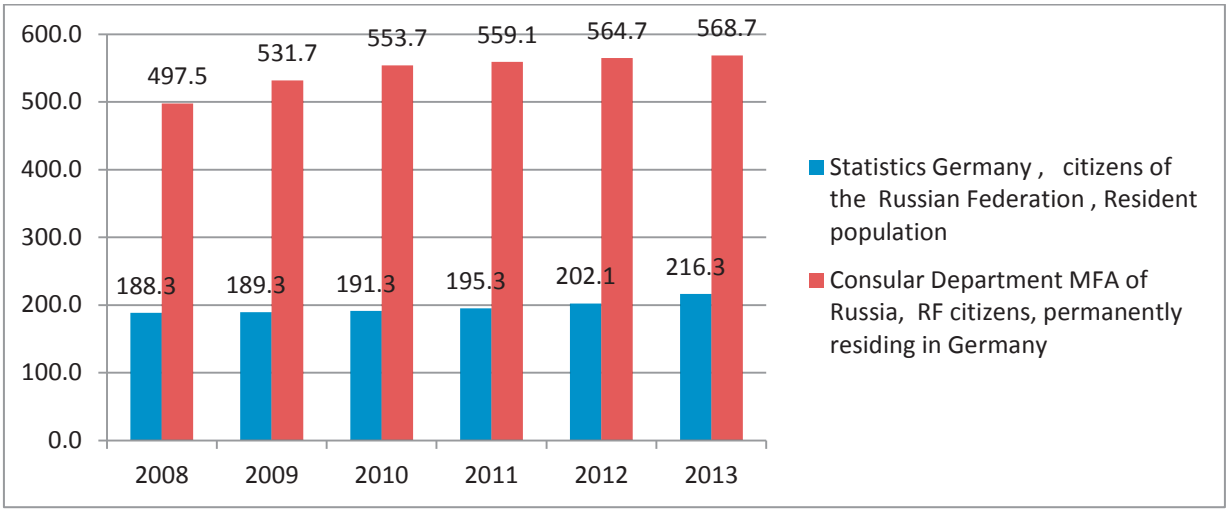
[66] http://www.kazembassy.ru/ru/konsulskiotdel/konsulskiiuchetgrazhdan accessed on 15 May 2015

happens) such individuals either move to Russia (mainly from the Central Asian countries), or register with consular offices abroad (for example, Moldova, Germany, Israel, U.S.).

143. The statistics on consular registration in CIS countries appear to be rare, as survey respondents (CIS NSO and migration services specialists) noted in most cases that the data are neither published nor available. Starting from 2014, the Russian MFA publishes on its web site aggregate data on Russian citizens registered with MFA's foreign establishments. These statistics reflect both permanent and temporary residents and are not disaggregated by countries of residence[67]. More detailed data, by countries (and cities) of consular offices, can be received upon request.

144. Statistics on Russian citizens registered with consular offices abroad show quite interesting facts. For instance, out of almost two million Russian citizens permanently residing abroad and registered with consular offices, the majority live in Germany, and the number of such individuals continues to grow. Comparison of these numbers with German statistics on Russian citizens permanently residing in Germany demonstrate that even though registration with consular offices is voluntary, the Russian numbers are on average 2.7 times higher than the German figures (Figure 15).

Figure 15.
Russian citizens permanently residing in Germany: data of the Russian MFA Consular Department vs. data of the Federal Statistical Office of Germany, 2008-2013, thousand



Source: Russian MFA CD, Federal Statistical Office of Germany

145. As for other European countries the situation was the opposite. The figures for Russian citizens permanently residing, for instance, in Sweden and Finland and included into the population registers in 2008-2010, on average were 1.7 times higher than those registered as permanent residents in the Russian consulates in these countries (Table 8).

[67] http://www.kdmid.ru/opendata/default1.aspx

Table 8.
Russian citizens registered with consular offices as permanently residing in Finland, Sweden and Norway vs. Russian citizens, per national statistical office data 2008-2010

	Finland		*Sweden*		*Norway*	
	Russian MFA CD	*Statistics Finland*	*Russian MFA CD*	*Statistics Sweden*	*Russian MFA CD*	*Statistics Norway*
2008	15,224	26,909	3,715	6,797	1,607	10,379
2009	16,482	28,210	4,017	7,012	1,746	10,631
2010	17,030	28,426	4,363	7,435	1,916	10,818

Source: Data of the Consular Department of the Russian MFA and NSOs of relevant countries.

146. A possible reason of such disparities in Germany, which is the main destination country for emigrants from Russia, could be that Russian citizens when they acquire German citizenship neglect the German legislative requirement to renounce Russian citizenship. But more research would be needed to answer this question

147. These examples were cited in order to show the potential difficulty of using consular statistics to measure emigration, including comparisons with other countries data and the fact that these data have been rarely used in CIS countries due to limited accessibility.

5. Data collection at national borders

5.1. Overview

148. Data collected at borders can be a good source of statistics in countries which control entries and exits. Information is collected at passport control through migration cards (or similar forms) and electronic reading of passports, as well as during various activities related to border security (Table 9). Some countries conduct special passenger surveys at border crossing points, but they are designed for statistical purposes rather than administrative, thus are discussed in the next chapter of the handbook.

149. *Passport control* can generate statistics which in most cases capture entries and exits[68]. Generally, statistics are collected by purpose of trips and mode of transport. Data for foreigners are broken down by country of citizenship, as well as by countries of exit and entry.

150. Passport control based on electronic processing of machine readable travel and visa documents enables the collection and processing of data on each passenger, and both entry to and exit from the country is registered. Nevertheless, statistics collected at borders primarily show the number of trips, rather than the number of individuals who made such trips. This is quite understandable because these statistics have other objectives: to measure passenger traffic and the number of detected violations of the entry and exit legislation. As for measuring migration (and not trips), border control statistics are not very informative because

[68] Some individuals cross borders on foot via special border crossing points, but for simplification we use 'entry' and 'exit,' which are used in the national legislation of CIS countries.

among the flows of individuals who cross borders there are not many 'true' migrants who change country of residence.

Table 9.
Main administrative sources and types of data collected at borders

Type of measurement	*Type of migration data (what is measured)*
• registration based on passport control • dissemination, collection and processing of special cards (migration, passenger) • administrative practice for detection of illegal crossing of borders, overstay of visas, use of forged or invalid documents, etc.	• flows only – number of border crossings for entries and exits during a period of time – number of individuals who arrived in the country for different purposes, types of visas, and for different periods of time • number of individuals placed in detention for various violations of entry and exit procedures

151. Another serious limitation of data collected at borders is its completeness. Often there are no border crossing points between countries which are members of single visa space, such as the Schengen area. Statistical reports of such unions include data collected from conventional 'external' borders. Therefore border crossing statistics for specific countries capture only a part of the real flow of foreigners entering and exiting the country. In CIS countries a similar situation (though on a smaller scale) exists between Russia and Belarus, and this open border is often employed by citizens of countries for which Russia requires visas, but Belarus does not.

152. In addition to measuring flows of individuals who cross borders, border control is mandated to detect individuals who are not entitled to enter the country or to detect individuals who stayed illegally in the country when they try to leave. The outcomes of these activities are one of the sources of administrative data on illegal migration.

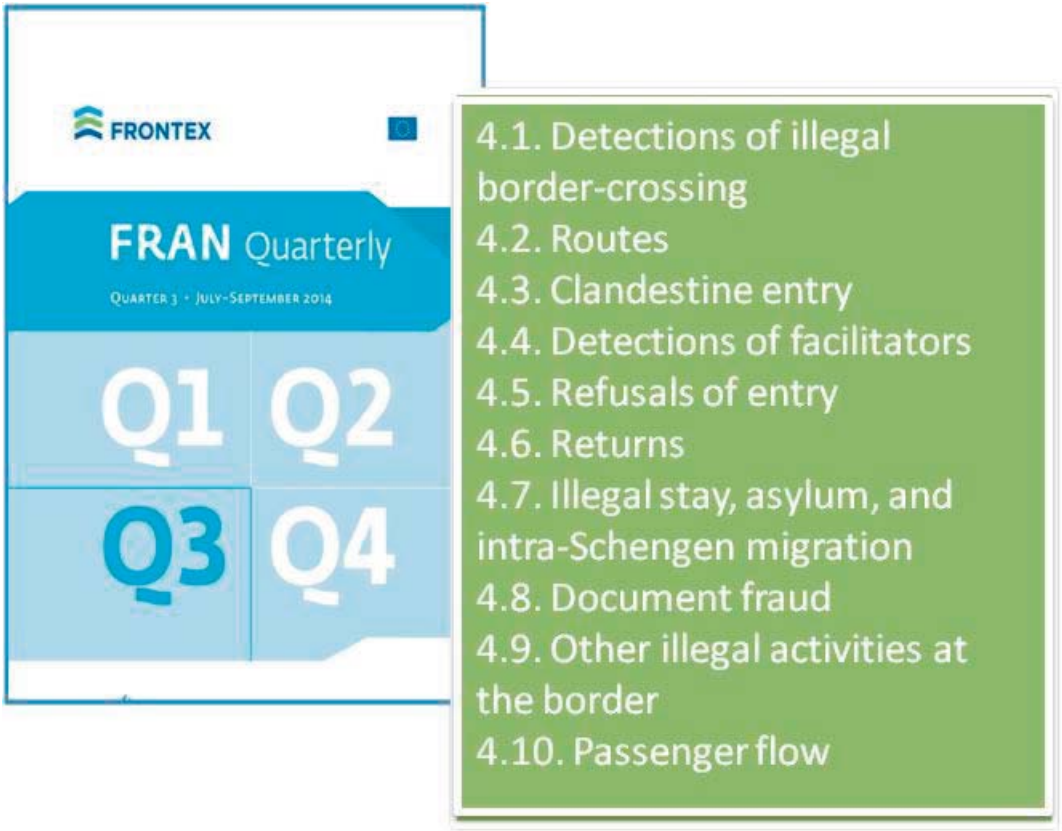
153. Reports of the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union (FRONTEX) demonstrate the potential and variety of data collected at borders. FRONTEX also coordinates the activities of border authorities of the Schengen states. Quarterly reports contain data on several indicators, including countries of citizenship of individuals detected at external Schengen borders, and the nature of these violations (Figure 16). Specifically, the report provides statistics for detections of illegal border-crossings, clandestine entries, refusals of entry, returns, document fraud, illegal stay, etc.[69] Notes to the statistical reports emphasize the objective difficulties of attempting to compile border control statistics collected in different countries[70], as well as the limitations of data on passenger flows which FRONTEX has produced since January 2014[71].

[69] See FRONTEX. FRAN Quarterly. Quarter 4 • October–December 2014, p. http://frontex.europa.eu/publications/

[70] *ibid*., page 7

[71] FRONTEX. FRAN Quarterly. Quarter 3 • July–September 2014, p. 46

Figure 16.
Quarterly FRONTEX report: cover page and excerpt from the table of contents



154. ***Migration cards*** complement border control and are used in many countries, though there is no single approach on how to use this tool. Generally, such cards are filled in at entry but in some countries they are also used at exit. Such cards are to be filled in by foreigners but sometimes they are also filled in by country nationals as well. Some groups of passengers are not required to fill in the cards: this may involve some categories of passengers (e.g. diplomats) or nationals of countries which have simplified entry procedures. These data can be collected continuously or on a sample basis and can be a major or complementary element of the national system for collecting data on migration. For example, until recently the U.S. produced statistics characterizing migration flows of individuals with non-immigrant admissions, by types of visas, i.e. by grounds or purposes of entry and some other variables (Figure 17).

155. The main problem of using migration and similar cards to measure migration is the difficulty of processing such cards. When cards are filled in by hand it is difficult to ensure sufficient legibility to enable scanning and automatic reading. Manual processing of paper forms results in considerably higher costs for producing statistics as noted by staff of relevant authorities using migration cards. Thus, starting from April 2013, the U.S. automated the I-94 process for non-immigrants admitted at air and sea ports. Paper forms are no longer used,

except for some cases when a passenger requires documentation for further administrative procedures throughout the country due to change in status[72].

Figure 17.
Excerpt of statistical report on non-immigrant admissions to the U.S.: 2012, based on Form I-94.

Table 28.
NONIMMIGRANT ADMISSIONS (I-94 ONLY) BY SELECTED CATEGORY OF ADMISSION AND REGION AND COUNTRY OF CITIZENSHIP: FISCAL YEAR 2012 – *Continued*

Region and country of citizenship	Total	Tourists and business travelers		Students and exchange visitors[3]	Temporary workers and families[4]	Diplomats and other represen-tatives[5]	All other classes	Unknown
		Visa waiver[1]	Other[2]					
Malawi	2,280	X	1,523	235	69	378	65	10
Malaysia	97,410	195	80,794	7,574	6,460	1,763	380	244
Maldives	368	X	125	79	4	118	38	4
Mali	3,370	X	2,531	302	105	385	28	19
Malta	6,301	4,773	1,132	87	167	102	34	6
Marshall Islands	148	X	42	D	D	42	35	19
Mauritania	1,086	X	641	125	19	233	64	4
Mauritius	5,632	X	4,293	244	198	301	579	17
Mexico	16,462,118	X	15,365,936	290,354	622,962	30,504	130,165	22,197
Micronesia, Federated States of	258	X	113	5	D	62	D	74
Moldova	11,293	X	6,892	3,464	405	364	135	33
Monaco	1,270	1,056	61	64	D	64	D	-
Mongolia	10,399	X	7,286	2,296	254	462	71	30
Morocco[15]	27,765	X	22,448	2,403	742	1,821	201	150
Mozambique	1,764	X	1,081	158	42	404	74	5
Namibia	2,249	X	1,543	131	76	398	83	18
Nauru	120	27	25	-	D	48	13	D
Nepal	18,475	X	11,304	4,019	1,634	720	699	99
Netherlands[16]	785,029	739,351	10,435	8,981	19,177	5,046	1,542	497
New Zealand[17]	266,494	243,128	9,998	3,918	5,862	2,384	1,044	160
Nicaragua	56,380	X	49,045	933	1,077	743	4,217	365
Niger	1,312	X	812	156	41	287	8	8
Nigeria	121,177	X	106,362	7,205	3,578	2,679	951	402
Norway	300,258	273,858	6,436	9,010	7,177	2,637	1,032	108

Source: 2012 Yearbook of Immigration Statistics. Office of Immigration Statistics, US Department of Homeland Security http://www.dhs.gov/publication/yearbook-2012

156. The list of variables collected by migration cards vary considerably from country to country. Generally, such cards contain information on passenger's sex and date of birth, purpose of trip and citizenship (for foreigners) or country (where a passenger has arrived from – where a passenger is leaving) for country nationals.

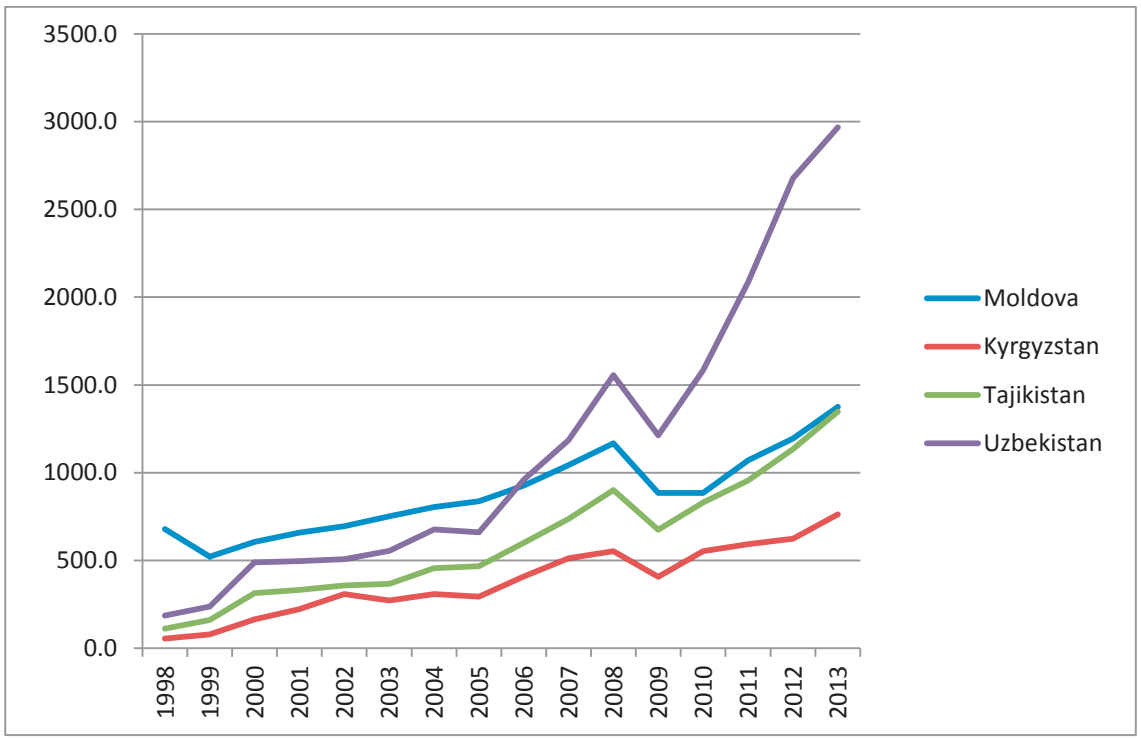
5.2. Data collected borders in CIS countries

157. ***Border control statistics.*** Today CIS countries use electronic systems of passport control for machine readable passports and visa documents. In Kazakhstan this function is performed by *Berkut*, an integrated information system to control foreigners' entries, exits and stays; in Russia – *Kaskad* and *Potok* ('Flow') AIS, and in Armenia – Border Electronic Management Information System (BEMIS) established under the aegis of the National Security Service. Software enables collecting data on border crossing by foreigners and nationals entering and exiting the country, differentiated by mode of transport (car, rail, sea and air, as well as movement on foot) and purpose of trips. Though it took some time to establish the necessary technical capacity at CIS country borders due to financial and logistic constraints, today almost all CIS countries have resources in place to collect data and produce statistics.

[72] See Katie Foreman and Randall Monger. Nonimmigrant Admissions to the United States: 2013. US Customs and Border Protection Fact Sheet. I-94 Automation. 3/2013

158. The analytical potential of statistics based on passport control has some limitations, but even these data can demonstrate changes in flows and help develop future research. Figure 18 demonstrates fluctuations in the flow of foreigners to Russia from several countries, which are the main donors of foreign labour migration. Also noticeable is the reduction in the size of these flows in 2009 due to the economic crisis that year.

Figure 18.
Entries into Russia from select CIS countries, 1998-2013, thousands.



Source: Russian Border Service, Rosstat

159. When an individual goes through passport control, the border service officer not only scans and checks his/her passport, but also records data on the mode of transport and purpose of entry. Unfortunately, the list of purposes is limited and usually does not include the 'work' option. Russia and Kazakhstan use the following options as purposes: business, tourism, private, for permanent residents, transit, and service personnel[73], while Belarus uses only 1) personal and 2) business and professional.

160. Generally, NSOs receive statistical reports from state border services in established formats. In the CIS context, summary statistics contain two types of information: entries of foreigners are broken down by countries of citizenship, whereas exits by country's nationals are broken down by destination countries. Data on border control are often published in statistical yearbooks – on migration (Russian Federation[74] – entries, exits by foreigners, by

[73] 'Service personnel' category includes aircraft, vessel, rail and road crews.

[74] See Rosstat Bulletin 'Population and Migration in the Russian Federation in 2013', Table 2.11. Foreign migrants by purposes of travel (based on data of the Russian Border Service) http://www.gks.ru/bgd/regl/b14_107/Main.htm

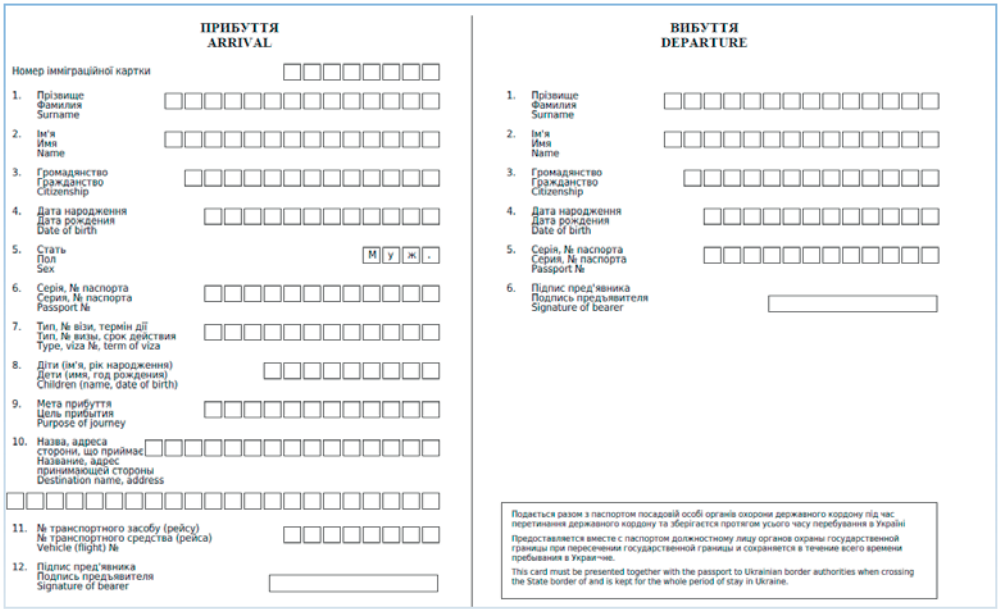
purpose and country of citizenship), tourism (Kazakhstan, Kyrgyzstan), or as independent reports (Ukraine[75]).

161. If the list of purposes includes the option of 'permanent place of residence' this category is often excluded from statistical reports, *inter alia*, due to difficulty of interpretation. It's not only 'new' immigrants who can arrive to a permanent residence place, but also foreigners who permanently live in the destination country and return after a short period of absence.

162. The completeness of border crossing registrations is affected by the availability of hardware and software and the accuracy of data input by border officers, as well as by the extent to which the borders are protected against unauthorized movements. If the practice of border crossing outside of border checkpoints is common, the actual flows will be underestimated[76], though it is difficult to estimate the scale of such underestimation. Statistics on detentions of individuals for violating immigration legislation or entry and exit rules are an important segment of data collected at the borders (see the description of FRONTEX practice), but these data are not yet published or made available in CIS countries.

163. *The statistics based on migration cards in CIS countries.* Migration cards are used only in a few CIS countries: Kazakhstan, Russia, Tajikistan, Ukraine (Figure 19) and Uzbekistan.

Figure 19.
Immigration card in Ukraine



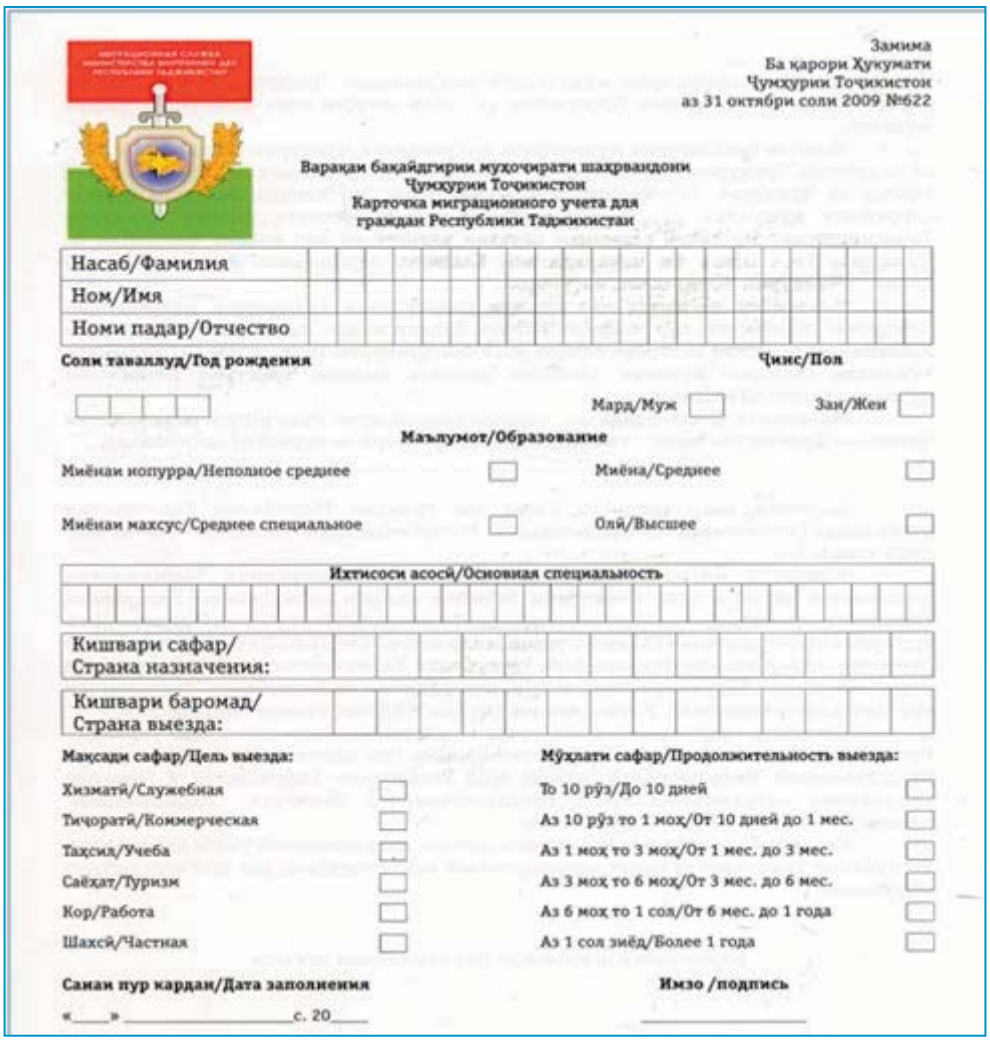
164. A migration card normally contains questions to gather information on an individual who crosses the border (citizenship, age, gender, purpose). Countries have different agencies responsible for managing this instrument: in Russia and Tajikistan migration cards are the

[75] See report 'Entries of foreigners in Ukraine by origin countries, in 2014' http://ukrstat.org/operativ/operativ2013/tyr/tyr_r/vig2014_r.htm, accessed on 15 May 2015

[76] See A. Beshimov, O. Abdykaimov, B.Rajapov, N.Tashbekov 'Cross Border Trade. Estimates of Border Crossings between Kyrgyzstan and Uzbekistan'. OSCE, Bishkek, 2011

purview of the migration authorities, in Ukraine the State Border Service, and in Uzbekistan – Customs Service. Cards are provided to foreign citizens at entry, but Tajikistan uses two types of cards, the second type is used for nationals when they leave for abroad and return home (Figure 20).

