

Distr.
GENERAL

Working paper 5 Add.4
15 November 2006

ENGLISH ONLY

**UNITED NATIONS STATISTICAL COMMISSION and
ECONOMIC COMMISSION FOR EUROPE
THE
CONFERENCE OF EUROPEAN STATISTICIANS** **EUROPEAN COMMISSION
STATISTICAL OFFICE OF
EUROPEAN COMMUNITIES
(EUROSTAT)**

Joint UNECE/Eurostat Work Session on Migration Statistics
organised in collaboration with UNFPA
Edinburgh, Scotland, 20-22 November 2006

Item 3 of the provisional agenda

THE CHALLENGES OF MEASURING EMIGRATION AND REMITTANCES

Session 3.1: Measuring emigration through immigration data

Report of the Data Exchange exercise to measure emigration through immigration data of
receiving countries.

Data Analysis Report. Group 4*
(Estonia, Finland, Georgia, Kazakhstan, Norway, Russia)

Submitted by UNECE/Eurostat Task Force on Measuring Emigration Using Data

I. INTRODUCTION

1. International migration is by definition an international phenomenon and as such is measured in two countries, in the country of origin and in the country of destination. Therefore, when one country does not have a suitable source of information or it is difficult to measure migration flows correctly, it may be useful to investigate the data from the receiving country of from both the receiving and sending countries.

* This paper has been prepared by Anne Herm, Eurostat and the Statistical Office of Estonia at the invitation of the secretariat.

2. The analysis below compares migration flows between six countries – Estonia, Finland, Georgia, Kazakhstan, Norway and Russia, the members of the "UNECE/Eurostat Task Force on Measuring Emigration Using Data Collected by the Receiving Country" in Group 4. Most of the data used for the analysis was collected for the Task Force with the intention of comparing data on the same flows between pairs of countries. Other information sources such as the joint Eurostat, UNSD, UNECE, ILO and Council of Europe Annual Collection of Migration Data and publications of national statistical institutions were also used as additional information.

3. Countries in Group 4 have different data sources for migration flows. Within this group of countries there is significant migration exchange between some countries while other pairs exchange limited numbers of migrants. Accordingly, the scope for comparing immigration and emigration flows in pairs of countries is limited not only by the availability of data but also by the small scale of migration.

4. Generally, the availability of migration data in Group 4 proves that most countries have both data on immigration and emigration. It is incorrect to say that emigration data is systematically under covered compared to immigration data. We observe that where immigration numbers are high in a given country, so are emigration data. This means that problem of under-coverage is relevant to both immigration and emigration figures. On the one hand, countries use different definitions in identifying migration, especially for the type (permanent or temporary) or duration of residence and the population groups covered. Even the definitions of immigrant and emigrant may be different in the same country. On the other hand, population and migration registration systems and statistical systems that measure migration may greatly under-cover migration (e.g. intentionally exclude some population groups or be unable to ensure full coverage) and this under-coverage differs from country to country. There are also other reasons why the same flows measured in two countries may be different, such as different treatment of migrations that were registered with delay, changes in migrants' destinations, etc.

I. DATA AVAILABILITY

5. The Task Force collected data on immigration and emigration flows and on population stocks from participating countries. These data were intended to describe the migration flows between countries identified in three different ways, based on a person's country of previous or next residence, country of birth or country of citizenship. This data collection required more detailed information on annual migration flows and population stocks compared to the joint Eurostat, UNSD, UNECE, ILO and Council of Europe Annual Collection of Migration Data.

6. Data collection covered the ten-year period from 1995 to 2004. It was suggested that, if possible, countries should supply the same data derived from different sources. In Group 4 no country did this and the available data are mostly derived from a single data source that is normally used for annual migration statistics. The availability of sets of data and data sources by country is shown in Table 1.

7. In Group 4, three countries (Estonia, Finland and Norway) base their migration statistics on population registration systems while in Russia only migration is registered and in the two other countries (Georgia and Kazakhstan) the method of data collection could not be clarified for this comparative study.