Figure 20.
Migration card for a national of Tajikistan


Замима
Ба қарори Ҳукумати
Ҷумҳурии Тоҷикистон
аз 31 октябри соли 2009 №622

Варақаи бақайдгирии муҳоҷирати шаҳрвандони
Ҷумҳурии Тоҷикистон
Карточка миграционного учета для
граждан Республики Таджикистан

Насаб/Фамилия
Ном/Имя
Номи падар/Отчество

Соли таваллуд/Год рождения

Ҷинс/Пол
Мард/Муж
Зан/Жен

Маълумот/Образование
Миёнаи нопурра/Неполное среднее
Миёна/Среднее
Миёнаи махсус/Среднее специальное
Олӣ/Высшее

Ихтисоси асосӣ/Основная специальность

Кишвари сафар/
Страна назначения:

Кишвари баромад/
Страна выезда:

Мақсади сафар/Цель выезда:
Хизматӣ/Служебная
Тиҷоратӣ/Коммерческая
Таҳсил/Учеба
Саёҳат/Туризм
Кор/Работа
Шахсӣ/Частная

Мӯҳлати сафар/Продолжительность выезда:
То 10 рӯз/До 10 дней
Аз 10 рӯз то 1 моҳ/От 10 дней до 1 мес.
Аз 1 моҳ то 3 моҳ/От 1 мес. до 3 мес.
Аз 3 моҳ то 6 моҳ/От 3 мес. до 6 мес.
Аз 6 моҳ то 1 сол/От 6 мес. до 1 года
Аз 1 сол зиёд/Более 1 года

Санаи пур кардан/Дата заполнения
«____» _____с. 20____

Имзо /подпись
_____

165. Some border crossing points in Russia (mainly in Moscow and St. Petersburg) have special printers installed to automatically fill in and print migration cards. The information is stored electronically and transferred to the FMS and simplifies data processing. Given that most migration cards are filled in manually and are not machine readable, data entry would require great effort (and resources). Therefore, statistics based on migration cards contain only a few general indicators (see Table 10).

Table 10.
Migration cards processed in Russia: 2009-2014, thousands

	2009	*2010*	*2011*	*2012*	*2013*	*2014*
Migration cards processed with data submitted to the database of the Russian FMS	34,329.5	38,381	39,962	47,079.6	51,431.8	53,521.3
Entry forms received from border authorities	18,396.3	20,199.2	20,851.1	24,562.1	26,663.9	27,809.7
Exit forms received from border authorities	15,933.2	18,153.2	19,083.9	22,482.6	24,731.1	25,639.5
replacement migration cards	n/a	28.5	27	34.9	36.8	72.1

Source: Russian FMS, Form 1-RD

166. Statistics on purpose of trips and breakdown by countries of citizenship from migration cards are partially captured when foreigners register their place of stay (foreigners must be registered if they stay in Russia for over 7 working days). Purpose of trip is recorded during registration as stated on his/her migration card, no changes are allowed.

Table 11.

Example of statistics produced by migration cards filled in by Tajik nationals when going abroad: 2005-2012, persons [77]

Number of Tajikistan nationals leaving abroad for work independently					
		Age, years			
Years	*Total*	*Under 18*	*18-29*	*30-59*	*60 and more*
		Both sexes			
2005	412 123				
2006	609 316	22 706	322 836	257 083	6 691
2007	573 953				
2008	646 298				
2009	677 414	16 590	203 224	475 503	97
2010	736 446	39 617	380 210	306 573	10 046
2011	750 070	56 407	359 456	157 546	17 846
2012	739 017	40 935	379 299	308 800	9 983

Source: Labour Market in the Republic of Tajikistan. Statistics Agency under the President of the Republic Tajikistan, 2013.

167. The need for manual processing of migration cards makes this source inconvenient and therefore rarely used in CIS countries. The only example where migration cards are processed and used for statistical purposes is Tajikistan (Table 11). These cards are an important source

[77] For the reasons not stated in the yearbook, sums of the figures in rows for the years 2009 and 2011 differ from the figures in the column "total"

of data on labour migration of Tajik nationals moving abroad and it is the source on which Tajikistan makes estimates of exits and characteristics of flows by age and sex.

168. The potential of migration cards in CIS countries is underutilized, mainly due to financial and technical difficulties and the large volume of information that has to be manually entered by operators. Generally speaking, the situation with migration cards is still unclear. Such cards often duplicate border registration information and statistics based on such cards are very scarce. One can assume that it would be better to combine the efforts of border and migration officers in order to complement rather than duplicate one another's efforts.

6. Administrative data and irregular migration estimates

169. Administrative statistics can be used to help estimate irregular migrants. In the U.S., the number of regular immigrants (per data from the U.S. Department of Homeland Security) is compared with the data from the American Community Survey on the number of foreigners living in the country. The difference is considered to be an approximate measure of migrants who have no status of legal permanent residents. In Spain, the Padron municipal register captures all immigrants irrespective of their legal status, i.e. availability of a residence permit[78]. The difference between data in the register and statistics on legal residence permits gives an indication of the number of illegal migrants. There is also a practice of using data on repeated captures of illegal migrants to estimate their number in a specific city (the so-called "capture-recapture" method[79]).

170. The issue of estimating irregular migration is mostly critical for CIS countries which host migrants (e.g. Azerbaijan, Kazakhstan, and Russia). Generally, main sources of information on irregular migration are the outcomes of police raids, but these data mostly only cover detected cases of violated migration legislation. Such practice prevails in Azerbaijan (they use data collected during inspections, as well as those reported by individuals) and in Kazakhstan (their MoI has a special department dealing with detection of irregular migrants), where data on violators and violations of rules of stay in Kazakhstan are entered into the *Berkut* information system. Belarus seems also to use similar administrative sources of data, but no indirect estimates of potential numbers of irregular migrants are produced.

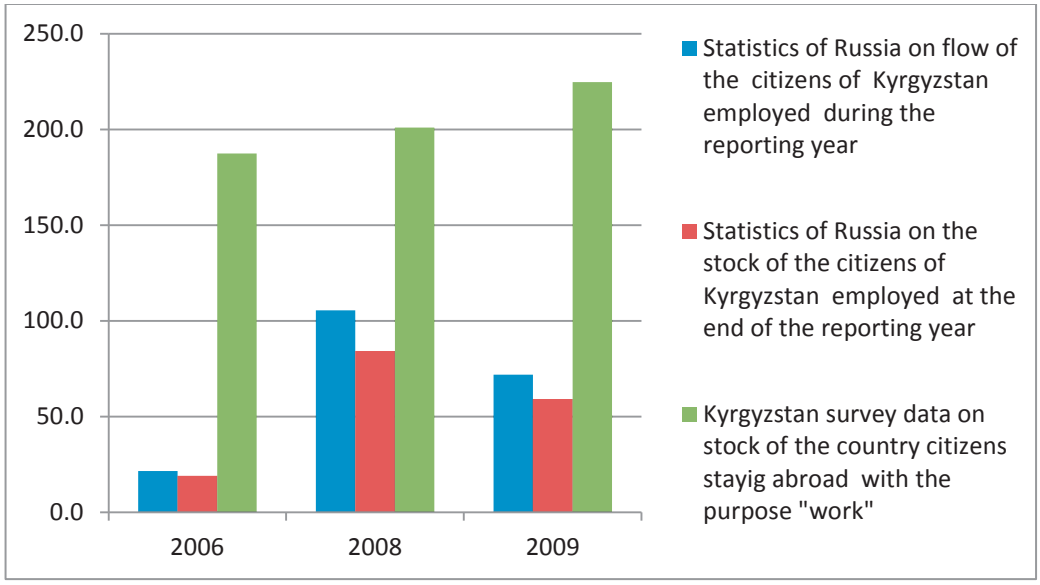
171. The agency responsible for estimating irregular migration in Russia is the Federal Migration Service; such estimates are made by compilations of various types of statistics produced by the FMS. The central database enables monitoring of foreigners' entries and exits, their registration with migration authorities (by purposes of entry), and acquisition of work or residence permits. The difference between the total number of foreigners (of employable age) who are staying in the country for a period above a threshold of time, and the number of foreigners who acquired work permits, can be considered as an estimate of non-documented labour migration. FMS considers foreigners who indicated 'Private' as a

[78] González-Enríquez C. Undocumented Migration. Counting the Uncountable. Data and Trends across Europe. European Commission, CLANDESTINO project, Country report, Spain. January 2009

[79] Jandl M. Methodologies for the Estimation of Stocks of Irregular Migrants. Joint UNECE/Eurostat Work Session on Migration Statistics Geneva, Switzerland, 3-5 March 2008, Working paper 11

purpose of entry, rather than 'Work,' as potential non-documented migrant workers. Other more precise methods of estimating irregular migration are not applied.

Figure 21.
Citizens of Kyrgyzstan legally employed in Russia vs. data of household surveys in Kyrgyzstan* on country nationals abroad for work purposes, 2006-2009, thousands



* Survey data – total. It is estimated that not less than 90% of migrants moved to Russia
Source: Russian FMS, National Statistical Committee of the Kyrgyz Republic.

172. To estimate non-documented migration, sending countries (Armenia, Kyrgyzstan) mainly use the population census and household surveys. In this case the number of absent population of relevant age groups is compared with administrative statistics of host countries (e.g. Russia) on the number of migrants who are entitled to legally stay (or work) in the host country. An example of such comparison of administrative statistics of a host country and survey data in a donor country to estimate non-documented migration is shown on Figure 21.

173. Moldavian specialists note that they use statistics on border crossings (entries), with periods of stays, in comparison with data from the population register on the individuals who have registered. Non-registered migration can be estimated based on these data, which in fact is similar to the residual method. Answering the question on whether any methods were implemented to estimate irregular migration, NSO and migration services specialists did not report any particular activities in this direction.

7. *Quality of administrative statistics on migration*

174. The availability of administrative data is only one prerequisite for efficient use of such data. There are objective factors affecting data quality in terms of completeness of migrant coverage and correctly capturing their structural characteristics. In addition, there might be mistakes during the processing and/or production of data, which can further deteriorate the quality of statistics. Data quality is also affected by some circumstances which, at first glance, seem to be inevitable, such as multiple citizenship affecting completeness and difficulties in differentiating measurement of migration events and migrants themselves.

175. *Gaps in coverage*. Despite many advantages international migration statistics based on administrative systems have some limitations.[80] One of the strongest limitations is underestimation of out-migration, or emigration, if an individual fails to report their exit. Countries with more developed register systems conduct checks to detect such cases. Experts say that when there are many unregistered units (e.g. irregular migrants), it is difficult to produce reliable statistics based on register data (UNECE 2011). In CIS countries measurement of emigration (for permanent residence and temporary labour migration) also appears to be a challenge because a considerable number of emigration cases are not reported. There are also issues with the registration of immigrant arrivals. This was noted by specialists of Armenia and Kyrgyzstan which took part in the survey, and was reported to be associated with lack of mechanisms to enforce registration, i.e. registration at a new place of residence is voluntary, as is the case with internal migration.

176. Coverage issues are particularly relevant to the measurement of temporary labour migration, as this is difficult to measure in all CIS countries. Given informal employment is common in destination countries, there are always migrants working without permits. It is not possible to estimate the scale of this phenomenon by only using data from registration systems and, partially, border control data. In fact, it requires use of different data sources and a residual methodology to arrive at some sort of estimate.

177. It is even more difficult to measure labour emigration. As discussed earlier, the practice of signing employment contracts through employment agencies, before a person leaves his/her country, is very limited in CIS countries. It is difficult to estimate the remaining flow of those who emigrated for work purposes, even based on destination country statistics on the number of work permits issued or the stock of foreign employees in the country at a given moment in time.

178. *Impact of multiple citizenship.* The fact that a migrant can have dual or multiple citizenship can also affect the completeness of coverage. This phenomenon is becoming increasingly common globally and cannot be ignored in the production of migration statistics[81].

179. First and foremost, the availability of individuals with passports of several countries can affect border control statistics, because when leaving a country and entering another one can use passports of different countries; they could enter a country as a country's national and exit as a foreigner. Availability of a national passport considerably simplifies registration at the place of stay and residence, which is also true for issuing work permits. The movements of foreigners who have multiple citizenships are registered using the passport which they presented at their entry to the country.

180. The scale of dual citizenship is often difficult to estimate; though specialists from Azerbaijan and Moldova answering the survey noted that dual citizenship is quite common in their countries and it does affect the measurement of emigration flows[82], even though

[80] For more details see Eric B. Jensen A Review of Methods for Estimating Emigration Population Division U.S. Census Bureau Working Paper No. 101 September 2013

[81] See Dual citizenship trends and their implication for the collection of migration statistic. UNECE, Economic Commission for Europe Conference of European Statisticians. Work Session on Migration Statistics Chisinau, Republic of Moldova 10-12 September 2014

[82] It is yet not possible to prove this statistically.

Azerbaijani law forbids dual citizenship. Moldova has a liberal policy towards multiple citizenship[83], as many citizens acquired Romanian citizenship under the Romanian Government Programme to 'restore' Romanian citizenship to residents of Bessarabia. In CIS countries dual citizenship is only officially recognized in some cases and when there are relevant bilateral agreements between countries. For example, Russia has such agreements with Tajikistan and Turkmenistan (though the latter has unilaterally withdrawn from the agreement). In addition, Belarus, Ukraine, and Uzbekistan do not recognize dual citizenship.

181. From the perspective of migration statistics, both in the destination country and country of former residence (and second citizenship), an individual is considered as a citizen of this country, therefore coverage might be good, but there will be distortions in the structure of migrants by countries of citizenship.

182. *Incomplete or incorrect data entries*. Some of the most common data entry errors include omission of variables which are not directly required for processing an application. Most commonly omitted are data on educational attainment and other characteristics unless these variables are mandatory[84]. If there are poor controls to ensure that all variables are entered and the software allows continuing data entry when some variables are unfilled, database operators (staff of relevant authorities) will abuse this possibility.

183. An automatic "interdiction" to continue data entry or to save a record with missing values can help to avoid this problem; however, this method is not always applicable in reality. An efficient way to prevent typos and errors while entering data into a database is the use of built-in classifiers and dictionaries. This simplifies data entry and makes it easier to compile such data. Such classifiers may offer standardized lists of countries (regions, geographic entities within a country), while 'smart' classifiers of geographic names also allow identification of an area or settlement if it is renamed or its administrative identity has changed. Implementation of classifiers and dictionaries is helpful for processing data on place of birth or citizenship at birth, lists of occupations and trades, educational attainment, marital status, etc.

184. Current practice suggests that even in the context of a single country, various agencies may use different data dictionaries or not use them at all. While working with demographic data on foreigners from vital statistics authorities in several regions of Russia, it was found that geographic units of Russian regions were spelled differently and sometimes containing typos, which suggests that no dictionaries are used at all[85]. The new software, "*Territory"*, which may become a prototype for a future Russian population register, uses a Russian classifier of occupations dated from 1994. No information was found as to whether other CIS countries use international or national classifiers in their data processing procedures.

185. *Errors in data input and storage packages*. Errors are inevitable if no logical checks are used in data management. Thus, if an immigrant's status changes, his/her previous status must be automatically cancelled. If an immigrant acquires a permanent residence permit, their

[83] See Chapter IV of the Law of the Republic Moldova dd. 2 June 2000 No. 1024-XIV, On citizenship of the Republic Moldova. http://base.spinform.ru/show_doc.fwx?rgn=3258

[84] Register based statistics in Nordic countries. Review of best practices with focus on population and social statistics. UN 2011, p. 11

[85] Biryukova S., Chudinovskikh O. Possibility to use registry based data for estimates of migration impact on population reproduction (In Russian) Voprosy Statistiki, № 8, 2011

record on the availability of a temporary residence permit must automatically become out-of-date. Similarly, if an individual acquires citizenship, he/she must immediately be excluded from the list of foreign residence permits holders. The practice of using data from the Russian CDBFSP (FMS) has demonstrated that their software does not automatically exclude different statuses. These update procedures need to be performed manually, but are not always made. Statistical reports generated upon request in 2013 and 2014 for individuals holding temporary residence permits (TRPs), demonstrated that the number of such individuals was approximately 40% higher than the actual stock, and in 2015 the difference was almost double. The FMS also produces aggregated statistics based on Form 2-RD, which is maintained separately from the central database and is more accurate, therefore it is possible to compare these data with data from the Central database. This method helped to identify errors and correct records in the CDBFSP.

186. *Mistakes in methodologies to produce statistics.* When professional statisticians are involved in the development of reporting forms or databases, generally there are few mistakes. However, as shown previously, reports on the foreign workforce produced using Form 2-T, which was used in Russia between 1994 and 2010 and is still used by some CIS countries, is prone to error. Fortunately, mistakes of this type can be easily resolved. Starting from 2011, as recommended by academia, Rosstat receives quarterly aggregate reports on the number of individuals who obtained work permits and patents, as well as on the number of individuals who have valid work permits and patents at the end of a period, with a breakdown by countries of citizenship.

187. *Differences in time of move and the time of registration.* A migration event is often registered in registers (and similar systems) with a delay, i.e. there is a time lag between actual move and time of registration. Generally national legislation prescribes a period of time within which a migrant is to notify government authorities; however such periods can be substantial, up to several months. It is considered that statistics based on foreigner registers and similar systems capture changes in migrant's status rather than actual movement events. Before an individual acquires a residence permit he/she has been already in the country for a period of time (often for more than a year), however, their temporary status prevented them from being included into the permanent population and measured as a long-term migrant. As a result, year of migration often mismatches year of registration when a migrant obtains a new status. This situation in particular takes place during regularization campaigns, when many migrants who have been staying in the country for a long time have an opportunity to stay in the country on legal grounds and acquire relevant documents.

188. *Distinction between migration events and migrants.* Apart from issues of coverage and data entry traditionally there is a question: what is the object of measurement in administrative systems: migrations or migrants? Measuring migrants rather than migrations requires mechanisms to identify the same individuals. This enables evaluating the magnitude of movements in a completely different way.

189. When compiling and combining data from different administrative sources, one needs to realize that these systems often contain data on the same individuals. For instance, an individual can be registered when he/she acquires visa, crosses a border, gets registered at the place of stay, and seeks a work permit or a residence permit. However, there might be also exclusions associated with special status of citizens from specific countries who, for instance, may not require a visa to enter a country or a work permit in order to work in the country of stay.

190. For example, the Russian Border Service registers all entries of foreigners; in 2013 there were about 31 million trips made by foreigners. At the same time, the Federal Migration Service also keeps an automated register of foreigners from the time when they first enter the country and such data are personalized. According to FMS reports there were only 17 million foreigners who entered Russia in the same year, which is just over half of the numbers reported by the Border Service.

191. The ability to differentiate between individuals and movements[86] occurs when personal identification numbers (PINs) are collected. Population registers, for which PINs are essential, can do this, but routine measurement methodology based on entry and exit forms does not provide for this. Therefore, we can conclude that statistics of long-term migration in CIS countries capture movement events rather than the actual number of migrants. With Russia's transition to a new methodology this phenomenon seems to have become even more common. The inclusion of many individuals with temporary registration increases risks of multiple counting, because the number of registrations is not limited and early exits and new registrations cannot be identified by Rosstat due to legal and technical limitations (lack of PINs, data to identify the same migrant, etc.).

192. Such limitations are found in systems designed to measure flows based on paper forms. Administrative systems which have automated population registration systems (APRS) (e.g. information system of the State Migration Department of Azerbaijan, *Berkut* system in Kazakhstan, Central Database of Foreigners in Russia) are able to track and measure all movements of the same individual, i.e. the statistics can capture both movements and individuals, as required. The possibility to identify an individual is important for measuring short-term and repeated migrations, as well as in some other cases. As reported by representatives of statistical and migration authorities of CIS countries, this can be done though information systems in Azerbaijan, Kyrgyzstan (with some reservations)[87], and Moldova because all registrations of movement events are based on a personal identification number.

193. Despite of the existence of registers and use of PINs it is not yet possible to identify the same individuals in measuring migration in Armenia[88] and Kazakhstan (but it will soon become possible after individual identification numbers are introduced into the production of migration statistics). It is also not possible in Uzbekistan and Ukraine. In Russia, such possibility exists only in FMS's database (though TIN is not universally applied yet and there are multiple records for the same individuals due to the specifics of transliteration and

[86] As reported by specialists of Armenian Statistics, even though the population register registers individuals, the database of movements reported to the statistical authorities captures movement events.

[87] Specialists of the Statistics Committee of Kyrgyzstan believe that, in principle, it is possible to identify migrants. 'Migrants holding residence permits (temporary or permanent) can get registered at place of residence (in accordance with the Rules of registration and deregistration of citizens of the Kyrgyz Republic at the place of residence and stay No. 886 dd. 4 December 2004), because temporary and permanent residence permits issued for foreign citizens and stateless persons during their stay on the territory of the Kyrgyz Republic (as per the wording of the Government Resolution No. 936 dd. 16 December 2004) is the document of identification of an individual required for getting registered'.

[88] A specialist of the Armenian Statistics Committee noted that so far the statistics authorities have no access to personalized data. An electronic database of foreigners is now under development. As proposed by the statistics authorities of Armenia, the management authority of the border control information management system of Armenia has identified annual data on movements of Armenian citizens, including those with dual citizenship, with population register data and were published in the report 'Social and Economic Situation in January-December 2014'.

different spelling of names), but there is so fare little possibility for producing migration flows statistics by Rosstat.

194. *Methods to assess quality*[89] of administrative statistics of migration depend on the type of data sources used. With respect to emigration flows, the underestimation of such flows can be estimated based on data of major host countries and such studies have been and are regularly conducted by academia. This method allows comparison of emigration from the country of migrants' former residence with immigration to their country of current residence. Here we deal with relatively homogenous data even though such data are collected based on different methodologies. In a host country the system captures the fact of registration, whereas in the exit country underestimation of emigrations is associated with the fact that exits have not been fully reported.

195. Thus, studies conducted by Russian researchers demonstrate that emigration from Russia is considerably underestimated: the flow of emigrants from Russia as per immigration data of major host countries appears to be almost three times larger than the number estimated by Rosstat[90].

196. Similarly, underestimation of labour migration can be also estimated by comparing statistics of issued work permits in destination countries with data from origin countries on individuals who have left the country for work purposes. For an origin country this method is also very productive: the potential estimate of irregular migrant workers who are citizens of a country is important for internal economic policies, as well as for activities of donor countries to legalize and to protect the rights of individuals who work abroad without permits.

8. Possibilities for compilations and comparisons of administrative data

197. Studying migration requires using all available data sources. This is the only way to offset the limitations of each source or to check consistency of the collected data. Compilation and combination of data collected during censuses and surveys with administrative data is one of the focus areas of national statistical offices with classic immigration patterns[91].

198. An unavoidable limitation of administrative data is the impossibility to take stock of non-reported migration events. Therefore specialists believe that the combination of administrative statistics with sample survey data, as well as the use of various statistical methods, helps to improve the quality of international migration statistics[92]. This practice is

[89] Here we are not talking about techniques to check completeness and correctness of data entry and processing.

[90] M.Denissenko. Demoscope-weekly No. 513 – 514, 4 – 17 June. http://www.demoscope.ru/weekly/2012/0513/tema05.php

[91] When estimating data on international migration the Office for National Statistics (UK) uses not only conventional surveys (Labour Force Survey, International Passenger Survey, etc.), but also administrative data of the Department for Work and Pensions (on adult population abroad), statistics of granting asylum, data of the Scheme of Worker Registration from New EU Member States (Ker et al 2007)

[92] Lapéniéne V. New approach to international migration statistics in Lithuania. Combination of data from labour force survey and population registers. Paper presented at DGINS Conference 'Migration – Statistical Mainstreaming', 1 October 2009, Malta

not yet common in CIS countries due to uneven development of data collection systems and time lags in the production of statistics.

199. Some of the examples above compared data of origin and destination countries. The comparison of mirror statistics of migration flows between Russia and Belarus demonstrated that over the past several years the quality of measurement has deteriorated, first in Belarus and then in Russia. Table 8, with data on the number of Russian citizens registered with consular offices, demonstrates that in the case of three Scandinavian countries there was considerable underestimation in consular Russian statistics, which most likely is associated with the fact that registration with consular offices is voluntary. In contrast, in Germany the number of Russian citizens registered with consular offices was almost three times higher than the number of Russian citizens permanently living in Germany.

200. Some CIS countries, where migration and associated event measurement systems have been developed, have practice in data compilation and comparison. When data are collected for several years, combination of statistics is possible. Azerbaijan, Russia, Moldova and Ukraine all use some sort of compilation practices when generating statistics. There are several examples of migration data being compiled from different sources for reporting purposes: Russia annually prepares a report on international migration (for OECD), for which they collect and compile data from different systems; recently Moldova, with the support of IOM, prepared and pro-actively promotes its 'Extended Migration Profile[93], and Ukraine has had positive experiences in academia working with multiple data sources, evaluating data availability and quality[94].

201. National statisticians of Belarus, Kyrgyzstan, Kazakhstan and Armenia indicated that they have no experience with data compilation, and specialists from the latter two countries link any future possibilities of data compilation with the development of registers. A respondent from the National Statistics Committee of Armenia noted that 'sooner or later we should, at least, find a possibility to combine the data of the population register and BMIS, which will help to understand movements of specific individuals. This is not enough but we should make the first step. And to this end we should start with legal regulations as the population register was established under the law, whereas electronic border control is performed as per the government decision'. Specialists from Kyrgyzstan also expressed their hope that such development will take place in the future.

9. *Interaction between national statistics offices and producers of administrative data on migration*

202. The production and publication of statistics from administrative sources strongly depends on cooperation between national statistical offices and relevant agencies responsible for collecting administrative data. NSOs may have access to primary data collected by such agency and process and publish such data, or receive tables with aggregated statistics produced by agreement with an administrative agency. In turn, an administrative agency may

[93] Extended Migration Profile of the Republic of Moldova, 2007-2012. Analytical report. By O.Poalenungi, J.Mazur, M.Vremish. IOM Moldova, Chisinau. 2013

[94] Poznyak O., Malinovskaya O. An Assessment of the Collection, Distribution, Storage and Analysis of Migration Information in Ukraine. – International Organization for Migration (IOM), Mission in Ukraine, 2015. – 74 p.

process collected data depending on its own needs and requirements and then publish tables or reports with statistics which are pertinent to its area of responsibility.

203. When assigning responsibilities for production and publication of statistics one should take into account the specifics of data exchange between agencies. Data can be produced by different agencies and stored in separate databases, used for internal needs and partially provided to other government agencies, as required. The second option implies that there is a national record keeping system which incorporates different modules. An example is the Population Register of Moldova, which incorporates Registration, Consular, Citizenship, Registry and other subsystems into its register system.

204. The third option implies that agencies have their own databases; however, they can feed the data through communication lines to a 'centre' if one information system in the country fulfils a centralizing function. Examples of such centralized systems include the State Migration Registration Information System (SMRIS) and the Central Database of Foreigners maintained by the Russian FMS; these systems are supplemented with data collected by other agencies dealing with migrants. Specifically, the description of the SMRIS says 'Providers of data to the information system are the Ministry of the Interior, Ministry of Foreign Affairs, Federal Security Service and Federal Tax Service. Providers of data can be also other central and local government authorities if these authorities are mandated by the legislation of the Russian Federation to record data on foreign citizens and (or) to provide such data to migration authorities'[95]. Thus, in terms of data exchange FMS appears to be the key authority amongst those mentioned above and can receive data from other governmental agencies.

205. The issue as to what administrative data related to migration NSOs of CIS countries receive from other authorities is essential for producing official statistics. For instance, data on flows and stocks of long-term migrants are required for producing population estimates and population statistics in general. Data on labour migration is required for better understanding of the labour force and labour market situation. Statistics of entries and exits collected at the borders are an element of tourism statistics. In addition, data from NSOs are generally openly available and most statistics are publically disseminated, helping to better inform users of statistical data, as long as it is accompanied by accurate metadata.

206. There is a room for improvement with respect to interagency data exchange in CIS countries. Representatives of national statistical offices have different views on the level of cooperation between NSO and producers of administrative statistics on international migration statistics. During the NSO specialists' survey this level of cooperation was assessed to be 'positive' by specialists from Moldova (with reference to the Moldavian Migration Profile as an example), and 'satisfactory' by specialists from Belarus. Other respondents either did not answer this question or considered the level of cooperation to be unsatisfactory. Statisticians from Armenia indicated that the situation in their country somewhat improved. According to discussions held at the Minsk Workshop in 2015 this is an area that could still use further improvement.

207. Nevertheless, for a comprehensive analysis (and description) of the migration situation one should know what data exist in national government authorities. Having obtained access to statistics, it is desirable to ask how data are collected and processed, as well as to discuss issues of data quality with other users. Practice shows that administrative agencies collecting

[95] http://www.rg.ru/2007/02/21/migrac-uchet-dok.html

data on migration have considerable potential for broadening their outlook. Their staff is often unaware of what their colleagues from other ministries do and even more rarely do they have experience in compiling and comparing migration statistics in order to assess their quality. NSOs in CIS countries also rarely have the opportunity to analyse the results of their work and to assess the quality of migration statistics, especially if these are data obtained from other data producers for which the statistical office is not responsible for.

208. In the context of cooperation between producers of migration statistics another issue is cooperation and information exchange between CIS countries. Of course, CISSTAT has the mandate and is pro-active in harmonizing statistics and data collection among CIS member states. However, though there is a legal framework for centralized collection of statistics, some countries still do not participate in the process, though there are objective reasons for this. The Commonwealth of Independent States is not a firm political or economic union where unified principles of migration management and registration could be applied, as is done in EU countries which have adopted and follow unified and binding principles of data collection and transfer[96]. Further, a number of new migration statistics related initiatives are expected to emerge from the newly formed Statistics Department of the EEU (Eurasian Economic Union), which views migration as a critical process the region.

10. Potential administrative sources of migration data in CIS countries

209. Apart from numbers of migrants, it is important to have information on the demographic, social and economic aspects of migration. Additional sources of migration statistics can and should be derived from databases of government social insurance systems, tax authorities, and agencies responsible for civil registration (acts of civil status), if these systems are not already integrated with the population register. Unfortunately, this potential has been rarely harnessed in CIS countries.

210. Data from tax authorities could be used to further illustrate the economic dimension of immigrants, because, for example, in Russia, when registering and acquiring taxpayer identification numbers the system records place of birth and citizenship, as well as a place of former residence for internal migrants. However, to date there is no evidence that TIN data have been processed in Russia. Starting from 2015, registration with tax authorities and TIN are mandatory for accessing the Russian labour market, therefore the availability of data on foreigners should considerably improve. In the near future it may potentially become a real source of statistics for analysis of labour migration to Russia.

211. In many CIS countries materials from registry offices (ROs) (records of births, deaths, marriages and divorces) contain information on individual's place of birth, place of current residence and citizenship. When registering a birth, theoretically such information is collected for both parents. By analysing these data one can discover how migrants – international and internal – affect demographic processes in the destination region. In other words, data from such sources may become a good supplement to traditional migration statistics collected in the region. Existing information indicates that only the National

[96] Regulation (EC) No 862/2007 of the European Parliament and of the Council on Community statistics on migration and international protection and repealing Council Regulation (EEC) No 311/76 on the compilation of statistics on foreign workers, 2007

Statistical Committee of the Republic of Belarus regularly produces and publishes such statistics; for example their Demographic Yearbook contains data on citizenship of brides and grooms (Figure 22).

Figure 22.
Excerpt of a report on citizenship of brides and grooms married in Belarus in 2012

БРАКИ И РАЗВОДЫ

Продолжение

	Всего браков	В том числе по гражданству жениха									
		Республики Беларусь	России	Украины	других стран СНГ	Израиля	США	Германии	Польши	других стран	без гражданства
2012											
Всего браков	76 245	73 085	1 399	437	261	79	24	83	35	720	122
в том числе по гражданству невесты:											
Республики Беларусь	74 318	71 218	1 376	430	250	78	24	83	35	714	110
России	1 198	1 167	18	3	2	–	–	–	–	6	2
Украины	387	381	2	3	–	–	–	–	–	–	1
других стран СНГ	129	116	2	–	7	–	–	–	–	–	4
Израиля	14	13	–	–	–	1	–	–	–	–	–
США	4	4	–	–	–	–	–	–	–	–	–
Германии	6	6	–	–	–	–	–	–	–	–	–
Польши	–	–	–	–	–	–	–	–	–	–	–
других стран	101	94	1	1	2	–	–	–	–	–	3
без гражданства	88	86	–	–	–	–	–	–	–	–	2

Source: 2013 Demographic Yearbook of Belarus

212. Russia has experience in processing RO data on births, deaths and marriages to determine the number and percentage of events involving foreigners. Estimates show that in 8 – 9 % of marriages in capital cities and neighbouring regions at least one spouse was a foreigner. In Moscow over 9% of children were born to couples where at least one parent had non-Russian citizenship (Figure 23 and Figure 24).

213. Production and analysis of such data offer great opportunities. For example, these can help identify differences in birth and death rates among nationals and foreigners. Such work is on-going in countries which have population registers and is considered to be a traditional area for studying migration and its implications. Since 2015, the National Bureau of Statistics of the Republic of Moldova produces vital statistics on the basis of the electronic microdata received from the Registry Offices and the State Population Register.

Figure 23.
Percentage of marriages with foreigners in selected regions of Russia, 2011

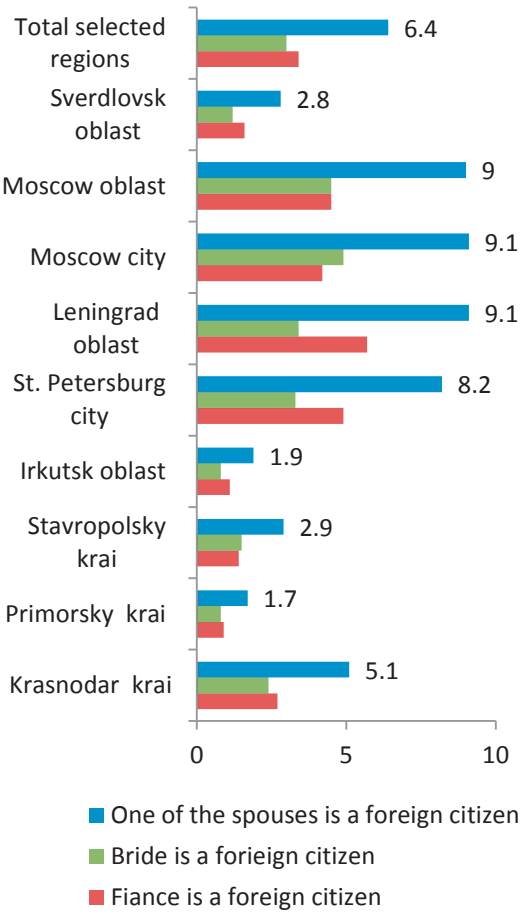
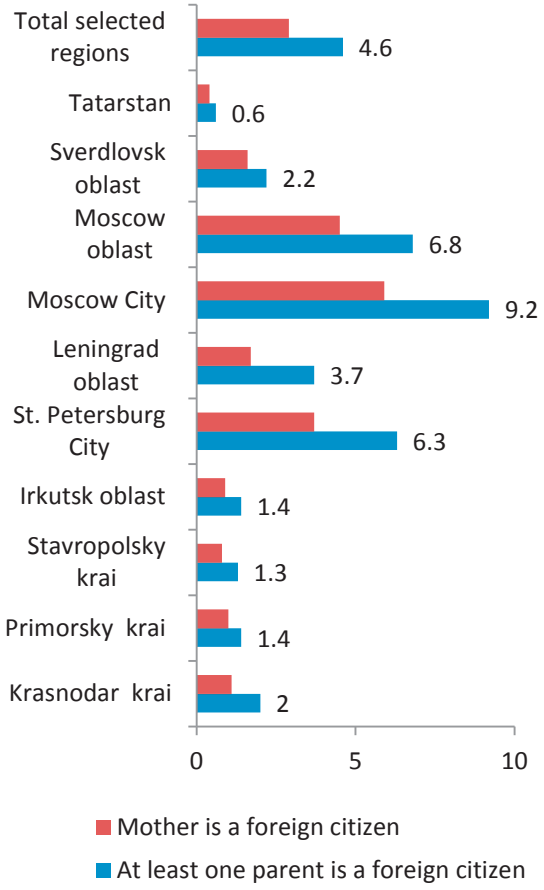


Figure 24.
Percentage of children born in selected regions of Russia, to couples where at least of parents had non-Russian citizenship, 2011



Source: RO materials provided by Rosstat. Estimates by S.Biryukova

214. Administrative data can also help dispel some myths about migrants. The mass media of host countries often discuss crimes among migrants and provide unconfirmed figures which help to fuel anti-migrant and xenophobic attitudes in society. Meanwhile, the MoI's reports on the number of crimes committed by foreigners and against foreigners help to compare levels of criminal activity between foreigners and the national resident population.

215. The data on the health of migrants are of special interest. In host countries some categories of migrants (including temporary migrant workers in Russia) must undergo medical examinations and prove that they do not have illnesses and infections that pose a threat to public health. Summarizing medical examination data and comparing with publicly available data on incidence and infection levels (national health authorities, WHO) will help evaluate differences in the health status of migrants and the population of a host or donor country in general.

11. Concluding remarks and recommendations

216. The development of administrative systems for registering migration has progressed in most CIS countries in recent years. The statistics produced from such systems is becoming more diverse and access to the data is gradually enhancing. A community is now evolving in CIS countries which is interested in developing national migration statistics and bringing it up to the international standards. However, there is still much progress to be made, as the overall situation is hardly satisfactory.

217. Frequently, administrative data on migration and related events are compiled but statistics are either not produced or is available for internal use only. Many electronic information resources which directly or indirectly register migrants are still used mainly for gleaning information on specific individuals rather than for aggregating and producing statistics.

218. Examples of open publication or provision, upon request, of administrative statistics covering different types of migration are still rare. In many countries, it is still difficult for external users to access administrative statistics. Very few, if any, countries in the region have a tradition to publish administrative data on statistics in structured, user friendly and regular reports.

219. Information from vital statistics, social insurance systems, and tax authorities are barely processed; whereas in fact they have the potential to diversify existing migration statistics and give answers to many questions. Administrative agencies that are not directly involved in regulating migration do not produce such migration statistics at all[97]. There is no evidence that (aside from personal information) statistics including migration background or migration status of individuals are used in the tax service or in the system of pension or health insurance.

220. Often the data entered in databases include limited variables characterizing migrants and lack those variables which administrative agencies do not require for their decision-making purposes (educational attainment, marital status, etc.). This considerably limits the potential for producing statistics.

221. Apart from missed opportunities for analysis, the low cost of using administrative data is not taken advantage of. In this context it seems difficult to speak about best practices and to cite any country of the region as an example for other countries to follow. Specialists from each country generally understand how different categories of migration should to be monitored but such understanding often runs into formal limitations associated with both statistics production and publication.

222. The development of information technologies drives all CIS countries towards establishing and improving automated systems of population registration. Some countries have launched population registers and similar national registration systems but the process is

[97] V.Ganta, author of a note on systems for collection of data on migration in Moldova, said that 'only some of these agencies disseminate statistical data. Furthermore, other agencies also have specialized databases but use them for internal needs only' (See V.Ganta, 2012).

very uneven. In some countries of the region, NSOs still receive data on long-term migration in hard copies, which is an excessively time consuming anachronism. It is taking too long to resolve positively the issue with transfer of administrative data in electronic format.

223. Most CIS countries still need to address the issue of insufficient cooperation between national statistical offices and ministries which collect data on population movements. As noted above, the ministries themselves are quite reluctant to produce their own statistics, neither they are keen to delegate such authority to NSOs which can make the data accessible to a wide range of users.

224. There are still asymmetries in the development of statistics related to migration, depending on whether the country is mainly a host or a source country. Countries focused on registration of temporarily absent population are less interested (including in terms of investment) in the development of administrative systems to track immigration because it is considered to be negligible and has no strong impact on the situation in the country.

225. Quite often restructuring of agencies responsible for regulation of specific types of migration (apart from the ministries of education) does not contribute to capacity building and continuity. Each time the agency is restructured, new employees come to work in statistical branches, many of whom are not experienced in work with data.

11.1. Recommendations

226. In summary, we can recommend that CIS countries continue to work on a number of principal areas, common or particular, in which the role of the coordinator (or most interested observer) must be played by NSOs. These recommendations could be applied selectively in countries where some of the questions have already been addressed or future actions have been defined.

227. In general, in CIS countries there is a need to improve cooperation between NSOs and the producers of administrative statistics of migration, both existing and potential ones. There is a number of steps related to this recommendation:

- Agencies should consult with representatives of NSOs and take into account possible needs of statistical agencies and wide range of users.
- NSOs should be involved with producers of administrative data in methodological work to develop administrative statistics on migration and related processes, especially if an agency has no previous experience in such activities.
- Both NSOs and agencies should develop a common approach and make the decision on what administrative data are to be submitted to a NSO for further processing and publication and what data an agency is to process and publish itself. This decision should include what types of statistical information will be provided NSO, whether these will be individual or aggregated data to be provided to NSO, what variables will be made available, and how often and in what format data will be provided.

228. Specifically,

- NSOs should:

- Together with administrative agencies, consider producing detailed migration statistics with the identification of time and purpose of move, and explore the potential of such statistics to disaggregate flows and stocks by short- and long-term migration.

- Start elaborating 'migration variables' collected by vital statistics in order to assess migrants' contribution towards demographic processes in a host country. Such statistics can demonstrate absolute numbers of demographic events among migrants, and the differences between migrants and non- migrants in major demographic events.

- In their turn, administrative agencies collecting data on migrants and migration events should:

  - Demonstrate more interest in statistics collected by other national agencies and develop inter-agency cooperation on a bilateral or collective basis.

  - Transmit electronic data to NSOs for producing the statistics of flows and stocks of long-term and short-term migration.

  - Ensure that raw data are fully and reliably entered, including variables required for identifying and profiling migration.

  - Commit to develop agency-level statistics related to migration in accordance with best practice of countries which have many years of experience in such activities. This could help agencies to answer important questions which are within their mandates, such as tax revenue generated from migrants, the efficacy of social insurance for migrants, estimates of the number of migrant children enrolled in schools and future planning needs, impact of migration on health care, etc.

  - Start regular publication of comprehensive statistical reports for which address a wide range of users, and are freely available. These reports should include, for example, main indicators of the entries and exits to and from a country, issuance of residence permits, access to national labour markets, naturalization, etc. There is a long-standing need for these sorts of publications.

229. Special attention should be given to the development of technologies for collecting, transferring and processing data for improving migration statistics. Among other things, the transition should be made as soon as practicable from paper-based raw data on migration to electronic data files to be provided to NSOs. This will save considerably save manual work and accelerate processing of raw data.

230. Implementing these recommendations will improve the availability of diverse administrative data and will open new prospects for data compilation and quality assessment. In combination with data on migration, developed on the basis of population censuses and household surveys, administrative statistics can answer many questions related to both

positive and negative aspects of migration-related processes, and help make informed decisions on issues related to migration in CIS countries.

Chapter III Sample Surveys

1. Overview

1.1. Topics for migration studies

231. Over the past few decades surveying social phenomena through samples of selected respondents has continually increased and evolved in terms of methods and modalities of investigation. This has been particularly true of international migration, first in developed countries and later in developing countries, given the increase and diversification of migration patterns over this same period. These surveys represent the initiatives of governmental agencies (mainly NSOs), research and academic institutes, non-governmental organizations and other entities.

232. The scientific study of migration was initially based on population censuses and administrative registers and later adopted sample surveys. Compared with other data sources, sample surveys allow one to undertake more in-depth investigations and thus obtain more detailed results. If population censuses and administrative registers give quantitative measurements on levels, patterns and trends of migration phenomena, sample surveys mainly provide qualitative information useful for complementing knowledge of patterns and trends. In particular, given the repeatability of migration during the life of a person, its frequent and varying modalities and different and emerging forms over time, surveys allow for the measurement of migration histories and personal motivations, thus enable us to ascertain the determinants and consequences of migration. This improves the ability to define and implement policy measures relevant for migration and, more in general, for the development of individuals and their countries of reference.

233. Naturally, the level of information available from sample surveys varies depending on their type and other conditions. Furthermore, sample surveys are all faced with challenges of selection of units and generalisation of results to the total population, the sensitivity of asking questions on certain topics, and the involvement of more than one country in migration movements.

234. When categorising possible topics and measurements of migration, it is widely accepted that the number of migrants arriving to, living in, or departing from a country is of primary concern, which is normally represented by the measurement of stocks (number at a given moment in time) and flows (number during a period of time) of migrants.

235. Further information of interest are the main demographic and socio-economic characteristics of these migrants, with respect to features like sex, age, country of birth[98] or previous residence, citizenship, place of residence, date of arrival, level of education, economic status and occupation. The provision of this information is often gained through

[98] In the population census, place of birth and place of previous/next residence generally allow to derive respectively country of birth and country of previous/next residence. Place of birth and place of previous/next residence are particularly important because they allow us to know an exact region, province, district and/or location, so both international and internal migration can be studied. However, given the focus of the manual on international migration, 'country of birth' and 'country of previous/next residence' are used more frequently hereafter.

population censuses and administrative data systems. However, where this information is collected infrequently (as with censuses) or partially (as with many administrative sources), sample surveys dealing with migration may provide these information more frequently and in greater detail, including detailed information about characteristics and timing of migration processes (including return migration).

236. Sample surveys are also able to collect information on a wide range of additional personal and collective characteristics of migrants and their households, including for instance their household and family composition (once again, in particular when other sources are rare or insufficient), aspects of living conditions, and the pre-migration situation and full employment, education, and family histories of migrants. In fact, these characteristics may be collected through in-depth interviews of either migrants themselves or other respondents on their behalf (called proxy respondents). Given the cost of and burden associated with collecting this information for an entire population, such data collection can only be obtained through samples of households and respondents.

237. The pre-migration situation and complete histories and trajectories of migrants are necessary to study the consequences (impact) and possible future trends of migration. The amounts and different types of remittances (financial and social) sent by migrants and associations and their use by households and communities in countries of origin, represent one of the main aspects of migration impact. However, there are a wide range of topics and issues that represent the effects of migration, including those less tangible, such as personal attitudes and behaviours resulting from having experienced, or not experienced, migration over a lifetime.

238. On the other hand, to completely assess the consequences of migration data need to also be collected from the non-migrant population. This can provide measurement of migration's impact from both a material (e.g. remittances received) and non-material (e.g. intention to migrate) perspective. Thus, for example, the evaluation of consumption patterns, investments and attitudes of households receiving remittances from members who migrated abroad, remains incomplete until the conditions of households without migrants are also investigated. Sample surveys also allow these aspects to be analysed, through comparison of return migrants and households with migrants currently living abroad, with people living in the same country of origin who have never migrated nor have any household members living abroad.

239. Finally, specialized migration sample surveys allow for direct in-depth investigations on specific categories of migrants due to specific episodic circumstances, which are emerging with greater frequency throughout the world including CIS countries. This may include a focus on people seeking asylum abroad, massive flows deriving from political crisis and conflicts (for instance as has occurred in recent years in some CIS countries), or the victims of trafficking of human beings.

1.2. Types of sample surveys

Introduction

240. Sample surveys on international migration are generally based on direct data collection from migrants or non-migrants, normally through face-to-face interviews at country border points (so-called border or passenger surveys), within households residing in the territory or abroad (household surveys), or in other places and contexts, even using alternative

methodologies (non-border and non-household surveys). The latter may include, among others, surveys conducted at workplaces or public places (e.g., religious or cultural centres), and self-compiled questionnaires sent via mail or made accessible on the Internet. Sample surveys may also be carried out via indirect data collection from people dealing with migrants and non-migrants such as national officers responsible of migration management, practitioners in the area of migration or private employers. A combination of methods may be considered for undertaking specific migration studies, utilizing a type of mixed data collection method targeting both migrants and key informant type respondents.

241. For each type of sample survey, the study of migration may in principle be conducted through different data collection tools, i.e. additional questions, or *ad hoc* modules attached to the questionnaires of more general surveys, or specialized questionnaires targeting specific groups of migrants or population. Further distinctions may be given by aspects like frequency of data collection (episodic versus continuous surveys) or approach of data collection (cross-sectional surveys versus longitudinal surveys, i.e. surveys based on panels of respondents, often rotating over time).

242. The following sub-sections review the main features, opportunities and challenges of sample surveys classified as follows:

- **Border surveys**
- **Household surveys** with migration questions or modules (or general household surveys)
- **Household migration-specialized surveys** (household migration surveys)
- **Other migration-specialized surveys**, including surveys on specific types of migrants undertaken outside of households or border points, indirect surveys, and mixed surveys (studies)

243. In addition, these sub-sections refer to methodological documentation and several individual surveys and survey programmes implemented worldwide, including CIS countries, over the last twenty years. Among the more recent initiatives, the monograph *International Migration and Remittances in Developing Countries: Using Household Surveys to Improve Data Collection in Eastern Europe and Central Asia,* prepared by Richard Bilsborrow and Mariam Lomaia for the World Bank (Bilsborrow 2011), is a particularly important reference. Furthermore, in 2015 a repository of migration surveys was prepared within the framework of the EU-funded Project TEMPER (*Temporary versus Permanent Migration*) and made available online[99].

244. Finally, sample surveys implemented in CIS countries are briefly described/reviewed and compared in general terms, on the basis of varying details of information gathered while preparing this manual. Key methodological issues particularly relevant for household migration surveys are then later discussed.

Border surveys

245. As seen in the previous chapter, apart from some exceptions like between select CIS countries and within the EU Schengen Area, most countries run a system of controls at border

[99] http://www.temperproject.eu/research-areas

crossings. However, these controls are implemented through varying procedures and tools (e.g. entry/exit cards) and levels of registration of individual passages, depending on practical arrangements and local conditions (e.g., border posts in desert areas, level of computerisation, etc.), the existence of bilateral agreements (which applies to some countries belonging to the CIS Region) and other circumstances.

246. Besides the collection of data from administrative procedures, national border crossing are also used for data collection operations aimed at learning about the movements of tourists, commuters, migrants and other categories of international travellers. Most of these statistical operations are based on gathering information from samples of travellers at the time of their arrival to or departure from the country, through face-to-face interviews and standardised questionnaires designed for specific purposes. These border or passenger surveys are ideal for countries where border points are fully controlled and relatively few in number, or even limited to a few air and sea ports, such as small countries/islands.

247. The registration of border crossing data through administrative procedures is intended for all travellers or a defined group of them (e.g., foreigners) and has the primary purpose of security control, and normally is the responsibility of police or state security services under the Ministry of Interior. Information collected is limited to basic personal data and some additional information, depending on the type of data collection tool (e.g., optical reading of passports or entry/exit cards). This information may include the type of document allowing entry to or exit from the country (e.g., a three month visa issued for tourism) and the purpose and expected duration of stay/absence (see previous chapter for more detail).

248. Compared with border administrative registration, border surveys have the main objective of collecting statistical information, by sampling people experiencing the same conditions (e.g. crossing an international border) and asking them relatively in-depth questions targeted to the specific purpose of the investigation. Therefore, respondents of these surveys may be able to provide more information than what could be provided by a border card or other administrative document. For instance, some people entering the country could be asked to report on their intention to stay beyond the period stated on their short-term visas, such as possibly finding work in the country. More general, border crossing respondents may provide at least some information reflecting their personal biographies, current conditions and prospects linked to migration, or simply the specific case of their current border crossing (e.g., if with or without family members). In general, given the limited time that passengers may have to answer questions, it is necessary to adopt short questionnaires for border surveys.

249. As well as the possibility raised above, the declaration of respondents about their intentions and expected duration of stay in the country or abroad may be itself a constraint. Thus, for surveys on immigration, as well as emigration, it may be useful to also collect contact information of the sampled people in order to conduct a follow-up survey at a later time. This may provide a way to check the real outcome of the entry into or exit from the country, collecting information on future migration status, as well as creating a sample of respondents for future migration-specialized surveys.

250. Other disadvantages of border surveys mainly derive from sampling. In fact, though international migration is overall a rare event, it is likely enough migrants will be found where border movements are particularly intensive. However, in most countries only a very limited number of all passengers move to change residence at a given moment. Most international movers are tourists, business people and other visitors for short periods of time

or even cross-border workers. Therefore, border surveys need to include large samples of passengers in order to find an adequate number of people eligible for migration-specific interviews and thus limit sampling errors. In the end, the number of migrants may represent a minimal percentage of all passengers in a survey.

251. As a second complication linked to sampling, in principle border surveys cannot utilize sampling frames of respondents. In a general way, potential tools like passenger lists of international carriers exist; however these may be difficult to access and will only provide information limited to the name and basic demographic data of passengers, which does not help target migrant passengers. In addition, international movements in principle occur at any moment during the year, regardless of reasons, while for cost purposes survey fieldwork needs to be conducted in hours useful to catch people frequently.

252. A detailed account of the problems and possible solutions in using border surveys is included in the guidelines on the production of migration statistics established by the International Labour Organization (ILO) in 1997 (ILO 1997). The International Passenger Survey (IPS) of the United Kingdom perhaps represents the major worldwide application of such a survey (MEDSTAT 2009). Some relevant border surveys have also been implemented in CIS countries, such as the *Survey on Studying of Migration Processes* in Azerbaijan of 2009 (see Annex IV and SSCAZ 2014).

Household surveys with migration questions or modules (general household surveys)

253. Countries and NSOs often opt for measuring some aspects of migration phenomena through the introduction of specific questions or *ad hoc* modules on migration in their data collection questionnaires. For example, this can be applied to border surveys conceived for multi purposes, population censuses and especially household surveys.

254. In general terms, the use of questions and modules on migration in household surveys depends on several factors, such as the availability of alternative sources, the frequency of the surveys themselves and other national circumstances. This is the case for labour force surveys, as well as of other specific topics like income and living conditions, or multi-topic surveys carried out on a regular or ad hoc basis, usually adopting large nationally representative samples.

255. The advantages of utilizing these types of surveys lie in the recurrent and increasing demand for information about migration and the marginal costs associated with gathering this information. In fact, while migration-specialized survey requires specific settings and huge resources, a pre-existing general survey already has its own organization, infrastructure and budget. Other advantages come from the possibility to customize questions and follow internationally agreed definitions and to obtain relevant information on the socio-economic characteristics of migrants and on their patterns of migration. Finally, similarly to border surveys, specific questions in general surveys may also serve to assist in the design of sampling for successive migration-specialized surveys.