I.1. Data on migration flows

8. The available migration flow data shown here are based mainly on tables filled in by the Group 4 countries.

1.1.1. Table 1. “Residence one year ago by place of birth” and Table 2. “Residence one year ago by citizenship”

9. These tables were required to be filled in for the number of persons who lived in the country but were living in the partner country (country of origin) one year before by age group and sex. In the first table, the countries were asked to break down this number by place of birth (host country, country of origin or elsewhere). In the second table, the number had to be broken down by country of citizenship.

10. Only one of the Group 4 countries, Norway, was able to provide both tables in the required form, i.e. for all reference years and for all partners in Group 4.

11. Estonia presented data derived from 2000 census results. The census did not include a question about place of residence one year prior to the census. It was not, therefore, possible to produce data that would fully meet the requirements of the project. However, the year of first arrival of foreign-born persons is available from the census data. Thus the data presented by Estonia include foreign-born persons who first arrived in Estonia in 1999, a year before the census, and in the first three months of 2000, that is until the date of the census. Cross-tabulations by country of birth and country of citizenship are possible in theory, but were not produced in time for this data collection.

12. Both countries supplied these data disaggregated by age and sex.

13. Finland and Russia seem to be able to process these data but did not provide them for comparative study while in Georgia and Kazakhstan the data are not available.

Table 1. Migration data sources and availability of data, Group 4

	MIGRATION FLOWS								POPULATION STOCKS	
Member countries in Group 4	Table 1. Residence one year ago by place of birth	Table 2. Residence one year ago by citizenship	Table 3. Immigrants by country of last permanent residence (arrived last 10 years)	Table 4. Immigrants by country of birth (arrived last 10 years)	Table 5. Immigrants by country of citizenship (arrived last 10 years)	Table 6. Emigrants by country of next residence	Table 7. Emigrants by country of birth	Table 8. Emigrants by country of citizenship	Table 1. Population by country of birth and citizenship	Table 2. Population by country of birth, country of birth of parents and citizenship
	Data sources									
ESTONIA	Census 2000	Census 2000	Population Register	Population Register	Population Register	Population Register	Population Register	Population Register	Population Register	Not available
FINLAND	Not available	Not available	Population register	Population register	Population register	Population register	Population register	Population register	Not available	Not available
GEORGIA	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available
KAZAKHSTAN	Not available	Not available	No information	Not available	Not available	No information	Not available	Not available	Not available	Not available
NORWAY	Central Population Register	Central Population Register	Central Population Register	Central Population Register	Central Population Register	Central Population Register	Central Population Register	Central Population Register	Central Population Register	Not available
RUSSIA	Not available	Not available	Registration of place of residence	Not available	Registration of place of residence	Removal of registration of the place of residence	Not available	Removal of registration of the place of residence	Not available	Not available

14. 1.1.2. Table 3. "Immigrants by country of last residence" and Table 6. "Emigrants by country of next residence"

15. In Group 4, all countries except Georgia collect data on country of last residence and country of next residence. The time period for which the data are available differs between countries. Estonia, Finland and Norway have data for the whole observation period while Russian data start from 1997. Data on age groups and sex were processed by all these countries, except for migrants from and to Norway in Russia. Kazakhstan presented total immigration and emigration by last and next residence in Group 4 countries starting from 1996. Georgia has only the total number of immigrants from the 1998 Migrant Survey and from the 2002 Census (for the year 2001).

16. 1.1.3. Table 4. "Immigrants by country of birth" and Table 7. "Emigrants by country of birth"

17. Three countries – Estonia, Finland and Norway – are able to produce statistics on migration flows by country of birth for the whole period. Data by age group and sex were processed by all three countries. The data source for these countries is the population registration system (the population register), as it is for flows by country of last and next residence.

18. Russia seems to be able to process these data but did not provide them for this comparative study while in Georgia and Kazakhstan the data are not available.

19. 1.1.4. Table 5. "Immigrants by country of citizenship" and Table 8. "Emigrants by country of citizenship"

20. Tables on migration flows by country of citizenship are available for all years from 1995 to 2004 in countries using the population registration system (Estonia, Finland and Norway) and in Russia from 2002 to 2004. Data on age groups and sex were processed by all these countries. Georgia and Kazakhstan do not have these statistics.