256. In order to obtain robust results, these surveys demand specific requirements and shrewd sample design and selection strategies in order to obtain adequate numbers of respondents and/or to cover specific groups of migrants. Therefore, they require at least a

large general sample and/or a high incidence of the specific category of migrants subject to investigation[100].

257. The measurement and study of migration in general household surveys is aimed through the adoption of the following tools:

- Questions useful to identify migrants and non-migrants belonging to households (e.g., **return migrants**, non-migrants / potential migrants, family members of current out-migrants left behind in the household of origin, current out-migrants from the same household) and general attitudes of households linked to migration.
- One or more modules for individual respondents or the household as a whole. Details on these aspects are presented in Section III.2.

258. In any case, due to their wide-ranging objectives and ability to ask a limited number of questions, thus reducing **response burden**, general household surveys may address specific aspects of migration, namely the determinants and consequences of the phenomenon.

259. Other features which should be addressed when using household surveys with migration questions or modules are:

- The provision of questions regarding absent or former members of the household answered by proxy respondents;
- The use of a reference period (**cut-off period**) before the time of survey, as well as the use of concepts and definitions adopted for defining different types of migrants;
- The coverage of households that have migrated in their entirety during the reference period.

260. These points are further addressed later in the chapter.

261. The inclusion of migration-related questions or modules occurs on different types of household surveys. Labour Force Surveys (LFSs) and other employment surveys certainly represent the main case, due to the relationship between migration and employment- or even unemployment-, their high prevalence and frequency, as well as their typically large (nationally representative) sample sizes. Household Budget Surveys (HBS) are often adopted as well, in particular to learn about the impact of migrant remittances on households. The World Bank-sponsored Living Standards Measurement Surveys (LSMSs) offer a good degree of flexibility and normally utilize nationally representative samples, though often of small size, which limits their usefulness for this exercise. Demographic and Health Surveys

[100] In fact, Bilsborrow (2007) considers a sample of 5,000 households (about 20,000 individuals), an adequate size for a general survey in a medium size country. An incidence of foreign born population living in the given country of 5% may presumably sample only around 1,000. This may become irrelevant for studying immigration if an important number of these potential respondents arrived in the country many years earlier, are minors, or do not belong to the economically active population. On the other hand, adopting a sample of 50-100 thousand households in a country with a high proportion of people born abroad, the numbers of relevant adult migrants within the sample should be sufficient for making conclusions about the size and basic characteristics of migrants at both the national and regional levels.

(DHSs), which are generally funded by the US Agency for International Development, are undertaken less frequently than LFSs or HBSs, though they adopt nationally representative samples large enough to elaborate results at the department and province level. However, it is worth noting that they have rarely measured international migration. All other general or multi-purpose household surveys, such as the Multiple Indicator Clusters Survey (MICS) promoted by UNICEF, are effectively –or may be in principle- adopted for international migration, although with limitations mainly linked to the size and representativeness of samples and the purpose of the investigation.

262. Different migration modules for general household surveys are made available through manuals and publications. In the cases of LFSs, LSMSs and other general surveys, modules are adopted worldwide, often with some adaptations due to national circumstances. As a main example, ILO created around 2005, and further developed in 2010, the Labour Migration Module (ILO LMM 2015). It was a set of comprehensive model questionnaires on labour migration and remittances, but flexible and customisable with long and short versions to be attached to existing LFSs or other general household surveys. It is made up of three sections, i.e. an individual questionnaire, a foreign born section and a native-born section. The household roster collects data for all household members, with more details for those aged 15 years and older. Other *ad hoc* modules on the labour market situation of migrants and their immediate descendants were introduced in EU LFSs of 2008 and 2014 (Eurostat 2014). Other types of general surveys, in particular household budget surveys inspired by the World Bank, were largely introduced in different regions in recent years and particularly in Eastern Europe and CIS countries (Bilsborrow & Lomaia 2012).

263. In recent years many CIS countries have used migration modules in general household surveys. This includes the cases of LFSs of Armenia, Moldova and Ukraine, based on the ILO LMM since 2006, as well as HBSs of most countries in the region since 2000, as reported in Annex IV and Annex V.

Specialized migration surveys (household migration surveys)

264. The continuous administrative registration systems described in Chapter II are useful sources to inform about the numbers and a few other basic characteristics of migrants- either immigrants, emigrants or other categories, in terms of both stocks and flows. Similarly, this information may be provided by population censuses, either through traditional enumeration and other methods. However, censuses are not carried out frequently (every ten years), and the information provided depends on the definitions and coverage of the population, as well as on the migrant categories and the adoption of other specific requirements or questions. As an example, multiple citizenship is still often not measured on censuses in countries that allow it. Finally, as discussed earlier, border surveys and general household surveys are mostly useful to know about a few migration aspects of the sampled population and to help establish estimates of flows and stocks of migrants at the country level.

265. When regular migration is considered, household migration-specialized surveys represent the most suitable statistical operation to inform about complete migratory and employment histories, behaviour, attitudes, and future plans of individuals and households. In other words, these surveys allow to ask more questions and thus to investigate the determinants and consequences of international migration. On the other hand, these surveys can be expensive.

266. These types of household surveys have, by definition, the constraint of deriving detailed information from a sample of respondents. However, several measures may be taken to reduce the distortive effects of sampling, such as using large samples of respondents or targeting eligible respondents after a wide listing operation. Furthermore, these surveys are flexible in content and may focus on specific components or aspects of migration, such as immigration of foreigners, emigration of nationals abroad, return migration, or the intention of people to emigrate abroad. They generally also include so-called control groups of individuals (e.g. non-migrants) and households (non-migrant households), which are relevant to study the impact of migration on socio-economic development, living conditions and cultural attitudes. Control groups are relevant because effective assessment of the determinants and consequences of migration also requires information about the different paths and evolutions of those who did not move. Finally, given methodological specificities and the generally high costs, household migration-specialized surveys are undertaken less frequently than other general household surveys.

267. Another important distinction between household migration-specialized surveys concerns whether they are implemented in one or more countries. As a matter of fact, any migratory movement implies one country of origin and one country of destination, in addition to the possibilities of countries of transit, successive moves and so on. At a local level, for each country of destination there are often several countries of origin, often linked by international trade, language, colonial ties or geographical proximity, which constitute interlinked systems, also known as migration systems (Kritz et al 1992). Specialized surveys are more frequently carried out in one country ('one-way survey'), generally in the country of destination, than in both the countries of origin and destination or migration system ('both-way surveys'). This mainly depends on the degree of relevance of migration in the countries of origin and destination, the combination of countries (for instance, an important immigration country may include flows originating from a variety of countries), the feasibility of bilateral or multilateral cooperation initiatives, methodological issues, and resources available for the project. Here it is important to consider that there are a wide range of options mainly depending on the objectives of the investigation, the possibility of collaboration with institutions located in relevant partner countries, and on the availability of financial resources.

268. Given the specificity of investigation, the previously mentioned issues of cut-off period, proxy respondents and coverage of households migrating as a whole assume more relevance for specialized migration surveys than general household surveys. Specialized migration surveys need some sort of conciliation between the aim of investigation and the practical conditions for carrying it out.

269. Several initiatives of migration-specialized surveys have been undertaken in CIS countries over the last twenty years. More recently these include proposed both-way household surveys advanced in 2012 under the framework of Project MiRPAL[101] (see Box 1), two surveys on emigration from Tajikistan undertaken in 2014, and comprehensive surveys recently undertaken in Armenia and Ukraine (Annex IV). Furthermore, relevant experiences consist of a survey on return migration undertaken in Armenia (in parallel to

[101] *Migration and Remittances Peer-Assisted Learning*, an initiative aiming to deepen knowledge and understanding, as well as strengthening cross-country collaboration on migration policies and practices in CIS countries – see at www.mirpal.org.

Mali and Tunisia) in 2012 under the initiative CRIS[102] and surveys on migration and skills implemented by the European Training Foundation (ETF) in Armenia, Georgia, Moldova and Ukraine (as well as Albania, Egypt, Tunisia and Morocco) between 2007 and 2011[103].

270. Outside CIS countries, the more important survey initiatives of recent years concern the following:

- Specialized surveys undertaken in Egypt, Ghana, Morocco, Senegal and Turkey (as origin countries) and Italy and Spain (as destination countries) in 1997 in the framework of Eurostat/NIDI Project[104] (Eurostat 2000);
- Surveys on emigration, return migration and forced migration undertaken in the framework of MED-HIMS Programme[105] in Egypt (2013) and Jordan (2014) plus the 2010 Palestinian Migration Survey based on a preliminary version of MED-HIMS Model Questionnaires (MEDSTAT 2014);
- Surveys undertaken in Senegal, Ghana and the Democratic Republic of Congo (as origin countries) and France, Italy and Spain (as destination countries) around 2010 in the framework of the MAFE Project[106];
- Surveys on temporary, return and circular migration to be undertaken under TEMPER in a number of countries from four major geographic sending areas, namely Eastern Europe (Romania, Ukraine), Latin America (Colombia, Argentina), Sub-Saharan Africa (Senegal, Ghana, DR of Congo) and North Africa (Morocco) with France, Italy, Spain and United Kingdom as destinations (www.temperproject.eu).

Box 1.
The 2012 proposal for studying international migration and remittances in the CIS countries

In the last few decades, and particularly since 2006, the increased interest in international migration and its potential value for migrants, as well as countries of origin and destination at the global, regional and national level, generated a series of proposals and initiatives for investigations using household surveys. This has been particularly the case in countries with limited or unreliable data on migration flows, which also lacked appropriate sample surveys for the study of the determinants and consequences of phenomenon.

A proposal for a round of household migration-specialized surveys in CIS countries emerged under the auspices of the World Bank MiRPAL Project around 2010, coming

[102] *Cross-Regional Information System on the Reintegration of Migrants in their Countries of Origin*)of the European University Institute (EUI) / *Return migration and Development Platform* (RDP, http://rsc.eui.eu/rdp, an initiative aiming to address the socio-economic, legal and institutional factors and conditions shaping returnees' patterns of reintegration in their countries of origin.

[103] http://www.etf.europa.eu/web.nsf/pages/PRJ_2011_WP11_40_33

[104] Push and Pull Factors of International Migration.

105 Mediterranean Household International Migration Surveys.

106 Migration between Africa and Europe. http://mafeproject.site.ined.fr/en

from an assessment on measuring migration through general household surveys in the region and other Eastern European countries (Bilsborrow 2011). This proposal was discussed at the international level, and its goal was to undertake new data collection via specialized surveys in both origin and destination countries of migrants in CIS countries, similar to the Eurostat/NIDI Push-Pull Project. In fact, CIS countries constitute an almost ideal migration system, given their shared cultural ties and frequent use of Russian, as well as shared flows of capitals, goods and services, and labour migration.

The key condition for such a survey programme is adoption of the same target population and the use of similar definitions and methodologies in two types of countries, i.e. of origin and destination.

Identification of international migrants was proposed to focus on changes of permanent residence involving a change of country occurring within the past 10 years. While a 5-year cut off point is often preferable for the sake of data quality and policy making purposes, a 10 year cut-off point was used to increase the number migrants present in the sample. The study was further limited to those 15 years and older, since intention to migrate was also of interest.

The survey programme aimed to cover the following population groups:

- Out-migrant: a person who at age 15 or older, migrated from the sample household to live in another country within the past 10 years (regardless of duration of emigration, as the purpose was to capture those who may have just left months or days ago to live abroad);
- Immigrant: someone who came to live in the household from another country during the past 10 years, but was at least 15 years of age at the time of immigration.
- Return migrant: a member of the household who left to live abroad at any time in the past but returned within the past 10 years (again without a time requirement for living abroad).
- Non-migrant: any members of sample households who are not migrants as defined above, thus includes household members who emigrated longer than 10 years ago, return migrants who returned over 10 years ago and immigrants who arrived more than 10 years ago.

Finally, related to sampling, in countries of origin a stratified sample was to be used, followed by two-phase sampling of units. In the end around 10,000 households would be interviewed.

To date, the proposal has only found application in Tajikistan in 2014, with data collected on return migrants and non-migrants in that country, as well as among Tajik migrants in Russia – as partially reported in Annex IV on the basis of gathered information.

Other migration-specialized surveys

271. This residual category of sample surveys relevant for migration (both international and internal) includes a wide range of operations having at least one of the following features:

- Implementation in places different from households and border points, such as workplaces, public places or refugees camps;
- Data collection from respondents or other informants different from migrants, but linked to them; and
- Adoption of data collection methods different from interviews or in their combination (mixed surveys and studies).

272. Therefore, this group primarily includes surveys on specific categories of migrants or descendants of migrants, such as the following:

- Migrant workers or international students;
- Second generation descendants of migrants;
- Irregular migrants;
- People living in collective households;
- Migrants receiving some form of social protection or assistance;
- Migrants disproportionately concentrated in specific geographic areas;
- Members of diaspora communities abroad.

273. Apart from that, there may be surveys on related aspects of migration; such as remittances sent by various hometown associations to organizations and communities in their countries of origin or even social remittances (basically ideas, practices and social capital) issued by migrants abroad.

274. Given the wide and evolving range of specific migration phenomena and the need for related information, the modalities of implementing such surveys significantly vary. Thus, the classical data collection method of interviewing individuals is complemented or replaced by methods like respondent self-administered questionnaires, in-depth interviews with experts, as well as focus group discussions. In all these cases, any method adopted for selecting respondents to interview or participants in discussions underlines a non-probabilistic sampling method and thus opens questions about its representativeness. These surveys are often part of larger studies and are undertaken outside of NSOs, which is why they are given limited consideration here.

275. These other migration-specialized surveys generally provide qualitative measurements of migration-related phenomena. Their main advantages derive from their targeted approach and adoption of more pertinent strategies for data collection. In fact, first they directly address the specific category of migrants or people that are most relevant in order to inform about their topic of interest. Moreover, these studies may be composed of different data collection operations, thus are more flexible and innovative with respect to practical modalities of data collection. Hence, for instance, a specific sample of foreign students can be immediately selected as respondents using the enrolment register of a given university, and they can further be interviewed via self-administered Internet based questionnaires. All this is crucial for effective measurement in terms of quality and detailed results regarding measurement of complex issues, while making best use of limited financial resources.

276. Among examples of these type of surveys in CIS countries, it is useful to refer to the mapping of Moldovan diaspora in selected EU countries undertaken on behalf of IOM in 2012 (IOM 2013b). Based on data collected through this survey, several interviews with experts and focus-groups discussions were further carried out.

277. Several surveys on irregular migration have been conducted by the Foundation for Initiatives and Studies on Multi-ethnicity in Italy (Blangiardo et al 2011). An online survey among EU Blue Card holders in Germany was undertaken in 2014 by the German Federal Office for Migration and Refugees (Hanganu 2015). The survey's target group was identified by using data of the Central Register of Foreigners that contains the residence titles of all third country nationals (as well as the data of EU citizens) staying in Germany. Another example is the study *Mixed Migration: Libya at Crossroad. Mapping of Migration Routes from Africa to Europe and Drivers of Migration in Post-revolution Libya* prepared in 2013 for UNHCR. This study was based on new data collection from interviews with migrants, representatives of national institutions and international organizations, and other key respondents in Libya and abroad (Altai 2013). Finally, the Mexican Migration Project, launched in 1982, aimed at gathering data on the characteristics and behaviour of regular and irregular Mexican migrants to the United States using a number of mixed methodological approaches (http://mmp.opr.princeton.edu).

1.3. Choosing the most useful surveys

278. The specific data collection that a country should implement through sample surveys on international and/or internal migration depends on a series of circumstances. These mainly include the migration profile of the country, information needs for migration management and development, the current availability of information, the availability of technical capabilities and financial resources, as well as the degree governmental services understand the usefulness of evidence-based policy-making.

279. The use of sample surveys relies on what information is already available on a regular or irregular basis, in terms of flows and stocks of migrants, as well as more in-depth topics. As a matter of fact, important and mainly quantitative information may already be available through administrative sources or, less frequently, from population censuses. The absence of such information, or even the lack of accessibility to data sources, may necessitate use of sample surveys to collect this information. This is illustrated by an increased number of NSOs implementing surveys to collect information missing or inaccessible from other sources, particularly though the integration of migration questions onto pre-existing general household surveys. On the other hand, sample surveys, namely migration-specialized surveys, constitute the ideal method for collecting qualitative information on the determinants and consequences of migration, or to profile specific categories of migrants (see III.1.1), though many countries do not have the resources needed to conduct this type of work.

280. In more general terms, the choice of the most useful surveys, as well as the specific modalities of investigation, should follow the specific needs and evolution of the individual country. To give an example, consider a country with an unchanging migration profile, with significant permanent inflows of labour migrants, with good levels of integration with local population, and irrelevant outflows over the same period. Such a country may find it viable to monitor the phenomenon of foreign immigration on an annual basis through administrative sources, a population census undertaken every ten years, and implementing comprehensive household specialized surveys every five years (between censuses) to address qualitative aspects linked to immigration and integration of foreigners. On the other hand, if the same

country cannot rely on administrative sources to measure migration, then perhaps it would be useful to use general household surveys to monitor annual migration flows. Furthermore, this country could use the addition of modules to the same general survey to investigate topics that would have been covered by the specialized survey.

281. In any case, the comprehensive data collection system should be prepared to adapt surveys to collect information on both a continuous and ad hoc basis, so that newly arising questions can be answered, such as massive movements of migrants or refugees. In these cases entities should use the experiences of other countries or contexts. Furthermore, they should also try to apply new methodologies and modalities useful to enhance the coverage and sampling of surveys, as well as data collection itself.

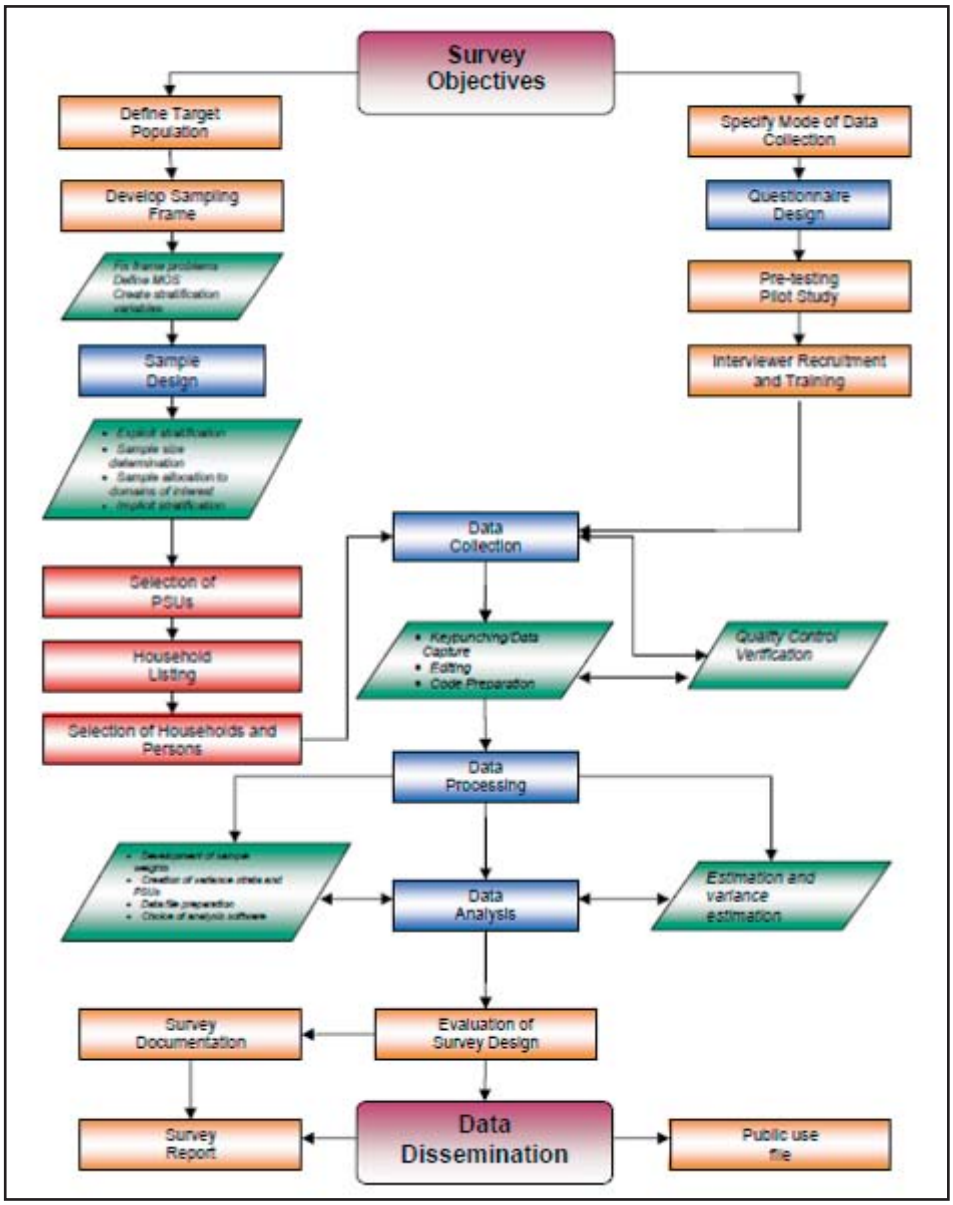
2. Survey design and implementation

2.1. The complete survey process (introduction)

282. The execution of any general or specialized survey may be seen as a complex process composed of a series of successive and interrelated activities, as shown in the following schema.

283. After discussing this important reference schema, this section further develops some aspects linked to the design and coverage of sample surveys relevant for studying migration, such as the definition of target population and place of data collection for household based migration-specialized surveys. Second, it covers some aspects, methods and challenges linked to the development of survey questionnaires and planning and selecting valid samples of respondents for household migration and other types of surveys. The final sub-sections briefly review issues applicable to other key stages of preparation or implementation applicable to almost any type of survey.

Figure 25.
Flowchart of the complete survey process



Source: Household Sample Surveys in Developing and Transition Countries (United Nations 2005)

2.2. Survey design and coverage

Conditions for surveying migration

284. As previously mentioned, people may be classified as international migrants on the basis of place of birth, country of citizenship or place of previous residence. In case of specialized surveys, the objective mainly consists of studying the determinants and consequences of migration. Hence, choosing the place of previous residence appears to be the most useful option, both for identifying migrants and members of migrant households or non-migrants belonging to control groups.

285. Migration paths may vary significantly, with, for instance, people born abroad and then immediately moving to the country of citizenship of their parents, people moving to a new country once reaching adulthood, or people alternating between long stays in their country of birth and one or more countries of successive residence. Moreover, despite the usefulness of knowing about the determinants and consequences of migration over the life course of individuals and households, their most recent migration is usually most relevant from a policy perspective.

286. Thus consideration needs to be given to whether the survey will identify migrants by considering moves from any time over a person's life (an open period), or whether to use a finite point from which to measure migration (e.g. a cut-off point of x years prior to the survey). Use of an open period can include migrants who left from or arrived in the country very far back in time, thus might not be of interest to the study. On the other hand, having no cut-off point increases the likelihood that the respondent will be considered a migrant, thus will importantly expand the sample size of migrants found.

287. Optimally a survey should focus on migratory flows which have occurred in the previous one to five years, to a maximum of ten years. Though respondent recall is better when shorter time periods are referenced, the ten year option is perhaps more recommended, since it helps increase the number of migrants within the sample. The Eurostat/NIDI Project adopted a 10-year period, while the MiRPAL proposal for surveys in CIS countries used the same period. The MED-HIMS surveys adopted a period of 12-13 years, although the cut-off date adopted (i.e. 1 January 2000) was chosen to facilitate the memory of respondents while approximating the 10-year period for which the Model Questionnaires had been drafted. In the case of Armenia's Integrated Migration Survey of 2013, no threshold was used to define current emigrants, though a reference period of six years was used for return migrants. In other surveys in CIS countries, the cut-off periods used vary depending on several conditions, with considerable concentration towards periods of 12-36 months, in particular with general household surveys.

288. In any case, when a threshold of x years before the survey is used for identifying migrants, a cut-off period of $x/2$ years before the survey date should be taken into account when looking at the characteristics of non-migrants or non-migrant households, in order to have a control group to compare with migrants, based on the average time between the migrant reference date and the survey date (Bilsborrow 2007).

289. In addition, surveys depend on the concepts and definitions adopted for measuring migration (see previous chapter regarding international definitions), including migration duration, the period of effective or expected absence from the household for a current out-migrant or the effective residence abroad for a member who returned to the household within the given reference period. This allows for defining flows based on period of residence prior to the survey and actual or expected duration of migration.

290. Another key aspect in survey research methodology addressing migration concerns people responding to the interviews. In fact, in the case of a household survey undertaken in a country of origin, information about current out-migrants can be gathered directly from them only if they are present within the household at the time of the interviewers' visit, which is very rare in practice. The usual method to overcome this limitation is to gather data on current out-migrants (as well as household members temporary absent) using proxy respondents, i.e. heads of household, spouses left behind or other reference persons. Given proxy respondents need to answer questions about people other than themselves, the quality

of responses can vary, particularly with regards to questions on personal attitudes or behaviours, as well as post-migration experiences. This limits the amount of detail that can be accurately collected via proxy respondents in origin countries, and survey questionnaire design should take this into consideration, when conducting both specialized and general household surveys. On the other hand, when investigation on emigration is carried out in countries of destination the answers are more likely to be provided directly by out-migrants themselves and so in principle will be more reliable.

291. Concerning coverage issues, surveys dealing with immigration, as well as emigration, should in principle include both citizens and foreigners. However, in the case of emigration there may be less interest in foreigners, since they usually return to their country of origin or move on to a another country. Furthermore, key migration variables should be collected for all household members, either resident within the household or living abroad, including all changes of residence (and timing) as well as eventual changes of citizenship (and timing).

292. The target population of migrants, as well as non-migrants as a control group, the size and spatial distribution of the sample of households used in the survey, and even the place of data collection change according to the purpose of the survey, whether it is to estimate the number and basic characteristics of migration flows and stocks or if it is to study the determinants and consequences of migration.

Defining the target population for studying the determinants and consequences of migration

293. One possible way of collecting data on the determinants and consequences of migration is based on making a distinction between countries of origin (O) and countries of destination (D) of migrants, as the impact and results can differ for each (ILO 1997, Bilsborrow 2007).

294. Considering first the determinants of emigration from a country of origin O, it is possible to apply the following:

a. To collect data in the main countries of destination (D1, D2, D3) on samples of people who migrated there from O in the previous x years, and data from non-migrants in O – as was adopted in the Eurostat/NIDI project and MAFE surveys;

b. To collect data in the main country of destination (D) on samples of people who migrated there from O, including data from non-migrants in O;

c. To collect data in O only, in households with and without migrants, on former members of households who are current out-migrants (via proxy) and on potential migrants, i.e. adult people who did not migrate from both types of households (via direct interview) – as implemented for instance in MED-HIMS surveys or the *Integrated Migration Survey* of Armenia (2013).