I.2. Data on population stocks by origin

21. 1.2.1. Table 1. "Population by country of birth and citizenship"

22. Data on population by country of birth has to be broken down by country of citizenship. This was limited to three groups of country of citizenship: the host country, partner country and other. In the case of citizens of the host country who were born in the partner country, countries were asked to distinguish between citizens by birth and naturalised citizens. These data were not provided.

23. Estonia, Norway and Russia provided population stock data for this study.

24. The Estonian data was produced as at 1 January 2005 based on the population register. This is not the current data source for official population figures, which are based on the last census results and vital statistics. Accordingly, these data are derived from an alternative source, the reliability of which is not yet confirmed.

25. Norway's data covers the whole period from 1996 to 2005.

26. In Russia, data are produced separately by country of birth and by country of citizenship. Country of birth data are only available for a selection of countries where relatively large numbers of persons were born (e.g. the list excludes Norway). Data on country of citizenship is available in Russia as far as Estonian, Georgian and Kazakhstan citizens are concerned.

27. No one of these countries distinguished between citizens by birth and naturalised citizens.
28. 1.2.2. Table 2. "Population by country of birth, country of birth of parents and citizenship"
29. No country provided this information for the Task Force.

II. DATA SOURCES AND DEFINITIONS

30. For a given country both data availability and definitions used depend greatly on the data source.
31. For migration flows the data source is the population registration system in Estonia, Finland and Norway. Russia also derives statistics from a registration system but it covers only immigrants' new place of residence and emigrants' deregistration from their place of residence. Kazakhstan supposedly uses a similar system while Georgia does not have data from a registration system and the only available data are derived from the census or special sample surveys.
32. Finland and Norway adopted common rules for the registration of inter-Nordic migration through their specific population registration systems (Nordic Migration Agreement). This strongly supports the comparability of flows between countries measured by both of them.
33. More details and information specific to each country are presented below.

II.1. Estonia

34. In Estonia the source for both annual migration flow data and population stock data for this study is the population register, in which the place of residence is updated with notifications of place of residence by local municipalities. The Statistical Office receives an electronic file every year with an extract from the Population Register on all persons registered and on those who registered a new place of residence, including those who arrived from abroad or left to go abroad. Up to now, the data have been used only to assess the quality and improvement of the registration system; poor coverage did not allow the data to be published among official statistics.
35. The same source has mainly been used since 1994 but there have been considerable changes in both the rules of registration of the place of residence and maintenance of the database. The population register was officially created in 2000 based on the Population Register Act which laid down the rules for registration and the technical environment. This change led to an unexpected adverse influence on the updating of data in the database, availability for statistical processing, and data quality.
36. Until recently people had no strict obligation to report their new place of residence after a move either within the country or (from) abroad. Since 2004, foreigners who settle in Estonia and, since 2005, all residents of Estonia must register their new place of residence within 30 days after the move. This obligation is valid for all changes of residence including arrivals in Estonia and departures to live abroad, as well as internal migration. Foreigners are registered when their residence permit is issued or, in the case of EU citizens, when they exercise their right to live in the country. In both cases, the minimum duration of stay is supposed to be at least three months. Even if registered in the population register on the basis of a residence permit, foreigners are not considered part of the resident population until they personally declare their place of residence in a local municipality in Estonia. For citizens there are no restrictions relating to the duration of stay and accordingly every change of

residence for more than 30 days could be counted as a migration event. Even so, it is likely that citizens register only long-term, or more or less permanent, moves.

37. The census data are used as a basis for annual population figures. By the census definition population covers inhabitants permanently living in the country including those who were absent for less than one year. For this study some data were derived from census results.

II.2. Finland

38. The data source for migration flow figures in Finland is the Population Information System and is based on all notifications of change of address when arriving from or leaving to live abroad. Foreigners will be counted as immigrants if their expected stay is at least one year. Finnish citizens who had their last place of residence abroad and returned to Finland will be registered in the new municipality of residence without requirements as to the intended duration of stay. Finnish citizens or foreigners who leave the country in order to live abroad for one year or more must notify their emigration. However, a Finnish citizen leaving the country to live abroad on a temporary basis without a specific time limit may keep his or her municipality of residence in Finland if his or her connection to Finland is stronger than to the new country of residence based on his or her living conditions.