295. In order to assess determinants efficiently, all the surveys above should collect data on the characteristics of migrants at the time of migration, or just before, as well as on the composition and characteristics of households at that time (retrospective data). Moreover, the third case should also collect data on the situation of households at the time of emigration for each of their members during the considered migration period, as well as the situation of households without out-migrants *at the mid-point* of that interval of time.

296. The first two approaches above mean the implementation of two or more different surveys and then joint analysis of results. In general, the first option demands a large screening exercise for locating and identifying migrants from a single country of origin in several countries of destination. Therefore, the second case may be more feasible, given data collection is from one destination country only. However, this may cause the results to be affected by selecting only one direction of outflows. Naturally, the second approach could be also more appropriate when emigration concentrates disproportionately towards one country of destination, as for instance in the case of migrants from CIS countries to Russia.

297. The third approach demands the adoption of specific criteria of household selection and eligibility of individuals for interviews, but it is a unique survey thus will only need one sample of households. On the other hand, weaknesses include lack of detailed information and lower quality responses through the use of proxy respondents and the emigration of entire households, which will be discussed later. Despite these limitations, this approach is the less expensive, more feasible and thus the most frequent type of survey conducted to collect this information.

298. Different frameworks apply for studying the determinants of migration flows or potential migration from the point of view of the country of origin. In the case of the determinants of return migration, it is opportune to interview migrants who had left O for D, but returned to country O, along with out-migrants from O to D remaining in country D, since the latter constitute the population at risk (of return migration). When it is not feasible to implement the survey in both O and D, data on out-migrants still residing in D can be obtained from proxy respondents residing in O, but obviously with fewer detailed questions.

299. In the case of measuring determinants of potential migration, it is necessary to ask all adult members of households of origin (households with and without out-migrants) if they intend to migrate or not. Survey results should be then analysed in order to understand why some people migrate, some intend to migrate, and others do not. Finally, if the sample size is sufficiently big, it could also look at main possible destinations for future migrants.

300. Moving to the consequences of migration, reference to the population at risk is less evident by definition, as migration impacts migrants, households and communities in countries of origin, as well as of destination. Considering here just the case of consequences on individual migrants, it is generally possible to adopt the following:

i. To collect data on non-migrants in country O and data on migrants from O residing in country D;

ii. To collect data on non-migrants in several countries of origin (O1, O2, O3, …) and data on migrants from O1, O2, O3, … residing in D;

iii. To collect data on the current status of out-migrants from O to D, interviewing proxy respondents belonging to their households of origin and non-migrants in country O;

iv. To collect data on non-migrants in D, as well as migrants from O, by direct interview undertaken in country D.

301. The first two approaches have the advantage of collecting data directly from the populations of interest. The second method takes into account the effect differences in

individual, household and community factors, as well as differences related to countries of origin (including emigration policies, macroeconomic conditions, etc.), have on the international migration of persons. On the other hand, these two approaches are constrained respectively by the need to select a representative sample of migrants from a single country of origin O (which is a relatively rare event) and the higher costs and challenges associated with implementing surveys in multiple countries.

302. Despite several limitations the third and fourth approaches are often adopted, since the methodology is simpler and they are generally less expensive to implement than the first two methods. Among other limitations, the third approach of interviewing households in countries of origin must select a representative sample of migrants in a single country of destination, which could be difficult due to the rarity of such flows within a limited time period (excluding possible exceptions with high concentrations of nationals moving into one single destination country). On the other hand, the fourth approach considers the wrong population groups, as migrants in destination countries should be compared with the population at risk (e.g. non-migrants) remaining in country O. Thus, this method can only represent the level of integration of migrants in the country of destination – with respect to employment, income, health status and other aspects, compared to the native population.

303. The description above makes evident that the settings and number of places of data collection for studying the determinants and consequences of international migration, for both individuals and households, should be considered at the planning stage. Moreover, jointly applying more than one method can produce enormous benefits in terms of efforts and financial resources necessary for planning and implementing specialized surveys. Even when the primary interest of study is for just one specific group, the determinants and consequences of migration are often studied in combination through household specialized surveys for informing policy decisions.

304. Finally, due to funding and operational reasons, household migration-specialized surveys are easier and more frequently implemented in a single country of origin or country of destination or, alternatively, in a combination of these two places. However, a knowledgeable study aiming at both the determinants and consequences of migration from a origin country O to a country destination D, should foresee a survey in O covering both non-migrant households and migrant households, in parallel with a survey in D covering households with migrants, allowing for appropriate comparison groups. Initiatives are decidedly recommended along this direction.

The coverage of migration of entire households

305. One of the main challenges of general or migration-specialized household surveys is catching households that have migrated in their entirety. In principle, this applies to both immigration and emigration surveys, but affects out-migration in particular.

306. In the case of immigration surveys, as well as any survey, it is important to use up-to-date sampling lists so that new housing units which include immigrants are present. The more prevalent case of missing households is when emigration surveys are carried out in countries of origin, and entire households migrate leaving no one left behind. Thus, it is in principle very difficult to obtain information about this component of emigration using household surveys as they might be underestimating the phenomena. This was particularly evident in the Integrated Migration Survey of Armenia of 2013, where empty dwellings due to household members absent abroad resulted in about 20% of cases, though this was certainly exacerbated

by use of an outdated sampling frame from the Population Census (IOM 2014). Among possible solutions to this problem, is to gather information on these missing households from main destination countries in order to adjust estimates of emigration (Bilsborrow 2007). However, this method may be constrained by small samples of migrants and be successful only in cases of broad both-way surveys involving two main countries of origin and destination. In origin countries, some estimate of complete households which have emigrated could be garnered from survey non-response information (vacant households and information from neighbours). In addition, a limited number of very basic questions about the emigrated household, such as family composition, the country of destination and date of departure, could be asked using proxy respondents (e.g., neighbours, custodians, new occupants of house or local police). Finally, the process could introduce a panel approach (re-interviewing specific households or migrants over time) within a regular survey in order to monitor future migration flows, hence reducing undercounts (MEDSTAT 2014).

2.3. Questionnaire design

Main requirements

307. The usefulness of sample surveys depends strictly on the quality of results, which is dependent on the appropriateness of both questionnaire design and data collection. Thus, structuring and completing questionnaires requires a large and careful effort. The requirements for developing appropriate strategies are widely discussed in international handbooks, even if those works specifically address the organization of surveys in developing and transition countries (e.g., United Nations 2005).

308. The same series of general principles for developing survey questionnaires also apply to the case of sample surveys dealing with migration. In general, the set of questionnaires should be used for the following:

- To identify current and former household members relevant for the aim of survey, as well as the family nuclei, including the reference person and relationships between all household members;
- To identify persons eligible for answering different survey sections and modules;
- To collect basic information on each household member according to needs;
- To collect more detailed information on specific types of respondents or data collection topics through separate modules;
- If no or limited information is available from existing data sources, to collect data on the contexts where sampled households and individuals live, such as the social conditions of local communities or districts.

309. Furthermore, it is important to also apply the following general requirements:

- To order the modules and questions in a way reasonable for conducting the interview as well as managing the data;
- To adopt skips patterns throughout the interview to save time and better orient the interview;

- To first ask for general and then specific information;
- To avoid redundancy and repetition of questions;
- To formulate questions as neutral as possible, concisely and without ambiguities, although in some cases only pre-testing of questionnaires will reveal the real efficacy of wording and other issues;
- To preferably put sensitive questions towards the end of the questionnaire;
- To possibly keep the interviews as short as possible (minimize respondent burden).

Questionnaires for border survey and general household surveys

310. All **border surveys** relevant for international migration build on the following:

- Screening questions to identify, within the selected sample, passengers eligible for the interview on international migration, tourism or other topics of investigation. Such questions might include country of residence, country of birth, and reason for travel;
- One or more modules of questions to be addressed to individual respondents identified as migrants or other topics being considered, such as tourism. The migration module includes further personal data such as age, marital status, educational attainment and economic status, information about the reasons, status or intentions of migrants, as well as information on the composition and residence of family members.

311. In any case, border survey questionnaires have to be concise and only a limited number of questions can be asked.

312. Similar to border surveys, the measurement and study of migration through general household surveys uses the following approaches:

- The adoption of one or more questions on the household roster to identify migrants or some features of the household linked to migration. These questions may concern place of birth[107], country of citizenship, place of current or previous residence or, more interestingly, place of residence at a specific time in the past (for instance 2 or 5 years previously) and time of arrival at permanent

[107] Questions on place of birth and place of previous residence generally allow deriving respectively country of birth and country of previous residence. The place of birth and place of previous residence are particularly important because they identify exact region, province, district and/or location, so as to study international migration as well as internal migration. Place of birth information is particularly important in CIS countries due to the breakup of the Soviet Union and subsequent creation of numerous countries. Current country borders should be used to collect country of birth information. Persons whose country of birth and current country differ due to changing borders should not be considered to be international migrants (UN 1998).

residence[108]. Furthermore, for the study of emigration abroad or internal migration, other questions may allow identification of former household members who have moved away. Finally, other questions may concern the household as a whole, for instance reception of remittances or goods prior to the survey.

- The adoption of one or more separate modules for individual household members or migration aspects of households, depending on the migration profile of the country, the purposes of investigation and the possibility to identify different categories of data collection units and respondents.

313. For an example of identifying country of birth, a typical sequence of questions may be the following (with modification if asked of proxy respondents):

- Case (a)
  - *Where were you born?*
  - *When did you most recently arrive to live in this country?*
- Case (b)
  - *Where were you born?*
  - *Where were you living on (a specific past date)?*
  - *(If in same country) When did you arrive at your current residence?*
  - *(If in another country) When did you most recently come to live in this country?*
- Case (c)
  - *Where were you born?*
  - *Are you a citizen of this country?*
  - *When did you arrive at your current residence?*

314. Questions in the main questionnaires, or specific modules, about the date of most recent arrival to, or departure from, the household may be open (at any time) or refer to a specific period preceding the date of survey, generally between one and ten years. The **open period** option is more promising because it obtains more migrants within the sample of respondents, but the longer the time period the greater the problem with respondent recall. On the other hand, a pre-defined cut-off point may improve the quality of answers, but may limit the number of migrants identified, thus impact the representativeness of the sample. In any case, the appropriate solution depends on the purpose of the survey and country context, thus there is no definitive best method to use.

315. A further distinction concerns whether to ask specific questions to all people belonging or linked to the household or only to respondents of the individual questionnaires, which again depends on the purpose and design of each survey. Thus, for instance, information on country of birth may be collected for all household members, while place of residence a number of years before the survey may be asked only of respondents to the individual questionnaires.

316. In the example above, a minimal household roster should collect the name, sex, age, marital status, relationship with the head of household, country of birth and education level of all household members. Moreover, in the case of emigration, the same information should be

[108] The combination of questions may vary. They may also include information on immigration (questions on country of birth and citizenship) and emigration (questions on persons who have moved abroad, the duration of their absence, the reason and country of emigration).

collected for previous household members or even relatives[109] who live abroad. Further, one or more specific modules may collect information on specific categories of people linked to the household (for instance, modules on work activity of emigrant prior to departure or in destination countries) or the household itself (for instance, a module on remittances received by the household).

Questionnaires for migration-specialized surveys[110]

317. Following the identification of migrants, questionnaires for specialized surveys conducted within households, as well as outside them**,** could aim to collect detailed data on many of the following aspects, depending on what questions would like to be answered.

a. **The modality and migration history of individual migrants:**
   - Timing of migration, reasons and processes of departure or arrival
   - Possession of citizenship and efforts to seek documents and requirements necessary to migrate to the planned country of destination or make arrangements to migrate without documents
   - Role of migration networks, sources of information, previous contacts and visits to the country of destination
   - Experiences in additional countries of destination (and departure), that is intermediate movements or countries of transit

b. **The demographic, economic and social situation of the migrant, household and community of origin immediately prior to migration**:
   - Full household composition
   - Personal characteristics in terms of marital status, health, language ability, education and expectations
   - Health status
   - Migration of relatives prior to migration as potential factors of stimulation or choice of destination
   - Previous experience abroad (or in other regions, in the case of internal migration), for example as a student or tourist
   - Work history and experience
   - Availability of money from remittances or encouragement from prior migrants from the household
   - Employment situation just prior to migration, nature of work, workplace, level of pay, number of usual working hours, benefits, land ownership, etc.
   - Experience looking for work and any episodes of unemployment, plus efforts to find work
   - Involvement in (non-work) community activities
   - Contacts with migrants and other household members in other countries
   - Experiences with labour recruiters prior to migration
   - Expectations of receiving assistance in potential countries of destination
   - Attitudes towards risk-taking, change, gender roles, religion, etc.
   - The migration decision-making process

[109] For more information about collecting information on relatives of household members to estimate emigration see Bilsborrow (2007).

[110] This section is adapted from Bilsborrow and Lomaia 2011.

c. **The initial situation of the migrant in the country of destination**:

- Means of travel and place of arrival
- Assistance received at time of arrival (at border crossing, airport arrival, etc.)
- Nature of first job or work experience, experience of finding work (how long it took, methods used), the labour contract terms, the number of working hours and wages, etc.
- The knowledge of language of country of destination upon arrival

d. **The current situation of the migrant and his/her current household in the country of destination, as well as in the household of origin**:

- Household size and composition
- Language ability
- Citizenship acquisition from country of destination
- Health status
- Sources of household income
- Current job situation, workplace, number of working hours, labour contract terms, sense of job security, wages, income, benefits, etc.
- Housing conditions and ownership of assets
- The reception or provision of remittances, their value and use, modalities for sending/receiving and effects on household
- Self-perception of adequacy of income and life in general, including social, religious and cultural aspects
- (Further) migration intentions

318. Furthermore, for the study of either the determinants or consequences of migration, data useful for comparison should be gathered for non-migrant individuals and households, within households with and without migrants. For this part of survey, data should be collected on the full range of personal characteristics, antecedents to migration, household composition, previous migration experience, migration networks, work activity, including wages and time worked, education, marital status, etc., being gathered for emigrants, non-migrant and their households of reference. Having individual characteristics of migrants prior to migration, immediately after migration, and at the present time allows for measurement of the impact of migration on these individuals. Further comparisons can be made between migrants and natives in countries of destination, individual migrants and non-migrants living in countries of origin, as well as between households with and without migrants in countries of origin, in order to further assess the impact of migration.

2.4. Sampling

General issues[111]

319. The sample design is fundamental for surveying migration. Special sampling methods are often necessary when conducting general and specialized surveys on migration, because international migrants often constitute rare elements within the population. In general terms,

[111] This section is adapted from Bilsborrow and Lomaia (2012).

surveying migration increases the likelihood of needing to sample hard to find populations and/or utilizing imperfect sampling frames. However, the topic of sampling elusive populations has been readily addressed in the methodological literature.[112]

320. Regardless of data limitations and budgetary or personnel constraints, the sample of households to be selected for interview should ideally be a probability sample, one in which every element in the sample has a known probability of selection when the sample is drawn. In fact, probability samples are what allow statistically valid inferences to be made from the analyses of survey results. However, common deviations from probability sampling occur during fieldwork when interviewers or supervisors choose respondents apparently more willing to answer questions or choose substitutes in case it is difficult to get enough respondents. Moreover, migration-specialized surveys often adopt non-probability samples, i.e. need to determine samples without knowing the likelihood of selection of any element of their reference populations, which makes the generalisation of results difficult. As will be seen later, often it is helpful to combine both probability and non-probability samples to overcome these difficulties.

321. Sampling frames provide the basis for drawing a sample of units for analysis- i.e. migrant (and non-migrant) individuals and households, in the case of surveys based on households. The quality of a sampling frame determines the representativeness of the population of interest in the domain of interest. A sampling frame is perfect if every element appears on the list once, separately and refers to a unique address. A perfect frame could be a complete list of all migrants living in a country at time *t* who had arrived in that country after *t*-10 years (considering a 10-year cut-off period in the definition of migrant).

322. Sampling lists, of either individuals or households, are generally derived from the following sources:

- Population registers
- Registers of foreigners
- Household surveys
- Population censuses
- Expert opinion

323. The possibility of using population registers is practical only for countries with high-quality registers as well as, in principle, few undocumented migrants, so that coverage is high. Registers of foreigners may be useful even though they only list those arriving legally and may not be kept up to date, upon the condition that they indicate where migrants reside in administrative areas (provinces, districts, etc.) In the case of geography, the presumption is that migrants with the same origin tend to cluster in the same geographic areas. Despite the existence of registers in some CIS countries, they are believed to have poor coverage of international migrants and undocumented migrants in particular.

324. The population census can provide a sampling frame if it includes a question on country of birth or, preferably, on arrival from a foreign country in the past 5 to 10 years. For

[112] For more information on this topic refer to *Survey Sampling,* prepared by Leslie Kish (Kish 1965), *Surveying Migrant Households: A Comparison of Census-Based, Snowball, and Intercept Point Surveys,* by David J. McKenzie and Johan Mistiaen (McKenzie and Mistiaen 2007) and more recent works on sampling elusive populations prepared by Vijay Verma (ILO 2008 and ILO 2013).

emigration, the situation is much more difficult, although some countries include a question on emigrants from the household in the last 5 or 10 years: this provides some data on recent flows, but gives no information about emigration of entire households. In the end, even if occurring every 10 years in most the countries, censuses often provide the most useful sampling frames, as they provide data at low levels of geography, while also usually including (in theory) undocumented migrants as part of their coverage. Recent household surveys with national coverage and large samples derived from a census can be useful for identifying where migrants tend to live even when only country of birth information is collected.

325. When no other sampling lists exist, expert opinion represents a final resource for sampling. This method significantly depends on the degree to which NSOs and/or migration specialists have a good sense of which geographical areas tend to have more (recent) migrants. Use of expert opinion to define sampling frames has been used in Africa, such as in Ghana under the Eurostat/NIDI project in 1997, as well as in Nigeria for the World Bank's Africa Migration Project (2009-2010). Both these efforts led to reasonable strata for sampling. However, this method would seem to have limited applicability in CIS countries, as other sampling lists exist for most countries.

326. Areas with relatively high or low prevalence of migrants can usually be identified, and thus be used to improve random sampling for migration-related surveys. Otherwise, random selection of areas for the first or successive stages of sampling can be simply based on the (estimated) population size of areas or PPES (probabilities of selection proportional to estimated population size). PPESs have the modest advantage of yielding a self-weighted sample. In other words, using this method the final elements (e.g., individuals) do not have to be weighted to adjust for different chances of having been selected in the sample. So, each element has the same probability of selection as any other. However, for migration surveys, where migrants are rare elements, it is highly desirable to find some way of determining where migrants are concentrated in order to classify areas into strata with varying proportions of migrants so as to sample more from those areas, thereby making fieldwork more efficient for finding migrants to interview.

327. **Stratification** is the division of the population of interest into sub-groups or strata according to objective criteria or variables. Stratification helps to eliminate variation between strata from the computation of total variation in the sample, thus reducing total variance. For a survey on international migration, the logical basis for stratification is the proportion of the population in the area that are international migrants, or the proportion of households in the area containing one or more qualified international migrants. Stratification also allows the use of different sampling frames, and even different sampling procedures, among different strata.

Disproportionate sampling of area units and two-phase sampling of households[113]

328. As noted above, international migrants, or households containing migrants, especially recent migrants, are relatively rare in both countries of origin and destination. The two more relevant procedures used to address this problem (Kish 1965) consist of the following:

i. **Stratified sampling** with disproportionate probabilities of selection of area units, and

[113] This part is adapted from Bilsborrow & Lomaia (2011).

ii. **Two-phase sampling** in the selection of household units.

329. These procedures are discussed briefly below under the assumption that a population frame exists and can be used to create a sampling frame to select a sample of international migrants (and non-migrants, depending on the survey purpose). This allows the classification and subsequent stratification of all areas of the country into strata based on the proportion of international migrants.

330. A second assumption is the interest in investigating emigration – i.e. the characteristics of emigrants and their households, the prevalence and use of remittances, differences between non-emigrant individuals and households, among others – collecting data in the country of origin, which appears relevant in most CIS countries.

331. For constructing a sampling frame in such context, it is necessary to determine if data useful to identify households containing emigrants are already available. If not, the only possible sampling of first-stage area units or **Primary Sampling Units** (PSUs, for example provinces) is based on PPES (e.g. estimated population sizes from the most recent population census). This would also be the procedure for selecting second stage area units, and so on, down to the **Ultimate Area Units** (UAUs).[114] The survey on emigration undertaken in Tajikistan in 2014 represents an application of such methodology, although adapted somewhat (Bilsborrow et al 2015). In the Tajik case, after excluding the capital city of Dushanbe because of the small percentage of households with emigrants identified in the last census, the remaining first-stage administrative areas (regions) did not differ greatly enough in their proportion of emigrant households to require stratification. Instead, the number of micro-areas selected from each of the country's seven regions was proportional to its estimated population size or PPES, retaining the self-weighted sample at this stage. Thus a total of 40 UAUs were selected, with the goal to complete 25 household interviews per UAU.

332. Following the selection of UAUs, it is then necessary to identify which households contain emigrants in the sampled UAUs, where they will usually still be rare elements. It is desirable to select a sample of households without emigrants, as well as those with emigrants. Thus, the recommended procedure is to first conduct a complete **screening** or **listing operation** in order to identify and list households with and without emigrants. The second step is to then sample from each list, oversampling households with recent emigrants compared to non-emigrant households, followed by interviews. In the survey in Tajikistan referred to above, two-phase sampling was used in sample UAUs, in order to first identify and list households with and without migrants. This was necessitated by lack of data at the micro-area level on households with and without emigrants, as well as on return migrants.

333. Other ways to tackle the mechanics of two-phase sampling and facilitate fieldwork, including sample listing sheets, as well as other procedures applicable to sampling households for other types of migration surveys, are discussed in ILO 1997 and other works reported in this chapter.

[114] An alternative way of selecting area units is to select them based on expert or informed judgment, that is, people knowledgeable about where emigrants mostly originate from could be asked to stratify areas according to expected intensity of emigration, then oversampling would occur in these areas.

Other methods of sampling for migration surveys

334. Given the difficulty of finding a sufficient number of migrants using regular probabilistic sampling techniques, a number of other non-probabilistic methods are discussed in this section. These are particularly useful when trying to survey hard-to-find groups like irregular migrants or other migrants groups considered to be highly mobile or an elusive part of the population. While these methods are advantageous in finding harder to find migrant groups, as with any non-probabilistic method, they suffer from generalizability of results. As discussed later, some methods try to combine both probabilistic and non-probabilistic methods to overcome this disadvantage.

335. As a first example, general *Time and Space Sampling* or *Intercept Point Sampling* is shortly referred to here. This method is based on the likelihood of migrants to attend aggregation points for social contacts, health care, religion, leisure or simply everyday needs, where they can be approached and selected for interview. When migrants are a rare element in the population, intercepting them at these places is a cost-efficient procedure and allows reaching individuals who could be only occasionally found within their households or may not even be living in a classical housing situation (McKenzie and Mistiaen 2007). A similar method applying this approach is called the *Centre Sampling Technique* (CST), which was developed in Italy in the nineties and has since that time been continually adapted (including the Eurostat/NIDI Push-Pull Project) (Blangiardo et al 2011). This method selects samples of migrants representing both legal and irregular foreign immigration, without use of lists of households or registers, but rather referral sampling techniques.

336. Another case of use of references is called Snowball Sampling, a kind of chain-referral method suitable when the units of a rare reference population are difficult to locate but know each other. Often applied in the field of health and criminology, it is also widely used as a method to survey migrant households. In Snowball Sampling based on individuals (migrants in a country of destination), one member of the population of interest is asked to identify *k* known associates of a similar characteristics (e.g. a migrant), and each of these are then asked to identify *k* different members, and so on. This method was adopted in sampling a rare ethnic group in a project in Brazil, as well as permanent Mexican migrants in the United States in the framework of MPP (McKenzie and Mistiaen 2007). Furthermore, it was used to survey immigrants in Spain in the framework of the Eurostat/NIDI Project (Groenewold and Bilsborrow 2004).

337. Adaptive Cluster Sampling is another technique useful to locate large concentrations of migrants by increasing the chance of their appearing in the sample. In fact, this is a technique designed to obtain more adequate and efficient samples for a population which is rare and very unevenly distributed (ILO 2013). It starts by using a conventional sample and determines the selection of subsequent samples from where a high concentration of the population of interest is found. This technique is particularly effective when the population of interest tends to be concentrated in relatively few and large clusters, while there is little information available on the extent, location and patterns of its concentration.[115] In other words, this technique represents a combination of probabilistic and non-probabilistic methods, which is often the best way for undertaking research in migration, with the initial

[115] ILO (2013) discusses a number of theoretical and implementation issues for this technique, including the criteria and rules for its adoption, the choice of initial sample, unequal unit selection probabilities, and stratification and estimation procedures.

use of a probability sample and then the expansion and definition of a definitive sample using non-probabilistic methods (Thompson and Seber 1996).

2.5. Other key phases of survey preparation

338. As seen in Figure 25, survey preparation, i.e. all steps to be implemented before launching data collection, consists of the following activities:

a. Definition of target population and objectives of the survey;

b. Draft a project document, including tentative timeframe and budget, and secure financing;

c. Establish a group to supervise and a core team of experts to be in charge of preparing and implementing all aspects of the survey;

d. Develop a work plan for all remaining activities;

e. Design data collection questionnaires

f. Draw and select a sample of households and respondents to be screened or interviewed;

g. Prepare survey manuals and materials for training;

h. Train field and data entry staff;

i. Prepare a fieldwork and a data entry plan;

j. Conduct a pilot test;

339. Defining the target population and survey objectives, questionnaire development, and sample selection have already been considered earlier in this section. Additional issues to discuss are related to manual preparation, staff training, and conducting a pilot test. Data collection and management will be discussed in the following section.

340. A key tool to prepare for any survey is a manual on survey design and organization. Furthermore, separate instruction manuals are necessary for all people who will be trained and actively participate in survey operations. These are generally survey coordinators, data coders, data entry staff, supervisors and interviewers. These manuals include clarification for unusual cases and anticipation of possible problems arising from respondent selection procedures or data collection during interviews (e.g. questions the interviewees might have regarding survey questions).

341. The conditions and requirements for staff training may vary widely, depending on the type of survey and experience of the interviewers. In general, little training is necessary for surveys carried out routinely and by the same team or where little changes (e.g. modules) over time. Conversely, new or complex specialized surveys demand more training effort, even for more experienced staff who have previously worked on surveys. Therefore, in the case of migration specialized surveys, training of three to four weeks, including a number of practice interviews, may be necessary to allow both supervisors and interviewers to effectively carry out their fieldwork.

342. Conducting a pilot survey or pre-test is crucial to assess the survey's organizational framework and the effectiveness of proposed sampling and questionnaire wording, especially for surveys implemented only occasionally. A household migration survey pre-test should involve at least one hundred households, or at least a number useful to sort out a minimum quota for each category of respondents, i.e. migrant and non-migrant households. Among other things, a broad number of interviews may identify topics or questions that are more sensitive for respondents and help make adaptations to the questionnaires to reduce non-response. In fact, despite several solutions available at the data editing stage, particularly for a rare event such as migration, it is highly preferable to avoid the application of corrections *a posteriori*. In any case, non-response issues should also be kept in mind at the level of questionnaire design, utilizing questions that facilitate response, in particular when proxy *respondents* are involved.

343. The outcomes of the pre-test help determine the final version of the questionnaire and allow for adjustments in fieldwork and data entry plans before full implementation of the survey. However, if needed, it may be helpful to conduct a second pre-test, probably smaller and more targeted to particular aspects, as discovered during the initial pre-test.

2.6. Data collection

344. The fieldwork team, both interviewers and supervisors, is a critically important component for conducting surveys. In addition to adequate transportation, fieldwork teams should have fully reliable means to communicate with survey management, as well as among themselves, in order to report timely on progress and respond immediately to problems. At the same time, proper means of communication are crucial for contacting heads of households and individuals eligible for interviews, in order to facilitate meetings and maintain schedules. In this regard, modern technologies such as the Internet and cell phones may prove to be greatly beneficial, though in rural or remote areas of several countries this might be less applicable depending on coverage of services.

345. Quality assurance of fieldwork data collection is another important issue and has to be pursued through different means. First of all, fieldwork supervisors should be assigned to groups of a maximum of four or five interviewers. Supervisors should implement a series of control measures, what may consist mostly of the following:

- Carefully monitor the selection of respondents eligible for interview in each selected household and the conduction of interviews by interviewers;
- Review questionnaires as soon as possible after compilation, in order to provide immediate feedback and remedy in case of deviations from instructions or high levels of non-response; and
- Randomly revisit some already interviewed households to check the outcomes of interviewers' jobs.

346. In turn, the main survey managers, or even regional coordinators, should monitor the fieldwork supervisors.

347. To improve the quality and the overall processing of surveys, data collection should ideally be undertaken using laptops or hand devices allowing for immediate checking of inconsistencies. However, this depends on the availability of financial resources, human resource capabilities, and practical conditions available in fieldwork areas (e.g., availability

of electricity or Internet coverage). In general terms, it is clear that the more complex the organization and articulation of fieldwork, the more challenging ensuring its quality will be.

348. Data collection for specific migration surveys can be implemented through online compilation of survey questionnaires directly from respondents. Among other cases, the recent experience of the German Federal Office for Migration and Refugees described earlier (Hanganu 2015), demonstrated the applicability of such data collection. Online surveys are interactive, particularly efficient with respect to technical and practical solutions (for instance the absence of paperwork, check-box questions, drop-down answers, the possibility to immediately switch to other languages and in particular responses immediately entered to the dataset) and are easy to distribute. Therefore, online surveys are applicable under particular cases and conditions, where there are adequate technical infrastructures, Internet access is prevalent, and eligible respondents may be targeted in a systematic way. In fact, the online self-compilation of questionnaires increases both likelihood of undercoverage and non-response, generating refusals when privacy statements are not trustworthy (Couper 2008).

2.7. Data management

349. The registration of survey data is usually performed through data entry from questionnaires collected in the field, with further checking and coding from hard copies. Centralising data entry means respondents cannot be followed-up with regarding data corrections, but allows survey staff to edit responses according to specific requirements and rules. Checks for logical consistency and other features are generally adopted at this stage. The entire data management system must promptly register initially collected data from questionnaires, in order to check data and progressively inform ongoing data collection in the event of problems, and to release survey results to policy makers and other users as soon as possible (United Nations 2005).

350. The next step of data management consists of recoding data in a standard reformatted file useful for further processing and better understanding, i.e. converting variables and files from a form that is most convenient for data collection to one more appropriate for tabulation and analysis. Furthermore, data should be cross-checked and validated (for instance, data coming from different parts of the questionnaire) and amended for errors and possible non-response.

351. Weighting sample data and estimation from the sample (i.e. drawing inferences about the population from which the sample was selected), are the next essential steps in survey analysis. This represents a set of complex procedures based on the computation of design weights, calculation of sampling errors, adjustment for non-response and under-coverage of survey units, calibration against external standards, and trimming and scaling of weights (ILO 2013). In certain circumstances it is necessary to correct design weights for known exclusion or under-coverage of some parts of the study population, which may have occurred from sampling error.[116] Non-response weights based on known characteristics for responding and non-responding units are introduced in order to reduce the effect of differences in response rates in different parts of the sample. This is particularly important when rates of non-

[116] It may be useful to recall that under-coverage and non-response may derive from the nature of data collection units, the type of information sought in the survey, and the particular conditions under which the survey is conducted. Given the decisions on the selection of survey units and contents of questionnaires, constraints ensued after the end of data collection have to be solved during data management (ILO 2013).

response are high and vary within the sample. Non-response and under-coverage may be significant in migration surveys and demand solutions at the weighting stage, such as adjusting estimates to take this into consideration. These adjustments may be particularly time-consuming and need several stages of elaboration, tabulation and results assessment. A typical result of non-response may be amending categories of the questionnaire's variables when presenting tabulated results.

352. Once survey data have been definitively arranged and tabulated, data analysis and report writing should occur, in view of what originally motivated the survey. Although the analysis and dissemination of survey results should be conducted as soon as possible, this is often not the case, especially for migration-specialized surveys. Specialized surveys, since they are normally conducted on an ad hoc basis, often encounter problems with data management due to their lack of familiarity. Therefore, survey takers should plan for extra time for carrying out this phase.

353. In addition, according to United Nations (2005), the main advice for the management and analysis of survey results consists of the following:

- Provide a complete accounting of eligible/ineligible households and individuals and respondents/non-respondents, which is necessary for weighting results;
- Apply rigorous checks and evaluations of data to discover and solve errors and abnormalities;
- Ensure that no households and individuals have been mistakenly excluded or included more than once;
- Conduct first analysis of results as soon as possible and produce a publically accessible public dataset (micro-data) for further analysis.
- Plan for different forms of data outputs, which represent different interests; and
- Provide detailed metadata for use by potential users, which should include any deviations between the planned and implemented samples, non-response rates, and copies of adopted questionnaire and manuals.

3. Assessment of sample surveys in the CIS Region and recommendations for improvement

354. This section presents a general assessment of major sample surveys, mixed data collection operations and studies on migration topics implemented in CIS countries since around 2000. In particular, it shows what can be stated through analysis of available documents and participation in a regional workshop organized by UNECE in Minsk in May 2015. All inventoried operations are listed and summarized in Annex IV.[117] Special attention is given to general household surveys implemented by NSOs in these countries. Afterwards, these surveys are summarized in a set of tables presented in Annex V.

355. The reference material consists of the following:

[117] The Bibliography fully reports and provides links to all works referred to in this sub-section and Annex IV, as well as a series of studies on migration in CIS countries that did not use sample surveys.

- Methodological documents and publications of national surveys or studies;
- Methodological reports and presentations prepared by NSOs for international meetings such as Joint UNECE / Eurostat Work Sessions on Migration Statistics;
- Assessment reports of national systems on migration undertaken in recent years;[118] and
- Publications prepared by international organizations.

356. As a conclusion of this broad assessment, a series of general and specific recommendations for improving the use of sample surveys are provided.

3.1. Broad assessment of relevant sample surveys in CIS countries

357. The **inventory** presented in Annex IV shows clearly that some countries are more likely than others to use sample surveys to investigate migration and its related phenomena. This applies in particular to Armenia, Azerbaijan, Georgia, Moldova, Tajikistan and Ukraine, where a high number of survey-based initiatives can be found. The inventory also shows increased attention to measuring migration in recent years, as well as a diversification of topics for investigation, including internal migration, emigration (mainly for labour purposes), the conditions of people left behind in households of origin, return migration and in particular remittances. Conversely, data collection on specific categories of migrants, such as irregular migrants, asylum seekers and refugees, and trafficked persons, seem less represented. Occasionally surveys cover subnational geography, such as regions, districts or main cities, as in the case of an emigration study from the region of Tianeti (Georgia) to Athens and remittances and living standards in the region of Kathlon (Tajikistan), although the inventory may be incomplete regarding these types of studies.

358. Most survey initiatives are initiated for policy, development and planning reasons, as well as to enhance awareness and national dialogue on migration issues and capacity building on data collection and research. Among the main examples, an ongoing IOM survey project on migration and remittances in Ukraine intends to create awareness between key stakeholders on the nature, use and impact of remittances entering the country and to support development of a Migration and Development Action Plan. Furthermore, some initiatives aim at fostering relationships and evidence-based decision-making within foreign countries and international organizations. This applies to the IOM-Ukraine project mentioned above, as well as to the Extended Migration Profile and other recent operations in Moldova to assist the establishment of a Mobility Partnership with the EU.

359. It is worth noting that most specific surveys and studies were a result of support and cooperation from international organizations such as UNECE, IOM, ILO, the World Bank, CIS-Stat, the EU (also with ETF and EUI) and the Asian Development Bank. International organizations play an important role in the implementation of sample surveys and other studies, including countries of origin and destination of migrants (e.g., both-way surveys). Examples are given by the World Bank and IOM, in the cases of recent migration surveys of Tajikistan and Ukraine, and by IOM in the case of mapping Moldovan diaspora.

[118] Assessments of migration systems of Armenia, Georgia and Moldova were recently undertaken on behalf of IOM and made publicly available. In addition, an assessment of measurement on labour migration was carried out in Tajikistan under the EC-funded MIEUX (Migration EU Expertise) programme.

360. Several surveys were carried out jointly in two or more CIS countries, and/or introduced as pilot practices worldwide or within CIS countries. Main examples include the study on children and elderly population left behind by migrants in Georgia and Moldova, the programme of the Asian Development Bank on remittances and poverty in four CIS countries, and the survey programme of the World Bank on return migration implemented in parallel in three CIS countries and three Eastern European countries. Furthermore, ILO initiatives for preventing forced labour and child labour contributed to the implementation of specific ad hoc surveys, which were relevant for the study of migration. Given the specificities of national migration profiles, some countries frequently participated in pilot international exercises. Thus, Armenia adhered to standard surveys implemented under the CRIS initiative, while Armenia, Moldova and Ukraine introduced successive versions of ILO's LMM. Finally, Tajikistan adhered to the proposal of both-way surveys which emerged under the MiRPAL Project, while Ukraine also followed the same general approach. However, some regional experts found the setting of specialized migration surveys proposed under MiRPAL to be too complex, which in fact has reduced comparability of results in these countries to date (see Annex IV, under Tajikistan).

361. The funding and partnership of international projects also reveal the involvement of national ministerial agencies and research centres such as the Russian Armenian (Slavonic) University in Armenia, the Centre of Sociological Investigation and Marketing "CBS/AXA" in Moldova, the Higher School of Economics (HSE) of National Research University in Russia, and the Sharq Research Centre in Tajikistan. Furthermore, a number of countries from outside CIS countries have made direct contributions to these studies, such as Germany, Italy, Norway, Sweden, the United Kingdom, USA and Canada. This involvement often depends on the prevalent destinations of migrants, such as for mapping Moldovan diaspora communities in EU countries, but also for the establishment of cooperation initiatives involving entities. This was the case for Italian Cooperation, the Swedish International Development Agency (SIDA), the Maastricht Graduate School of Governance, the Carolina Population Centre (CPC) of the University of North Carolina and Georgetown University. Among outcomes, international collaboration increases dissemination and visibility of survey results, as for example the *Russian Longitudinal Monitoring Survey* (RLMS) of the HSE which can be found on CPC's website.[119]

362. Among other features, recent experiences show a good level of synergy and integration of means for surveys carried out within the same countries. This mainly involves adoption of official sampling frames from survey and research programmes undertaken outside of NSOs (for instance in Armenia or Moldova) or the use of existing samples for longitudinal surveys (e.g. the *Tajikistan Household Panel Survey* of 2011). Still regarding technical aspects, there was a prevalence of household surveys conducted outside of NSOs. Many specialized studies collected primary data and information through different means and then exploited available secondary data. Longitudinal studies have also been implemented to a limited extent, as with the RLMS.

363. Most specialized surveys, as well as some general household surveys, inventoried for this manual are particularly rich in content, since they integrate a wide range of characteristics of households, migrants and non-migrants. However, the extent of utilisation by outside users is difficult to ascertain. Certainly, as anticipated by IOM 2010a and others,

[119] http://www.cpc.unc.edu/projects/rlms-hse/project.

these important surveys demand adequate dissemination of results, full methodological documentation made available to the public and adequate financial resources for reproduction, which is often not the case in CIS countries.

364. In general, CIS countries aim towards reproducing best practices of other sample surveys and complying with international requirements relevant for surveying migration, which would help ensure international comparability of results. This is helped by the participation and coordination of activities by international organizations and national assessments in these countries, as long as international recommendations and practices are followed. This is true when model surveys are implemented in multiple countries, and also when surveys are inspired by the experiences of other countries and methodologies are adapted to national circumstances (IOM 2003). In any case, despite slow progress, several NSOs are progressively introducing key adaptations to their regular general surveys. The continuous evolution of the migration section of the *Integrated Living Condition Survey* (ILCS) of Armenia from 2010 to 2013 is a good example of this. Some initiatives desire to ensure the sustainability of data collection operations in the medium to long-term, thus for instance, the proposal of the IOM sponsored migration survey in Ukraine includes provisions to regularly collect a standard set of migration-related data via existing surveys (IOM 2013a).

365. Among the difficulties reported by national statistical institutions, a main, common issue concerns the lack of adequate financial resources for the purposes of specific sampling requirements or specialized surveys. Some countries have had difficulties measuring some specific categories of population and migrants, such as foreigners in Moldova through the LFS (IOM 2011b). The under-coverage of remittances has also been seen from the experiences of countries like Kyrgyzstan and Moldova (UNECE 2012b and IOM 2010b). Also non-response is seen as a prevalent, common problem when implementing sample surveys, in particular where information on sources of income and remittances are asked (UNECE 2012b). Finally, NSOs in the region seem aware of the opportunities and challenges of using new data collection methods such as the self-compilation of online questionnaires via the Internet (UNECE 2015).

366. The set of summary tables in Annex V provide a deeper analysis of the coverage of migration data collected by NSOs in CIS countries, though these are mainly general household surveys (LFSs, HBSs and LSMSs) and a few household migration surveys (indeed, only two specialized cases in Armenia in 2013 and Tajikistan in 2010). Overall, the inventory is neither exhaustive nor up-to-date, in particular for some countries. Moreover, it does not take into account what was/is effectively measured through administrative sources, population censuses or other specialized surveys undertaken during the same period. Therefore, these limitations should be taken into consideration when evaluating the situation in CIS countries. However, it does provide a general view of the current state of migration survey research in the region, and the prevalent approaches adopted by different countries, as well as what is measured through household surveys, with respect to the following topics:

- **General and recent immigration,** including internal migration (summarised respectively in Table A.2 and Table A.3);
- **Recent or current emigration,** including internal migration (Table A.4 and Table A.5); and
- **The sending or reception of remittances**, other monetary transfers and goods by households residing in the country of data collection (Table A.6 and Table A.7).

367. Focusing on most recent surveys from the summary overview presented in Table A.1, about half of all national surveys do not cover at all, or cover only marginally, the identification of specific categories of migrants, especially immigrants, given emigration is more prevalent for CIS countries. The topics of remittances sent and received between households of origin and former household members abroad is better covered, though with many differences between countries.

368. At the level of individual countries, Armenia, Moldova and Ukraine have better measures of immigration (mainly return migration), emigration and transfers of remittances and goods through the use of dedicated migration modules (excluding specialized household surveys). In two cases, this applies through the combination of different types of surveys, i.e. the ILCS and LFS in Armenia and the LFS and HBS in Moldova. Indeed, as reported in Annex IV, some detailed modules addressed to individuals or households are or were occasionally added to national surveys. These examples represent a cluster of best practices of data collection on the process and main features of migration (e.g., the destination/origin) and qualitative information linked to the determinants and intentions of migration, implemented through general surveys. The following were reported:

- Armenia ILCS
  - Module on migration
  - Module on monetary and commodity flows between households
- Moldova LFS (for year 2012)
  - Questionnaire for absent migrants
  - Questionnaire for return migrants
  - Questionnaire for potential migrants
- Ukraine LFS (for year 2012)
  - Section on categories of labour migrants (both current emigrants and return migrants)
  - Section on characteristics of labour migrants
  - Section on plans and initiatives of non-migrants for moving abroad
  - Section on income from abroad and household welfare

369. Furthermore, the summary table in Annex V shows countries like Kyrgyzstan and Tajikistan measured immigration through their 2007 HBS and 2007 LSMS, respectively. As far as one can see, the few migration surveys reported in this annex, i.e. the *Integrated Migration Survey* of 2013 of Armenia and the *Survey on the Impact of Migration and Remittances on Welfare* of 2010 of Tajikistan, were particularly successful in terms of their ability to measure migration histories, migrants' intention, remittances, as well as other migration topics, thus measuring the determinants and consequences of migration.

370. Finally, the cut-off periods for identifying immigrants and emigrants varied between countries (for instance, from one month to ten years, in the case of immigration, and from one month to seven years, in the case of emigration). The same variants apply to migration durations, according to detailed methodological information of most surveys.

371. Table A.2 and Table A.3 provide concrete examples of immigration, such as the 2007 HBS of Kyrgyzstan which asked for country of birth, citizenship, previous residence abroad

and the country, and the event the person arrived in the past 10 years, age at time of move and reason for migration, while also distinguishing between internal and return migrants. On the other hand, the same survey did not include level of education and work status prior to migration. Considering the measurement of emigration in Table A.4 and Table A.5, the Moldovan 2008 and 2012 LFS (which both included migration modules) identified former household members who had gone abroad and collected data on their demographic and socio-economic profiles, as well their most recent migration episode, using a cut-off period of 12 and 24 months respectively.

372. However, in general, the situation of migration data collection through household surveys undertaken by NSOs appears to vary greatly and is not harmonized in content or definitions.

3.2. Proposals and recommendations for improvement

General level

373. At a general level, it is recommended to:

i. Improve the link between policymaking and data collection, by coordinating the use of sample surveys with comprehensive national policy strategies at the regional, national and local levels.

ii. Conduct more in-depth assessments of national migration data systems, such as done in Armenia, Georgia, Moldova in recent years.

iii. Strengthen collaboration between international organizations, countries, research institutions and projects/programmes available for enhancing national systems for migration

iv. Continue sharing and discussing national practices through international and regional meetings and fora.

v. Improve the comparability of migration data derived from sample surveys by following international standards and recommendations.

vi. Increase the visibility and usefulness of survey results by reporting fully on methodological procedures and provide metadata via publications and websites at both the national and international level

Specific level of survey implementation

374. Specific recommendations depend on the nationally available data on stocks and flows and should consider specific national needs.

- Countries with unsatisfactory or partial measurements of yearly flows and stocks of migrants should:

  i. **Adapt pre-existing national general household surveys to include basic questions to measure migration.** This could be as simple as adding information to the household roster, including country of birth and/or places of previous residence and timing of moves. This will allow countries to make estimates of flows and stock of migrants on a regular basis. Given their prevalence, LFSs and/or HBSs are recommended for such utilisation.

Additional cost would be limited and mainly attributed to additional sampling that may need to be done to reach migrants.

ii. **Implement or adapt existing border-crossing surveys to measure migration, through the addition of a few questions.** Such as the case with the 2009 border survey of Azerbaijan, which combined the measurement of migration with other interests, namely tourism and international mobility.

- Countries that have recently undertaken surveys with relevant partial or ad hoc measurements of migration, in particular general household surveys with modules on topics like labour migration and remittances adapted from model tools, should:

  i. Increase the frequency and use of sample surveys to measure migration, find ways to make data collection more sustainable, comply with international standards and try to accommodate user needs.

  This would include the addition of migration modules on a regular basis, which would be particularly important for a regular measurement of the determinants and consequences of migration.

- All countries should:

  i. **Increase harmonization and comparability of migration information collected in sample surveys throughout CIS countries.** This could be done by asking identical basic questions to identify migrants, and using the same cut-off period or migration durations, on surveys such as a LFS. In addition, standard migration modules could be used, which could help standardize measurement of the size, characteristics, and impact of migration and remittances. Ideally, an internationally coordinated common migration survey could be conducted among all countries in the region.

  ii. **Search for ways to carry out migration-specialized surveys.** These specialized surveys could be either "intensive" or "light," carried out on an irregular basis (between three and ten years), depending on what other information on migration is available. Such surveys could be carried out in single countries of origin or destination. Reproducing both-way surveys, such as those proposed by the MiRPAL project, would be more efficient and provide richer information. Even if these specialized surveys are conducted outside the NSO, NSOs are strongly encouraged to follow up and support any kind of specialized surveys and studies relevant to the national policies on migration and development in their countries.

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Annexes

Annex I. Potential administrative sources of migration in CIS countries

Agency	*Armenia*	*Azerbaijan*	*Belarus*	*Kazakhstan*	*Kyrgyzstan*	*Moldova*	*Russia*	*Tajikistan*	*Ukraine*	*Uzbekistan*
National statistical office	X	X	X	X	X	X	X	X	X	X
Ministry of Labour						x				
Migration Department	X	X	X	X	X	X	X	X	X	X
MoI	X	X	X	X	X	X	X	X	X	X
MFA			X							
Ministry of Justice										
Population Register (or similar APRS)	X					X				
Foreigners Register (or similar APRS		X		X		X	X			
Tax authority										
Ministry of Education	X	X	X	X	X	X	X	X	X	X
Registry office			X			x				
Border service	X		X			x		X		
Customs authority										
Ministry of Health										
National social (pension) insurance system										

Annex II. Registration of long-term migration flows in CIS countries

	Government authorities registering population migration	Primary documents for		Provision of information to statistics authorities	Additional information
		arrivals	departures		
Azerbaijan	Ministry of the Interior (main passport, registration and migration function); State Migration Service of the Republic of Azerbaijan; State Border Service	Arrival form is filled in by the internal affairs authorities and at the same time statistical form of arrival is filled in as well	Departure form is filled in together with a statistical form of departure	Migration data are produced by the State Statistics Committee of the Republic of Azerbaijan quarterly (short programme) and annually (long programme)	Starting from 2012 the Statistics Committee every quarter receives data on foreign citizens who acquired permanent and temporary residence permits in Azerbaijan, and on stateless persons
Armenia	Police of the Republic Armenia (Passport and Visa Office of Police)	Passport and Visa Office of Police of Armenia undertakes administrative registrations for the State Population Register		Electronic anonymized data (database) on arrivals and departures are provided quarterly	Starting from 2012 migration is estimated based on the data from the Integrated Household Living Conditions Survey
Belarus	Departments for citizenship and migration of the Ministry of the Interior, local governments.	Arrival form is filled in together with the statistical form of arrival. Arrival form is also filled in for foreign citizens and stateless persons who acquired second temporary residence permit, i.e. have been living in Belarus for a year or more	Departure form is filled in together with statistical form of departure	Statistical forms (of arrival and departure) are submitted to the statistical authorities every month. Statistical forms are encoded by regional statistics offices	
Kazakhstan	Regional offices of migration police of the Ministry of the Interior of the Republic of Kazakhstan	Statistical registration of the arrival form is prepared by regional offices of Migration Police of the MoI RK together with arrival forms for registration of individuals who arrived for permanent residence from other locations of the country and from abroad	Statistical registration of the departure form is prepared by regional offices of Migration Police of the MoI together with departure forms for deregistration of individuals leaving abroad for permanent residence	Statistical registration forms are submitted every month to district (municipal) statistics offices. District (municipal) statistics offices check whether statistical registration forms are properly filled in, and if forms are incomplete these are returned for completion. Statistical forms are then submitted to regional statistics offices for processing and uploading migration indicators into the Population Migration database. The migration databases are transmitted to	

	Government authorities registering population migration	Primary documents for		Provision of information to statistics authorities	Additional information
		arrivals	departures		
				the Data Computing Centre of the Statistics Committee of the RoK Ministry of National Economy	
Kyrgyzstan	State Registration Service under Government of the Kyrgyz Republic (passport and visa units of the Population Registration and Registry Department of the State Registration Service under the Government) manages passport services	Registration form in case of relocation together with statistical arrival registration form	Deregistration form in case of relocation together with statistical departure registration form	Statistical registration forms are submitted to statistical authorities every month. District (municipal) statistics authorities responsible for data encoding, entry and control. Then the data are transmitted to the Data Computing Centre of the National Statistics Committee of the Kyrgyz Republic which produces output tables with aggregate data	According to the Rules of registration and deregistration approved by the Resolution of the Government of the Kyrgyz Republic (2004), statistical departure registration forms are prepared for individuals who arrived/departed from one location to another one for permanent residence
Moldova	Ministry of the Interior (Bureau for Migration and Refugees)	Ministry of Information Technologies and Communication (responsible for managing the State Population Register) keeps records of internal and external migration		The National Statistics Bureau receives data on emigrants and internal migration from the Ministry of Information Technologies and Communication (State Population Register). Data on immigrants are received from the Ministry of the Interior (Bureau for Migration and Refugees)	
Russia	Federal Migration Service (FMS of Russia)	When registering individuals **at the place of residence** regional offices	When deregistering individuals **at the place of residence** regional offices	Statistical arrival and departure registration forms are submitted by regional FMS offices to regional	*Immigration* is registered on statistical forms of arrival when

	Government authorities registering population migration	Primary documents for		Provision of information to statistics authorities	Additional information
		arrivals	departures		
		of FMS fill in arrival forms together with statistical arrival registration forms. Starting from 2011 statistical arrival form is prepared when an individual is registered **at the place of stay** for 9 and more months	of FMS fill in departure forms together with statistical departure registration forms. For deregistration at the place of residence statistical departure registration forms are prepared for citizens of Russia, foreign citizens and stateless persons only when they go abroad	Rosstat offices every month. Regional Rosstat offices encode, enter and check the data in the above forms and produce tables with aggregate data	migrants (independently on citizenship) are registered in a place of residence and (since 2011) place of stay for 9 months and longer. *Emigration* is registered on statistical forms of departure when 1) migrants are de-registered from the place of residence (after notification of departure for residence abroad), or (and) 2) when registration at a place of stay for 9 months and longer expires
Tajikistan	Ministry of the Interior (passport office at the place of residence and at the place of stay)	Arrival form is filled in when an individual is registered, together with statistical arrival registration form	Departure form is filled in when an individual is deregistered, together with statistical departure registration form	Forms of statistical registration of arrival and departure are submitted on a quarterly basis to district, municipal and provincial statistical centres. After the data are checked and encoded they are transmitted to the Data Computing Centre of the Statistics Agency under the President of the Republic of Tajikistan for producing aggregate indicators	
Turkmenistan	State Migration Service of Turkmenistan	Statistical migration (arrival) registration forms are filled in for individuals who arrived for permanent residence (from other locations in the country, and from abroad)	Statistical migration (departure) registration forms are filled in for individuals who depart for permanent residence (to other locations in the country, and abroad)	Statistical registration forms are submitted to the statistical offices. Forms are encoded by regional statistical offices	
Uzbekistan	Ministry of the Interior of the Republic of Uzbekistan (regional offices of internal affairs)	Arrival form is filled in and also the statistical arrival registration form is filled in for those who are	Departure form is filled in together with statistical departure registration form	Statistical registration forms are submitted to statistical offices once a month. Forms are encoded by regional statistical offices	

	Government authorities registering population migration	Primary documents for		Provision of information to statistics authorities	Additional information
		arrivals	departures		
		permanently registered			
Ukraine	State Migration Service of Ukraine	Registration at place of stay in Ukraine is filled in and together with it – a form of statistical registration of the place of residence in Ukraine	Deregistration from the place of stay in Ukraine is filled in and together with it – a form of statistical deregistration from the place of residence in Ukraine	Statistical registration forms are submitted to the statistical offices once a month. Forms are encoded by regional statistical offices	

Table prepared by CISSTAT

Annex III. Variables in the records of movement submitted to national statistics offices for producing statistics[1]

	Armenia	*Azerbaijan*	*Belarus*	*Kazakhstan*	*Kyrgyzstan*	*Moldova*	*Russia*	*Tajikistan*	*Ukraine*	*Uzbekistan*
Gender	X	X	X	X	X	X	X	X	X	X
Age	X	X	X	X	X	X	X	X	X	X
Marital status		X	X	X	X		X	X		X
Citizenship	X	X	X	X	X	X	X		X	
Country of birth	X	X		X	X		X		X	X
Reasons of movement		X	X	X	X	X	X			X
Ethnicity	X	X	X	X	X	X		X		X
Educational attainment		X	X	X	X	X	X	X		X
Employment		X		X	X		X			
Country of former residence		X	X	X	X	X	X	X	X	X
Separate form for children			If moving without an adult	If moving without an adult	If moving without an adult	If moving without an adult	X	If moving without an adult	X	If moving without an adult
Children are added to adult's form (if moving accompanied by an adult)		X	X		X	X			X	X

[1] In hard copies, in electronic databases (Armenia) and summary tables (Moldova).