39. International migration data refers to the legally resident population of the country and each immigration or emigration event will change the state of this population. An international migration event is defined as a change of the municipality of residence registered by the Population Information System from or to abroad through the notification of change of address. Temporary absence abroad, if keeping the same municipality of residence in Finland and only notifying a change of address for a finite period, is not considered international migration.

II.3. Norway

40. In Norway all migration data is based on the Population Statistics System. The primary source of this system is the Central Population Register.

41. *The National Population Registration Act* and regulations issued pursuant to the act lay down conditions for carrying out population registration, e.g. for decisions made in individual matters concerning the place of residence. The legal framework therefore influences the quality of the data. International migration to/from Norway is an event regarded as such by the competent Norwegian authorities. The precise definition of 'immigrant/emigrant' according to this source is complex.

42. The arrival of a person may be counted as immigration if that person intends to stay in Norway at least six months. Departure may be considered emigration if the person intends to stay out of the country permanently or will not have more than sporadic stays in Norway during a year, and no longer has a spouse or children, housing or a job in Norway.

43. The number of migration events in Norwegian migration statistics is the result of Statistics Norway's intention to reflect the population register data statistically – as good as possible and according to general principles for handling population registration data. Personal data received from the data source are used to produce both flow and stock statistics, and in that way there is a connection with the population balance. Thus the statistical definition is based on the definition of migrant in the population register and adopted as much as possible for statistical use. The population covered by population statistics system is the resident population.

II.4. Nordic system of exchange of migration information

44. Migration statistics in Norway and Finland are based on data collected in line with the Inter-Nordic Migration Agreement between Denmark, Finland, Iceland, Norway and Sweden regarding population registration. This system is valid for all persons moving to or from another Nordic country, whatever their citizenship. Under this Agreement, every country records migration to or from another Nordic country according to the legal provisions of the country of immigration. For emigration, the minimum duration of stay in the country of immigration determines whether a person is registered as an emigrant. In practice, therefore, emigration from Finland will be recorded subject to the rule of six months for Norway, three months for Denmark and one year for Sweden and Iceland; emigrants from Norway will be recorded subject to the one year rule for Finland, Iceland and Sweden and the three-month rule for Denmark. A person who moves to another Nordic country has to submit an Inter-Nordic Migration Certificate issued in the last country of residence to the registration authorities of his or her new country of residence. Thus the same people should be registered in both countries – in the new country as an immigrant and in the previous country of residence as an emigrant. That ensures high comparability of data between Finland and Norway.

II.5. Georgia

45. In Georgia no reliable system exists for collecting annual data on international migration. Some data are available from the last population census in 2002, including the total number of immigrants in 2001; some estimates are derived from the 1998 Migrant Survey and 2001 sample survey of migration processes in Georgia ("The Migration Statistics", December 2000 – February 2001). The latter also cover short-term arrivals (including those for less than a month). Data by last and next country of residence, country of citizenship and country of birth were not available for the current study. According to the Statistical Yearbook published on the website of national statistical office, net migration is estimated annually.

II.6. Kazakhstan

46. Kazakhstan provided none of the requested data except for total immigration and emigration for each Group 4 country of previous and next residence for the period from 1996 to 2004.

II.7. Russia

47. In Russia, the source of data on international migration (long-term migration) is registration at the place of residence for immigrants or deregistration of emigrants. These procedures are carried out by branches of the Federal Migration Office. As part of the procedure, reports are produced for the purpose of collecting statistical data on migrants. The reports are sent to the regional branches of the Federal State Statistics Service (Rosstat), which process them and produce aggregate data in combination with different variables (so-called "regulated tabulations"). Rosstat processes primary statistical data every month.

48. Population estimates are produced for the permanently resident population starting from 2002, based on the population census. An immigrant is defined as a citizen of the Russian Federation, foreign citizen or a person without citizenship who has arrived from outside the country's borders and registered a place of residence. An emigrant is defined as a citizen of the Russian Federation, a foreign citizen or a person without citizenship who leaves Russian territory and is thereby deregistered in the former place of residence.