Annex IV. Inventory of sample surveys and studies relevant for migration

Armenia

- ***Integrated Living Conditions Survey* (ILCS, continuous survey)**

The ILCS, which has been implemented by the National Statistical Service of the Republic of Armenia (NSSRA) since 2001, traditionally collects information on the place of birth of household members (with partial detail on locations within the country or abroad) and the case and main reasons for absence during the survey month. Furthermore, it collects place of current residence of household members living abroad. Since 2009, it also includes a migration module (with information on migration to other regions or countries in the last 3 years, for a period of at least 3 months, the year/month, main reason and economic status of most recent migration, and the sending of remittances in the last 12 months) and a module on monetary and commodity flows between households (with a set of questions for both the shipment and reception of money or goods). The survey is based on a monthly rotation of settlements and households and is nationally representative at the *marz* level (regions, administrative division).

The investigation on migration through the ILCS represents progressive enhancements in line with international recommendations reflecting suggestions issued from an assessment carried out by IOM in 2010, which referenced duration of migration and adaptation question wording and response categories for several questions. However, it still does not allow determination of long-term migrants who left before and returned within the reference period of the last 3 years (IOM 2010a, Eurostat 2015 and NSSRA 2015).

- ***Labour Force Survey* (continuous)**

This survey is undertaken by the NSSRA with occasionally support by ILO and the World Bank. The 2006 survey introduced a migration module, which was one of the first exercises carried out worldwide for testing the first version of ILO LMM. It had a nationally representative sample of 1,985 households, with separate modules on immigration, emigration and return migration for a total of 40 questions. The LFS currently collects data on persons who have worked abroad, whether persons intend to emigrate for work abroad, as well as absent household members, including the duration of their absence, the reason for absence and the region or country of destination (Eurostat 2014 and Annex V).

- ***Survey on Remittances and Poverty* (2006-2007)**

This survey was implemented under a regional research project on remittances and poverty, funded by the Asian Development Bank, jointly undertaken in Armenia, Azerbaijan, Kyrgyzstan and Tajikistan.

- ***Survey on External and Internal Migration of the Republic of Armenia* (2007)**

Implemented under the joint initiative of NSSRA, the Ministry of Labour and Social Issues and UNFPA, this survey aimed to evaluate changes in migration trends from 2002 to 2007, following recent social and economic reform. It assessed the quantitative and qualitative

characteristics of migration flows, the socio-demographic and economic characteristics of migrants and future migration plans of different population groups (UNFPA 2008).

- ***Return Migration to Armenia in 2002-2008*** **(2008)**

Implemented by the Advanced Social Technologies, with funding from the Organization for Security and Co-operation (OSCE), it aimed to contribute to policy-making for return migration, thus facilitating reintegration of returnees and their migration experience for home country development (EUI 2013).

- ***Migration Survey on the Relationship between Skills, Migration and Development*** **(2011-2012)**

A national specialized survey focusing on potential migrants and return migrants, organised by the European Training Foundation (ETF) and implemented by the Caucasus Research Centre, in parallel with Georgia and Morocco. The sample included 2,630 potential migrants and 1,426 return migrants. However, the latter sample was inevitably not representative for the entire return migrant population (ETF 2013).

- ***Survey on Return Migration*** **(2012)**

Survey organized by EUI under the CRIS initiative and implemented by Advanced Social Technologies, focusing on the factors and conditions determining return migration and explaining why some return migrants contribute to the development of places of origin, while others do not. It was based on 349 interviews undertaken mainly in Yerevan and a few other cities and regions (EUI 2015).

- ***Household Survey on Migration, Impact and Remittances or Integrated Migration Survey*** **(July-August 2013)**

A joint initiative of NSSRA, the Russian Armenian (Slavonic) University (RAC), State Migration Service, the Ministry of Education and Science, IOM, EU, UNECE and Georgetown University on behalf of Mac Arthur Foundation. The survey interviewed a sample of 2,200 households in the city of Yerevan, using a multi-stage sampling technique based on a NSSRA Sampling Frame, with at first stage the selection of PSUs (survey areas) from the strata based on *marzes* according to the population size, and then the systematic random selection of households.

The survey focused on internal migration, immigration, return migration, emigration, savings and remittances of migrants and the development effect of migration on population and households. It intended to profile different migrant categories and establish priorities for evidence-based planning and decision-making on the demographic and socio-economic skills of the population and impact of migration (e.g. remittances and health and career wellbeing) IOM 2014.

Azerbaijan

- ***Household Budget Survey*** **(2003)**

Implemented by the State Statistical Committee (SSC) of Azerbaijan, and included some information on the reception of money or goods from abroad (see Annex V).

- ***Demographic and Health Survey*(2006)**

Implemented by SSC in collaboration with Macro International, USAID and UNICEF, asked some questions on refugees and IDPs (SSCAZ 2008).

- ***Living Standard Measurement Survey*(2008)**

Also implemented by the SSC, included information on household members who left for abroad or within the country in the last 12 months and whether the household receives remittances or other contributions from abroad (Annex V).

- ***Survey on Remittances and Poverty* (2006-2007)**

This survey was implemented under a regional research project on remittances and poverty, funded by the Asian Development Bank, jointly undertaken in Armenia, Azerbaijan, Kyrgyzstan and Tajikistan.

- ***Survey* on Studying Migration Processes (2009)**

Jointly implemented by the SSC, Migration Service and Border Service with the support of UNFPA and IOM, it was a large-scale sample survey (about 15,000 respondents) implemented at border crossing points for studying the situation of migration processes in the country, validating existing data on migration flows and trends and identifying the reasons of migration. The questionnaire contained 17 questions covering: sex, marital status, age, country of birth, nationality, citizenship, country of arrival/departure, main reason for entry/exit, availability of permission for labour activity, period of staying, occupation and branch of economy in the last place of residence, education, whether the person was accompanied by people under 15 years old, plans to work in Azerbaijan and whether the person lived earlier in Azerbaijan/abroad more than 12 months (UNECE 2011 and SSCAZ 2014

- ***Labour Migration Survey* (December 2008 – February 2009)**

Survey conceived and funded by IOM and undertaken by the Olea Consulting Group (OCG) based on a small sample of foreign migrant workers settled in the cities of Baku and Mingachevir. This survey focused on six components, i.e. the demographic profile, country of origin, transit routes and reasons, living and working conditions, future intentions and need of information for migration (SSCAZ 2009).

Belarus

- ***Household Budget Survey* (2000-2015)**

The National Statistical Committee conducts this survey that collects information on monetary transfers between households, distinguishing transfers from abroad.

- ***Labour force survey (quarterly) (2012-2015)***

Conducted by the National Statistical Committee, the survey touches on international labour migration and includes questions on short-term emigration for work (distribution by sex, age,

education level, destination country, status in employment, economic activity and occupation).

- ***Ad-hoc Survey of External Labour Migration*** **(2015)**

From second to fourth quarter 2015, the National Statistical Committee conducted a sample survey of households to study international labour migration. The survey was conducted simultaneously with the labour force survey in the same households. For this survey, a special questionnaire was prepared for people who had previously worked abroad (return migrants) or who were working abroad at the time of the survey (short and long term labour emigrants). The survey provided information on the socio-demographic characteristics and scale of international labour migration, including frequency and length of stay abroad, occupation of labour migrants before and after emigration, their activities, earnings, monetary transfers and other issues.

Georgia

- ***Household Budget Survey*** **(2008)**

Implemented by GEOSTAT, it identified people who ever lived abroad or in different regions (within Georgia), members of households who left abroad in the last 3 months, their main demographic variables, the reason of emigration, as well as some information on the dispatch or receipt of remittances (Annex V).

- ***Survey on Return Migration*** **(2005-2006)**

Part of a World Bank survey programme covering Bosnia-Herzegovina, Bulgaria, Georgia, Kyrgyzstan, Romania and Tajikistan, it addressed a full range questions on return migrants' experiences before, during and after migration. It also addressed the financial, social, domestic and personal aspects of migration experiences both during and after migration (World Bank 2007).

- ***National Public Opinion Survey on Remittances*** **(January 2007)**

Implemented by Bendixen &Associates, on behalf of the European Bank for Reconstruction and Development (EBRD), to profile remittances' recipients and inquiring on the remittances process, how public opinion sees the Georgian banking system and relations between Russian and Georgian remittances (EBRD 2007).

- ***Tianeti Household Census & Tianeti Emigration to Greece Survey*** **(2008)**

This IOM-supported operation included surveys of both remittance recipients in Tianeti (rural region of Georgia) and remittance senders in Athens (the most popular emigration destination). It investigated channels for money transfer, the interest of local population in new money transfer channels, the assessments given by emigrants and population on the economic situation in the community of origin, as well as their evaluation of the use of remittances and investment opportunities for development (IOM 2009).

- ***Survey on Children and the Elderly Left Behind* (2008)**

Operation implemented in most regions of the country by Maastricht Graduate School of Governance (UNU-MERIT) and other partner institutions under the EC-funded project "*The effects of migration on children and the elderly left behind in Moldova and Georgia*." It collected data on the demographic profiles of household members, the living conditions of households, the migration histories of all household members and specific information on the daily lives of children and the elderly population (Waidler et al 2013).

- **Migration Survey on the Relationship between Skills, Migration and Development (2011-2012)**

See Armenia – (ETF 2013).

Kazakhstan

- ***Household Budget Survey* (2008)**

Implemented by the Committee on Statistics of Kazakhstan with support from the World Bank, it collected data on whether the household sends money to former members or other people abroad or vice versa if former household members worked abroad (Annex V).

- ***Labour Force Survey* (2008)**

Implemented by the Committee on Statistics, it collected information on country of birth, citizenship and previous residence abroad of household members (distinguishing between Kazakhstan, other CIS countries and non-CIS countries) and whether the household receives money from former members or other people abroad (Annex V).

Kyrgyzstan

- ***Labour Force Survey* (continuous)**

Implemented annually by the National Statistical Committee (NSCKG) since 2002, it includes some information on labour migration (UNECE 2012a).

- ***Employment and Unemployment Survey* (2006)**

Implemented by NSCKG, in collaboration with the Ministry of Labour, it includes several questions relevant to migration (UNECE 2012a).

- ***Household Budget Survey* (2007)**

Survey funded by the World Bank, it is particularly useful for informing about immigration, as its household roster collects data on country of birth, citizenship, country of previous residence or area of previous residence within Kyrgyzstan, when the migrant arrived and the reason for coming. It uses a cut-off date of 10 years before the survey to measure migration (Annex V).

- ***Survey on Return Migration* (2005-2006)**

Part of a survey programme of the World Bank covering Bosnia-Herzegovina, Bulgaria, Georgia, Kyrgyzstan, Romania and Tajikistan – see Georgia.

- ***Survey on Remittances and Poverty*** **(2006-2007)**

Implemented under a regional research project on remittances and poverty funded by the Asian Development Bank, and was jointly undertaken in Armenia, Azerbaijan, Kyrgyzstan and Tajikistan. In the case of Kyrgyzstan, 4,200 households were surveyed with the primary objective of determining the impact of remittances on household welfare. This survey faced problems of poor response from more affluent households (most likely to receive remittances) and, more in general, availability for interviews (UNECE 2012b).

Moldova

- ***Household Budget Survey*** **(2008 and 2014)**

Survey implemented by the National Bureau of Statistics (NBS),targeting all household members, including people temporary absent or absent for long periods of time if they keep relations with the household and contribute towards the household budget(NBS 2015). This survey provides some information on recent and current emigration, as well as reception of remittances and goods from people abroad.

- ***Labour Force Survey*** **(continuous)**

NBS introduced a migration module to the 2nd Quarter of its 2008-LFS in the framework of a project implemented by ICMPD and other partner institutions under the ILO's *Special Action Programme for Combating Forced Labour* (NBS 2012). This module collected data on country of destination, duration of the stay abroad, reason for leaving, channels for labour migration, migration costs, methods used to look for a job, working conditions, residence status abroad, occupation, employment status, working relations, social protection, problems faced, assistance sought, and remittances. Overall, 12,430 households took part in the survey, as part of the regular quarter sample and a sub-sample of households that in 2007 declared at least one household member working or looking for work abroad. In total, individual data were collected on 5,730 people abroad at the time of survey or in the previous 12 months.

The Moldovan LFS provided an opportunity to estimate the number of emigrants abroad and their characteristics, apart entire households which had emigrated. However, despite information on duration of absence, it was ineffective for estimating annual emigration flows.[1] Furthermore, the sample was not sufficient to measure immigration of foreigners to Moldova[2].

In the 4th quarter of the 2012 LFS, in order to design labour migration schemes and implement result-based monitoring and evaluation systems, NBS further developed a specific migration module with support from several national and international agencies. In

[1] In fact, from the assessment undertaken on behalf of IOM in 2010/2011 (IOM 2011b), the number of persons abroad for more than one year includes all persons ever emigrated and still living abroad, while persons living abroad for less than one year will also include short-term migrants who will return within 12 months.

[2] Foreigners were included in the LFS sample based on dwelling addresses, however due to their small number the results were not statistically significant (IOM 2011b).

accordance with ILO's LMM, the revised module integrated information on some aspects of labour migration and its related skills composition, while the threshold for identifying emigrants was changed from 12 to 24 months. The sample size was of 12,000 households. Different individual questionnaires were adopted for household members who were current emigrants, return migrants or potential migrants (NBS 2015).

The 2014 LFS excluded migration modules but collected information on recent emigration of household members (those who moved within the last 12 months) (Annex V).

- ***Survey on the Impact of Migration and Remittances*** **(July-August 2006)**

A nationally representative survey of Moldovan households conducted by the Centre of Sociological Investigation and Marketing "CBS/AXA," with support of IOM, EU and SIDA, built upon a similar survey conducted in 2004. It mainly focused on why people migrate – or do not migrate – and how this decision affects the well-being of household members. It provided a comprehensive picture of migration and remittances, countries of destination, transfer channels and the direct effects of remittances (IOM 2007a).

- ***Migration Survey on the Relationship between Skills, Migration and Development*** **(2007)**

Similar to the surveys undertaken later in Armenia and Georgia – see ETF 2015.

- ***Panel Household Survey on Labour Migration and Remittances 2006-2008*** **(2008)**

Implemented by CBS/AXA and IOM, this survey built upon similar surveys in 2004 and 2006 referred to above, by re-interviewing approximately 4,000 households surveyed in 2006. It provided detailed information on patterns of labour migration and remittances in Moldova and their impact on individual households and communities (IOM 2009b).

- ***Survey on the Socio-Economic Impact of the Economic Crisis on Migration and Remittances*** **(March 2009)**

A household specialized survey covering the indicated topic above. It was implemented in Moldova by IOM, with support from the EC and Italian Ministry of Foreign Affairs and based on a sample of 2,027 persons aged 18 years and more. This research investigated various subjects such as the perceptions on the Moldovan business environment, entrepreneurship, banking system, economic crisis as well as, strictly regarding migration, the perceptions of the population on the migration phenomena and their experiences with emigration and remittances (IOM 2009a).

- ***Survey on Migration and Development*** **(2010)**

This was implemented by the Centre of Sociological, Politological and Psychological Analysis, the International Agency for Source Country Information (IASCI-CIVIS, Moldova) and the World Bank, within the framework of the MiRPAL Project.

- ***Survey on Children and the Elderly Left Behind*** **(2011)**

Survey implemented in parallel with a survey already referred to earlier (see Georgia), based on a nationally representative sample of 3,553 households with either elderly or children, in all regions of Moldova except for Transnistria.

- ***Mapping of the Moldovan Diaspora in Italy, Portugal, France and the United Kingdom*** **(May-August 2012)**

A study undertaken by IOM within the framework of the Project "*Support the Implementation of the Migration and Development Component of the EU-Moldova Mobility Partnership*." This study had the specific objectives to identify the demographic, socio-economic and cultural profile of Moldovan migrants, assess their integration in host countries, analyse the relationship migrants have with both diaspora organizations and the home country, and to assess the Moldovan diaspora's development and cohesion (IOM-2013b). Relevant existing data were complemented by primary data collected through quantitative and qualitative methods in Moldova and the four countries of destination. Quantitative research was based on a survey addressed to 760 respondents among Moldovan migrants. The qualitative research consisted of 44 in-depth individual interviews with experts and 16 focus-groups discussions with Moldovan migrants abroad.

Russian Federation

- ***Labour Force Survey*** **(continuous)**

The Federal State Statistics Service of the Russian Federation (Rosstat) has carried out LFSs with migration questions since 1992, on a quarterly basis from January 1999 to August 2009, and monthly since September 2009. This survey may be particularly relevant for measuring migration, as it involves a large sample of respondents residing in private households and aged 15-72.

- ***Russia Longitudinal Monitoring Survey*** **(RLMS) (1993-2003)**

This survey measures the economic well-being of the Russian population by monitoring their health, expenditures and service utilization of households, prices, and infrastructure status at the regional and community level. Since 2008 it has collected some migration data, with information on country of birth of household members, whether people ever lived abroad by main countries or region, and whether each household sends money to or receives money from former household members (Annex V). The 2013 the survey was implemented by the Higher School of Economics (HSE) of the National Research University, and ZAO Demoscope, together with CPC of University of North Carolina and the Sociological Institute of the Russian Academy of Sciences (SIRAS).

- ***Microcensus*** **(2015)**

In October 2015 Rosstat conducted a microcensus (Rosstat 2015) that collected information on the usual place of residence and some data on migration on people permanently residing in Russia as well as on temporarily absent population.

Tajikistan

- ***Labour Force Survey* (2009)**

The Tajik LFS of 2009 allowed for the identification of return migrants, as well as some information on immigrants and emigrants (TAJSTAT 2014 and Annex V). The survey was based on a sample of 4,000 households.

- ***Living Standards Measurement Survey* (2007 and 2009)**

Supported by the World Bank and UNICEF, since 2007 the LSMS has included a module with general questions about the migration process, plus another module regarding transfers and social assistance (Bilsborrow 2011 and Annex V).

- ***Tajikistan Household Panel Survey* (THPS, 2011)**

Initiated by the Institute for East-and Southeast European Studies (IOS, Germany) and implemented in cooperation with the Sharq Research Center, this survey explores the phenomena of migration and remittances. It re-interviewed 1,503 households randomly selected from samples from the 2007 and 2009 LSMS, representative at national and regional levels (four regions and Dushanbe) and of urban/rural zones. The THPS included two detailed modules on migration, i.e. Module 2: Migration (with data collection on internal migration, international migration and family members living away from the household) and Module 7: Transfers and social assistance (for data collection on transfers from another household, transfers to another household and social assistance). This survey generated a unique panel database on migration topics revealing useful information for analyzing the medium-run consequences of the global financial crisis of 2009 (IOS 2013).

- ***Study on Labour Migration* (2002-2003)**

Conducted by the Sharq Scientific Research Center with the financial support from Sharq and IOM, this study consisted in two focus groups and two nationwide surveys. The focus groups were held in Dushanbe and Isfara in 2002 among Tajik migrant workers, labour recruitment intermediaries, employees of travel agencies that organize employment abroad and Tajik community activists in Russian cities. The first survey (February-March 2002) identified migrant households and estimated the extent to which the population was involved in labour migration. Conversely, the second survey (January-February 2003) aimed to verify the data obtained during the previous research and estimate the scale of emigration between 2000 and 2003 IOM 2003.

- ***Khatlon Remittances and Living Standards Survey* (KLSS, 2005)**

This was the first study of remittances based on a representative sample survey of Tajik households, providing quantitative data at the individual, household and community level in the Khatlon *oblast* (region) and to help develop policy to best harness migrant remittances for development. The survey generated a panel database on households interviewed in Khatlon for the 1999 LSMS, to shed light on the dynamics of migration and remittances and assess changes in the living standards of people since 1999(IOM 2007b).

- ***Survey on Return Migration* (2005-2006)**

Part of a survey programme of the World Bank covering Bosnia-Herzegovina, Bulgaria, Georgia, Kyrgyzstan, Romania and Tajikistan- (see Georgia).

- ***Survey on Remittances and Poverty* (2006-2007)**

Regional research on remittances and poverty funded by the Asian Development Bank, jointly undertaken in Armenia, Azerbaijan, Kyrgyzstan and Tajikistan.

- ***Study on Migration and Development– Emigration, Return and Diaspora (2008)***

A study prepared by ILO, in collaboration with the Sharq Research Center, in the framework of the EU-funded Project "*Towards Sustainable Partnerships for the Effective Governance of Labour Migration in the Russian Federation, the Caucasus and Central Asia*." The study was based on the results of recent specialized surveys, as well as some specific data collection. The latter was based on a survey of 1000 labour migrants who returned in 2003-2007, and used Snowball Methods, an additional survey of 100 employers, and focus groups with returnees, college graduates, local authorities and businessmen, key informants and other local agencies (ILO 2010).

- ***Survey on the Impact of Migration and Remittances on Welfare* (2010)**

Survey undertaken by TAJSTAT, with support from the EU and the Federal Statistical Office of Germany (DESTATIS) TAJSTAT 2010. This operation gathered information on sending and receiving of remittances and goods by the households (see Annex V).

- ***Survey on Emigration & Survey of Tajik Migrants in Russia* (2014)**

Part of the MiRPAL Project to create an integrated system of household surveys on international migration for CIS countries, implemented on a pilot basis in Tajikistan and Russia (as main country of destination) by the World Bank. The survey in Tajikistan was conducted in March-May 2014, starting from a list of about 3,500 households, and ultimately interviewing about 1,000 households effectively interviewed. The survey in Russia was executed in December using an initial sample of about 2,000 Tajik migrant households and 500 households of non-migrant Russians as control group. In both surveys, the investigation of emigration, return migration and related topics were considered, using reference to the previous 10 years.

This survey constitutes one of the few experiences of surveying migration at both origin and destination in CIS. The surveys implemented in Tajikistan and Russia adopted similar definitions, concepts and questionnaires, with the latter including modules on housing quality, assets and expenditures, and health and income of households and individuals. However, the two surveys had significant differences in periods of execution, sample design and especially population coverage due to financial constraints, which limit the comparability of results. In fact, both surveys deviated from the ideal sampling combination of stratification of areas, disproportionate sampling and two-phase sampling of households, as described in Section III.2. In addition, the survey in Tajikistan had limited non-response follow up, thus resulted in a disproportionate selection of female and unemployed respondents. Further, the survey in Russia had a very low response rate and had bias at the level of sampled dwellings and households. Furthermore, the reliance on proxy respondents to answer questions led to additional bias and the different coverage for households who emigrated as a whole.

Ukraine

- ***Household Budget Survey*** **(2003)**

Implemented by the State Statistics Service of Ukraine (UkrStat), this survey asks whether households send/receive money to/from former members or other persons (see Annex V).

- ***Labour Force Survey*** **(2008 and 2012)**

To study of international migration UkrStat adopted specific modules attached to their LFS of 2008 and 2012,supported by international organizations such as ILO, IOM, UNDP, UN Women, UNFPA and UNICEF UkrStat 2012. These surveys provided information on the incidence, composition and destination of labour migration of nationals. Both surveys were based on nationally representative samples of 25,000 and 27,800 households, respectively, and covered a reference period for migration of respectively the 3.5 and 2.5 years prior to the survey. Focusing on the most recent survey of 2012, the coverage was quite detailed in terms of categories and characteristics of labour migrants, their income abroad and welfare of households of origin, as well as possible emigration plans of the population. The survey also investigated training activities taken to work abroad and coherence between the level of education acquired in Ukraine and the level necessary for working in the country of destination.

- ***Study on Migration and Remittances*** **(2014)**

Implemented by IOM in cooperation with the World Bank, UkrStat, the National Bank of Ukraine, the Ministry of Economic Development and Trade, IASCI and support of a local research institute, as a part of the *Research and Policy Dialogue Initiative on Migration and Remittances in Ukraine* and long-term inter-institutional cooperation. This study is based on both primary and secondary data and is intended to increase awareness among key stakeholders on the nature, use and impact of remittances entering Ukraine. Primary data were collected through a survey based on 20,000 households in Ukraine, as well as corresponding surveys of targeted samples of Ukrainian migrants in Russia, Italy and Canada, in addition to a border survey based on 2,000 interviews of migrants. This survey will cover the scale of labour migration and remittance flows, the demographic and socio-economic profile of Ukrainian migrants and households and their main countries of destination, transfer channels, the use and impact of remittances on the households of origin and savings patterns and factors which affect the decision of migrants to invest in Ukraine. In addition, focus groups, key informant interviews and a review of secondary literature/data were used to triangulate the primary data (IOM 2013).

Uzbekistan

- ***Household Budget Survey*** **(2000)**

Implemented by the State Committee on Statistics, it only includes questions relevant for the exchange of money and goods between households and their members away, with limiting conditions such as a one month recall period or the partial reporting of countries of origin/destination of transfers (Annex V).

- ***Population Sample Survey*** **(2011)**

A survey covering recent and current emigration of nationals abroad. It does not use a cut-off period to identify former household members that left abroad, but records if they left within the past 12 months, together with some socio-demographic data and the reason and destination of emigration (Annex V).

Annex V. Summary overview on topics and contents of migration data collection in selected household surveys countries since 2000

The following set of tables is an adapted and updated version of the ones presented in the monograph *International Migration and Remittances in Developing Countries: Using Household Surveys to Improve Data Collection in Eastern Europe and Central Asia* prepared by Richard E. Bilsborrow and Mariam Lomaia (The World Bank, Washington, 17 April 2011, available at http://catalog.ihsn.org/index.php/citations/24518, referred in this manual as Bilsborrow 2011).

The original set of tables was kindly made available by the World Bank and the mentioned experts to whom acknowledgments are addressed.

The compilation of Table A.2 to Table A.7 by the authors above was based on the latest surveys whose questionnaires were available at the World Bank office in Washington DC at time of preparation of the monograph (spring 2010). The integration of data for new surveys (normally more recent surveys, as from the light-red highlighted rows) was operated by the experts of the involved NSOs for the purposes of this manual. The whole mostly applies to general household surveys implemented since 2000.

The summary Table A.1 was compiled for UNECE by Giambattista Cantisani.

Table A.1.
Summary Overview on Migration Data Collection in Selected Household Surveys of CIS Countries

Recent Migration Data					*Data on Selected Household Surveys*					
								Topics of Data Collection[1]		
Country	*Population Size, 2013 (1000)*	*Foreign born Population, 2013 (in %)*	*Average Annual Rate of Change 2000-2013 (%)*	*Remittances 2013 (as % of GDP)*	*Year*	*Type of Survey*	*Number of Sampled Households*	*General/ Recent Immigration*[2]	*Recent/ Current Emigration*[3]	*Transfers Sent and Remittances Received*[4]
Armenia	2,976.6	10.6	-4.6	21.0	2008	ILCS		P	P/F	F
					2009-2014	ILCS	8,000	P/F	P/F	P
					2014	LFS		M	P/F	N
					2013	IMS		F	F	P/F
Azerbaijan	9,413.4	3.4	-0.5	2.4	2003	HBS	5,587	N	N	M
					2008	LSMS		M	P	P
Belarus	9,356.7	11.6	-0.3	1.7	2000-2015	HBS	6000	N	N	P
Georgia	4 340.9	4.4	-1.1	12.1	2008	HBS	5,257	M	P	P
Kazakhstan	16,440.6	21.1	1.5	0.1	2008	HBS	12,000	N	N	M
Kyrgyzstan	5,547.5	4.1	-3.8	31.5	2008	LFS		P	N	M
					2007	HBS		P/F	N	P
					2003	LFS		N	P	N
Moldova	3,487.2	11.2	-1.5	24.9	2008	LFS	12,430	P/F	P/F	P
					2012	LFS	12,000	P	P/F	P
					2014	LFS	16,000	M	P/F	N
Russian Federation	142,833.7	7.7	-0.6	0.3	2008	HBS	6,133	N	P	P
					2014	HBS		N	P	P
					2002	LFS		N	N	N
					2005	HBS		N	N	P
					2008	LMS		P	N	P
Tajikistan	8,207.8	3.4	-0.6	47.5[5]	2003	LSMS		P	P	P
					2007	LSMS	4,643	P/F	P	P

Country	Recent Migration Data: Population Size, 2013 (1000)	Foreign born Population, 2013 (in %)	Average Annual Rate of Change 2000-2013 (%)	Remittances 2013 (as % of GDP)	Data on Selected Household Surveys: Year	Type of Survey	Number of Sampled Households	Topics of Data Collection[1]: General/ Recent Immigration[2]	Recent/ Current Emigration[3]	Transfers Sent and Remittances Received[4]
					2009	LFS	4,000	P	N	
					2010	IMS				P/F
Turkmenistan	5,240.1	4.3	-0.5	:						
					2000-2013	HBS		N	N	P
Ukraine	45,238.8	11.4	-0.5	5.4	2012	LFS	27,800	N	P	P
					2013-2014	LFS		N	N	N
					2000	HBS		N	N	P
Uzbekistan	28,934.1	4.4	-0.6	:	2011	PSS		N	P	N

1. Coverage of topics: F=Fully, P=Partially, M=Marginally and N=None (with respect of identification of migrants and variables)
2. See details in following tables 2 and 3.
3. See details in following tables 4 and 5.
4. See details in following tables 6 and 7.
5. 2012

Sources: UN Population Wallchart 2013(UN 2013a); *UN International Migration Wallchart 2013* (UN 2013b); *World Bank Open Data* (World Bank 2015b); National surveys: Labour Force Survey (LFS), Household Budget Survey (HBS), Living Standards Measurement Survey (LSMS), Integrated Living Conditions Survey (ILCS), Integrated Household Survey (IHS), Longitudinal Monitoring Survey (LMS), Population Sample Survey (PSS), Integrated Migration Survey or other migration-specialized survey (IMS).

Table A.2.
Migration Data Collection in Selected Household Surveys of CIS Countries: GENERAL IMMIGRATION

			All Household Members				*Internal Migration*	*Return Migration*
Country	*Year*	*Type of Survey*	*Country of Birth*[1]	*Country of Citizen-ship*	*Ever Lived in a Different Country*[1,2]	*Uses Cut-off Period/ Date*	*Identifies In- Migrants from Internal Origins*[3]	*Identifies Return Migrants from Abroad*[2]
Armenia	2008	ILCS	Partial	No	Partial	12 months	Partial	Yes
Armenia	2009-14	ILCS	Partial	No	Partial	Survey month	Partial	Yes
Armenia	2014	LFS	No	No	Partial	No	No	No
Armenia	2013	IMS	Yes	Yes	Yes	2007-2013	Partial	Yes
Azerbaijan	2003	HBS	No	No	No	No	No	No
Azerbaijan	2008	LSMS	No	No	Partial	No	No	No
Belarus	2000-2015	HBS	No	No	No	No	No	No
Georgia	2008	HBS	No	No	Partial	No	Partial	No
Kazakhstan	2008	HBS	No	No	No	No	No	No
Kazakhstan	2008	LFS	Partial[4]	Partial[4]	Partial	No	No	No
Kyrgyzstan	2007	HBS	Yes	Yes	Yes	10 years	Yes	Yes
Moldova	2003	LFS	No	No	No	No	No	No
Moldova	2008	LFS	No	Yes	No	No	No	Yes
Moldova	2012	LFS	No	Yes	No	No	No	Yes
Moldova	2014	LFS	No	Yes	No	No	No	No
Moldova	2008	HBS	No	No	No	No	No	No
Moldova	2014	HBS	No	No	No	No	No	No
Russian Federation	2002	LFS	No	Partial[5]	No	No	No	No
Russian Federation	2005	HBS	No	No	No	No	No	No
Russian Federation	2008	LMS	Partial	No	Partial	No	No	No
Tajikistan	2003	LSMS	No	No	Partial	1998-2003	Yes	No
Tajikistan	2007	LSMS	Partial	No	Partial	2004-2007	Yes	Yes
Tajikistan	2009	LFS	Partial	No	No	12 months*	Yes	Partial
Tajikistan	2010	IMS						
Ukraine	2000-13	HBS	No	No	No	No	No	No
Ukraine	2012	LFS	No	No	No	No	No	No
Ukraine	2013-14	LFS	No	No	No	No	No	No

			All Household Members				Internal Migration	Return Migration
Country	*Year*	*Type of Survey*	*Country of Birth*[1]	*Country of Citizen-ship*	*Ever Lived in a Different Country*[1,2]	*Uses Cut-off Period/ Date*	*Identifies In- Migrants from Internal Origins*[3]	*Identifies Return Migrants from Abroad*[2]
Uzbekistan	2000	HBS	No	No	No	No	No	No
Uzbekistan	2011	PSS	No	No	No	No	No	No

1. Partial indicates that data are available for some countries, but other countries are only coded by region.
2. For those living in their country of birth who have ever lived in another country, their place of residence in another country is only available for the one year reference period. For the foreign born, in the absence of other footnotes, it is known that they also lived in some other country and the time they arrived in this country, but not the specific country they came from most recently.
3. Partial indicates that data are not available on the districts or regions of origin/destination.
4. Three choices are available: citizens of Kazakhstan, CIS countries and non-CIS countries.
5. Three choices are available: citizens of Russia, citizens of any other country (without specifying the country), or citizens of both Russia and another country.

Sources: Labour Force Survey (LFS), Household Budget Survey (HBS), Living Standards Measurement Survey (LSMS), Integrated Living Conditions Survey (ILCS), Integrated Household Survey (IHS), Longitudinal Monitoring Survey (LMS), Population Sample Survey (PSS), Integrated Migration Survey or other migration-specialized survey (IMS).

Table A.3.
Migration Data Collection in Selected Household Surveys of CIS Countries: RECENT IMMIGRATION

			Most Recent Immigration Episode				
Country	*Year*	*Type of Survey*	*Country of Previous Residence*[1]	*Year Arrived in Current Country*	*Reason for Moving to Current Country*	*Education Level prior to Moving to Current Country*	*Work Status prior to Moving to Current Country*
Armenia	2008	ILCS	No	No	No	No	No
Armenia	2009-14	ILCS	Partial	Yes	Yes	No	No
Armenia	2014	LFS	No	No	No	No	No
Armenia	2013	IMS	Partial	Yes	Yes	Yes	Yes
Azerbaijan	2003	HBS	No	No	No	No	No
Azerbaijan	2008	LSMS	No	No	No	No	No
Belarus	2000-2015	HBS	No	No	No	No	No
Georgia	2008	HBS	No	No	No	No	No
Kazakhstan	2008	HBS	No	No	No	No	No
Kazakhstan	2008	LFS	No	No	No	No	No
Kyrgyzstan	2007	HBS	Yes	Yes[2]	Yes	No	No
Moldova	2003	LFS	No	No	No	No	No
Moldova	2008	LFS	Yes	Yes	Yes	Yes	Partial[3]
Moldova	2012	LFS	Yes	Yes	Yes	Yes	Partial[3]
Moldova	2014	LFS	No	No	No	No	No
Moldova	2008	HBS	No	No	No	No	No
Moldova	2014	HBS	No	No	No	No	No
Russian Federation	2002	LFS	No	No	No	No	No
Russian Federation	2005	HBS	No	No	No	No	No
Russian Federation	2008	LMS[4]	No	Partial[5]	No	No	No
Tajikistan	2003	LSMS	No	No	No	No	No
Tajikistan	2007	LSMS	Partial	Yes	Yes	No	No
Tajikistan	2009	LFS	No	No	Partial	Yes	No
Tajikistan	2010	IMS					
Ukraine	2000-13	HBS	No	No	No	No	No
Ukraine	2012	LFS	No	No	No	No	No
Ukraine	2013-14	LFS	No	No	No	No	No

			Most Recent Immigration Episode				
Country	*Year*	*Type of Survey*	*Country of Previous Residence*[1]	*Year Arrived in Current Country*	*Reason for Moving to Current Country*	*Education Level prior to Moving to Current Country*	*Work Status prior to Moving to Current Country*
Uzbekistan	2000	HBS	No	No	No	No	No
Uzbekistan	2011	PSS	No	No	No	No	No

1. Partial indicates that data are available for some countries, but other countries are only coded by region.
2. Reports age at the time of moving to current country (instead of year).
3. Were reported only persons working abroad.
4. Data are representative only at the national level.
5. The year is reported only if the person moved to the Russian Federation *permanently*.

Sources: Labour Force Survey (LFS), Household Budget Survey (HBS), Living Standards Measurement Survey (LSMS), Integrated Living Conditions Survey (ILCS), Integrated Household Survey (IHS), Longitudinal Monitoring Survey (LMS), Population Sample Survey (PSS), Integrated Migration Survey or other migration-specialized survey (IMS).

Table A.4.
Migration Data collection in Selected Household Surveys of CIS Countries: RECENT EMIGRATION

						Most Recent Emigration Episode			
Country	*Year*	*Survey*	*Identifies Former HH Members Left Abroad*	*Uses Cut-off Time/ Date*	*Records if Left within Past 12 Months*	*Year Left*	*Reason for Leaving*	*Education before Leaving*	*Destination*
Armenia	2008	ILCS	Yes	Survey month	Yes	Yes	Yes	No	No
Armenia	2009-14	ILCS	No	Survey month	No	Yes	Yes	Yes	Partial
Armenia	2014	LFS	No	No	Yes	Yes	Yes	No	Partial
Armenia	2013	IMS	Yes	2007-2013	Yes	Yes	Yes	Yes	Yes
Azerbaijan	2003	HBS	No	No	No	No	No	No	No
Azerbaijan	2008	LSMS	Partial[1]	12 months	Yes	No	Partial[1]	No	No
Belarus	2000-2015	HBS	No	No	No	No	No	No	No
Georgia	2008	HBS	Yes	3 months	No	No	Yes	No	No
Kazakhstan	2008	HBS	No	No	No	No	No	No	No
Kazakhstan	2008	LFS	No	No	No	No	No	No	No
Kyrgyzstan	2007	HBS	No	No	No	No	No	No	No
Moldova	2003	LFS	Partial[2]	No	Yes	No	Yes	No	No
Moldova	2008	LFS	Partial[2]	12 months	Partial	Yes	Yes	Yes	Yes
Moldova	2012	LFS	Partial[2]	24 months	Partial	Yes	Yes	Yes	Yes
Moldova	2014	LFS	Partial[2]	12 months[1]	Yes	No	Yes[2]	Yes[3]	Yes
Moldova	2008	HBS	Partial[3]	12 months	Yes	No	Yes	No	No
Moldova	2014	HBS	Partial[3]	12 months[4]	Yes	No	Yes[5]	No[6]	No
Russian Federation	2002	LFS	No	No	No	No	No	No	No
Russian Federation	2005	HBS	No	No	No	No	No	No	No
Russian Federation	2008	LMS	No	No	No	No	No	No	No
Tajikistan	2003	LSMS	Partial[3]	12 months	Yes	No	Partial[3]	No	No
Tajikistan	2007	LSMS	Partial[3]	No	Yes	Yes	Partial	No	No
Tajikistan	2009	LFS	No	No	No	No	No	No	No
Tajikistan	2010	IMS							
Ukraine	2000-13	HBS	No	No	No	No	No	No	No
Ukraine	2012	LFS	Yes	2,5years	No	No	Yes	Yes[7]	No

						Most Recent Emigration Episode			
Country	*Year*	*Survey*	*Identifies Former HH Members Left Abroad*	*Uses Cut-off Time/ Date*	*Records if Left within Past 12 Months*	*Year Left*	*Reason for Leaving*	*Education before Leaving*	*Destination*
Ukraine	2013-14	LFS	No	No	No	No	No	No	No
Uzbekistan	2000	HBS	No	No	No	No	No	No	No
Uzbekistan	2011	PSS	No	No	Yes	Yes	Yes	Yes	Yes

1. Identifies only migrants temporarily absent "oversees for study or work".
2. Emigrants are included in the household roster, recorded as "*temporarily* absent, gone abroad".
3. Identifies migrants only if recorded as absent during the cut-off period and working abroad.
4. Cut-off times available in the household roster: up to 6 months, 6-12 months, more than 12 months.
5. Only one option is available "working abroad".
6. For migrants included in the household roster.
7. Only for labour migrants.

Sources: Labour Force Survey (LFS), Household Budget Survey (HBS), Living Standards Measurement Survey (LSMS), Integrated Living Conditions Survey (ILCS), Integrated Household Survey (IHS), Longitudinal Monitoring Survey (LMS), Population Sample Survey (PSS), Integrated Migration Survey or other migration-specialized survey (IMS).

Table A.5.
Migration Data Collection in Selected Household Surveys of CIS Countries: CURRENT EMIGRATION

			Information on Current Emigrants					*Internal Migration*
Country	*Year*	*Survey*	*Country of Residence*[1]	*Age*	*Gender*	*Education*	*Activity Status*	*Identifies Out-Migrants to Internal Destinations*[2]
Armenia	2008	ILCS	Partial	Yes	Yes	Yes	No	Partial
Armenia	2009-14	ILCS	No	Yes	Yes	Yes	No	Partial
Armenia	2014	LFS	No	Yes	Yes	Yes	No	Partial
Armenia	2013	IMS	Yes	Yes	Yes	Yes	Yes	Yes
Azerbaijan	2003	HBS	No	No	No	No	No	No
Azerbaijan	2008	LSMS[3]	No	Yes	Yes	No	No	Partial
Belarus	2000-2015	HBS	No	No	No	No	No	No
Georgia	2008	HBS	No	Yes	Yes	Yes	No	Partial
Kazakhstan	2008	HBS	No	No	No	No	No	No
Kazakhstan	2008	LFS	No	No	No	No	No	No
Kyrgyzstan	2007	HBS	No	No	No	No	No	No
Moldova[4]	2003	LFS	No	Yes	Yes	Yes	No	Partial
Moldova	2008	LFS	Yes	Yes	Yes	Yes	Partial[5]	No
Moldova	2012	LFS	Yes	Yes	Yes	Yes	Partial[5]	No
Moldova	2014	LFS	Yes	Yes	Yes	Yes	Partial[5]	Partial[6]
Moldova	2008	HBS[4]	Partial	Yes	Yes	Yes	No	No
Moldova	2014	HBS	Partial	Yes	Yes	Yes	No	No
Russian Federation	2002	LFS	No	No	No	No	No	No
Russian Federation	2005	HBS	No	No	No	No	No	No
Russian Federation	2008	LMS	No	No	No	No	No	No
Tajikistan	2003	LSMS[4]	No	Yes	Yes	No	No	Partial
Tajikistan	2007	LSMS[4]	Partial	Yes	Yes	Yes	Yes	Partial
Tajikistan	2009	LFS	No	No	No	No	No	No
Tajikistan	2010	IMS						
Ukraine	2000-13	HBS	No	No	No	No	No	No
Ukraine	2012	LFS	No	No	No	No	No	No
Ukraine	2013-14	LFS	No	No	No	No	No	No

			Information on Current Emigrants					Internal Migration
Country	*Year*	*Survey*	*Country of Residence*[1]	*Age*	*Gender*	*Education*	*Activity Status*	*Identifies Out-Migrants to Internal Destinations*[2]
Uzbekistan	2000	HBS	No	No	No	No	No	No
Uzbekistan	2011	PSS	Yes	Yes	Yes	Yes	No	Yes

1. Partial indicates that data are available for some countries, but other countries are only coded by region.
2. Partial indicates that data are not available on the districts or regions of origin/destination.
3. Identifies migrants temporarily absent "oversees for study or for work".
4. Identifies migrants only if working abroad.
5. Partial activity status: a) study, b) work, c) looking for a job and d) other situation.
6. At the moment of interview the household member is "*temporarily* absent, gone to another locality within the country".

Sources: Labour Force Survey (LFS), Household Budget Survey (HBS), Living Standards Measurement Survey (LSMS), Integrated Living Conditions Survey (ILCS), Integrated Household Survey (IHS), Longitudinal Monitoring Survey (LMS), Population Sample Survey (PSS), Integrated Migration Survey or other migration-specialized survey (IMS).

Table A.6.
Migration Data Collection in Selected Household Surveys of CIS Countries: TRANSFERS SENT

				Obtains Monetary Transfers Sent to Former Household Members Abroad				
Country	*Year*	*Survey*	*Household Sends Money to Former Members or Other Persons*	*Yes/ No*	*Country*	*Total Value within Past 12 Months*	*Transfer Mechanism*	*Use of Remittances*
Armenia	2008	LSMS	Yes	Yes	Partial[1]	Yes	Yes	Partial[2]
Armenia	2009-14	ILCS	No	No	No	No	No	No
Armenia	2014	LFS	No	No	No	No	No	No
Armenia	2013	IMS	Yes	Yes	No	Yes	No	No
Azerbaijan	2003	HBS	No	No	No	No	No	No
Azerbaijan	2008	LSMS	No	No	No	No	No	No
Belarus	2000-2015	HBS	no	No	No	No	No	No
Georgia	2008	HBS	Yes	Partial[3]	No	Partial[4]	No	No
Kazakhstan	2008	HBS	Yes	No	No	No	No	No
Kazakhstan	2008	LFS	No	No	No	No	No	No
Kyrgyzstan	2007	HBS	Yes	No	No	No	No	No
Moldova	2003	LFS	No	No	No	No	No	No
Moldova	2008	LFS	No	No	No	No	No	No
Moldova	2012	LFS	No	No	No	No	No	No
Moldova	2014	LFS	No	No	No	No	No	No
Moldova	2008	HBS	No	No	No	No	No	No
Moldova	2014	HBS	No	No	No	No	No	No
Russian Federation	2002	LFS	No	No	No	No	No	No
Russian Federation	2005	HBS	Yes	No	No	No	No	No
Russian Federation	2008	LMS	Yes	No	No	No	No	No
Tajikistan	2003	LSMS	Yes	No	No	No	No	No
Tajikistan	2007	LSMS	Yes	No	No	No	No	No
Tajikistan	2009	LFS						
Tajikistan	2010	IMS	Yes	Yes	Yes	Yes	Yes	Yes

					Obtains Monetary Transfers Sent to Former Household Members Abroad			
Country	*Year*	*Survey*	*Household Sends Money to Former Members or Other Persons*	*Yes/ No*	*Country*	*Total Value within Past 12 Months*	*Transfer Mechanism*	*Use of Remittances*
Ukraine	2000-13	HBS	Yes	No	No	No	No	No
Ukraine	2012	LFS	No	No	No	No	No	No
Ukraine	2013-14	LFS	No	No	No	No	No	No
Uzbekistan	2000	HBS	Yes	Partial[1]	No	Partial[5]	No	No
Uzbekistan	2011	PPS	No	No	No	No	No	No

1. Partial indicates that data are available for some countries, but other countries are only coded by region.
2. Reports only three choices for the use of remittances sent or received.
3. Combines money and in-kind assistance.
4. The recall period is the past 3 months.
5. The recall period is 1 month.

Sources: Labour Force Survey (LFS), Household Budget Survey (HBS), Living Standards Measurement Survey (LSMS), Integrated Living Conditions Survey (ILCS), Integrated Household Survey (IHS), Longitudinal Monitoring Survey (LMS), Population Sample Survey (PSS), Integrated Migration Survey or other migration-specialized survey (IMS).

Table A.7.
Migration Data Collection in Selected Household Surveys of CIS Countries: REMITTANCES RECEIVED

			Obtains Monetary Transfers Received from Former Household Members Abroad								
Country	*Year*	*Survey*	*Household Receives Money from Former Members or Other Persons*	*Yes/ No*	*Country*[1]	*Total Value within Past 12 Months*	*Transfer Mechanism*	*Use of Remittances*	*Household Receives Goods from Former Members Abroad*	*Household Receives Money or Goods from Non-Former Members Abroad*
Armenia	2008	ILCS	Yes	Yes	Partial	Yes	Yes	Partial [2]	Yes	Yes
Armenia	2009-14	ILCS	Yes	Yes	Yes	No	No	No	No	No
Armenia	2014	LFS	No	No	No	No	No	No	No	No
Armenia	2013	IMS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Azerbaijan	2003	HBS	Yes	Partial[3]	No	Partial[4]	No	No	No	Partial[3]
Azerbaijan	2008	LSMS	Partial[5]	No	No	No	No	No	No	No
Belarus	2000-2015	HBS	**Partial[3) 11)]**	**Partial[3)]**	**No**	**Partial[b)]**	**No**	**No**	**No**	**No**
Georgia	2008	HBS	Yes	Yes	No[6]	Partial[4]	No	No	Yes	Yes
Kazakhstan	2008	HBS	Partial[7]	No	No	No	No	No	No	No
Kazakhstan	2008	LFS	Partial[7]	No	No	No	No	No	No	No
Kyrgyzstan	2007	HBS	Yes	Partial[9]	No	Partial[4]	No	No	No	Partial[3]
Moldova	2003	LFS	No	No	No	No	No	No	No	No
Moldova	2008	LFS	Yes	Yes	Yes	No	Yes	Yes	No	No
Moldova	2012	LFS	Yes	Yes	Yes	No	Yes	Yes	No	No
Moldova	2014	LFS	No	No	No	No	No	No	No	No
Moldova	2008	HBS	Yes	Partial[7]	Partial	Yes	No	No	No	No
Moldova	2014	HBS	Yes	Partial[3]	Partial	Yes	No	No	No	Partial[3]
Russian Fed-	2002	LFS	No	No	No	No	No	No	No	No
Russian Fed.	2005	HBS	Yes	No	No	No	No	No	No	No
Russian Fed.	2008	LMS	Yes	No	No	No	No	No	No	No
Tajikistan	2003	LSMS	Yes	Yes	Partial	Yes	No	Partial[8]	Yes	Yes
Tajikistan	2007	LSMS	Yes	Yes	Partial	Yes	No	Partial[9]	Yes	Yes
Tajikistan	2009	LFS								

					Obtains Monetary Transfers Received from Former Household Members Abroad					
Country	*Year*	*Survey*	*Household Receives Money from Former Members or Other Persons*	*Yes/ No*	*Country*[1]	*Total Value within Past 12 Months*	*Transfer Mechanism*	*Use of Remittances*	*Household Receives Goods from Former Members Abroad*	*Household Receives Money or Goods from Non-Former Members Abroad*
Tajikistan	2010	IMF	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Ukraine	2000-13	HBS	Yes	No	No	No	No	No	No	No
Ukraine	2012	LFS	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Ukraine	2013-14	LFS	No	No	No	No	No	No	No	No
Uzbekistan	2000	HBS	Yes	Partial[8]	No	Partial[10]	No	No	Partial[10]	Partial[11]
Uzbekistan	2011	PSS	No	No	No	No	No	No	No	No

1. Partial indicates that data are available for some countries, but other countries are only coded by region. 2. Reports only three choices for the use of remittances sent or received. 3. Does not identify senders/recipients of remittances. 4. The recall period is the past 3 months. 5. Includes remittances as well from non-individuals (organizations, entities, charities etc.). 6. Reports money and goods (separately) received from former household members, but country of origin is indicated only for goods received. 7. Reports remittances from former members only if they work abroad. 8. Combines money and in-kind transfers without distinguishing whether received from within the country or abroad. 9. Reports the reason for the monetary transfer rather than the usage. 10. The recall period is 1 month. 11. Does not distinguish whether received from within the country or abroad.

Sources: Labour Force Survey (LFS), Household Budget Survey (HBS), Living Standards Measurement Survey (LSMS), Integrated Living Conditions Survey (ILCS), Integrated Household Survey (IHS), Longitudinal Monitoring Survey (LMS), Population Sample Survey (PSS), Integrated Migration Survey or other migration-specialized survey (IMS).

HANDBOOK
on the Use of Administrative Sources and Sample Surveys
to Measure International Migration in CIS Countries

Migration is a powerful driver and important consequence of economic, political and social change, and therefore needs to be adequately measured and understood. However, the improvement of statistical systems to measure migration has been a slow process because of weak coordination between migration statistics producers, discrepancies in the applied definitions, and challenges related to data collection.

The objective of this handbook is to guide statisticians and other professionals in producing and using data on international migration from administrative sources and household surveys in CIS countries. Chapter I of the handbook describes the key concepts and definitions for the measurement of international migration. Chapter II provides practical information on the sources of administrative data and their use, and highlights the related methodological and organizational challenges. Chapter III addresses the use of sample surveys to measure international migration and provides an inventory of migration surveys and best practices. Chapters II and III conclude with concrete recommendations for national statistical office and other migration data poducers.

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Information Service
United Nations Economic Commission for Europe

Palais des Nations
CH - 1211 Geneva 10, Switzerland
Telephone: +41(0)22 917 44 44
Fax: +41(0)22 917 05 05
E-mail: info.ece@unece.org
Website: http://www.unece.org

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