49. In addition to permanent immigration, for estimating migration flows, information on the number of temporary arrivals in Russia for one year or more, registered at their place of stay, is also used. However, such data are collected experimentally. There is no legislation governing compilation of the source documents for statistics on temporary migrants.

50. According to Rosstat, the data source does not fully cover the official estimate of the population balance because of undercounting both for immigrants and emigrants. Undercounting for immigrants is connected with the time lag between arrival and registration at the place of residence of foreign citizens and persons without citizenship, because registration is possible only on receipt of a residence permit. The time lag may be considerable (three to five years). On the other hand, emigrants who leave the country to take up permanent residence abroad may wish to remain registered in their place of residence in Russia, if the receiving country does not require a certificate from the last place of residence.

III. MIGRATION BY COUNTRY OF LAST AND NEXT RESIDENCE

51. In the analysis below, we attempt to estimate the level of comparability of migration data between pairs of countries and to illuminate the differences between similar figures. It should be noted that comparison is not possible for all pairs of countries because of missing data.

52. The Task Force intended also to compare data derived from different sources for a given country. However, no country presented data from more than one source, so this was impossible.

53. In this section, the data are based on information about the country of last and next residence. The basic principle is that the number of emigrants from country A to country B registered by country A should be equal or at least similar to the number of immigrants from country A to country B registered by country B. The following considers all pairs of countries in Group 4 separately.

III.1. Migration between Estonia and Finland

54. Migration flows between Estonia and Finland may be compared during the first half of the observation period (1995-1999). As Table 2 shows, both Estonian immigration and emigration figures are lower than Finnish figures. Annual immigration registered in Estonia is two or three times lower than emigration registered in Finland. After 1999 the difference sharply increases due to the fact that the data collection system became ineffective in Estonia after the population register was officially introduced. This initially had an adverse impact on the availability of data and on the coverage of immigration for certain population groups.

55. For migration from Estonia to Finland, again Finland recorded more events than Estonia. In 1995, total immigration recorded in Finland was one fifth higher than total emigration from Estonia. The difference increased over the next five years and by 2001 immigration recorded in Finland was four times higher than emigration from Estonia.

56. The different figures may be partly explained by the fact that the definitions of migration used by the two countries were different – Estonia did not (explicitly) set a minimum duration of stay in defining a migration event, while Finland had a "one year" rule. However, other factors should also be kept in mind. As explained above, in the case of Estonia the fall in immigration after 2000 is mainly the result of changes in the population registration system and statistical data collection.

Table 2. Migration flows between Estonia and Finland

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
From Finland to Estonia										
Immigration data (Estonia)	129	114	111	113	107	75	4	21	11	7
Emigration data (Finland)	363	367	256	282	264	503	268	361	311	854
From Estonia to Finland										
Immigration data (Finland)	1263	875	800	886	784	846	1283	1378	1292	1854
Emigration data (Estonia)	1067	648	550	510	491	499	335	370	313	320
Net flows Estonia-Finland										
in Finland	900	508	544	604	520	343	1015	1017	981	1000
in Estonia	-938	-534	-439	-397	-384	-424	-331	-349	-302	-313

III.2. Migration between Estonia and Norway

57. Both immigration and emigration registered in Estonia from and to Norway are ten to fifty times smaller than the same flows registered in Norway (Table 3). Such large differences are partly explained by different definitions (the different time criterion for registration). Norway records immigration as a period of at least six months' residence in the country, while Estonia has no time criterion and obviously misses most of these emigration events. However, the number of immigration events recorded in Estonia is too small compared to Norway to be explained only by differences in definition.

Table 3. Migration flows between Estonia and Norway

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
From Norway to Estonia										
Immigration data (Estonia)	1	1	2	2	3	1	0	5	0	0
Emigration data (Norway)	37	52	55	55	40	41	42	59	68	55
From Estonia to Norway										
Immigration data (Norway)	86	74	78	73	85	105	143	174	108	155
Emigration data (Estonia)	3	6	10	10	7	18	3	22	21	9
Net flows Estonia-Norway										
in Norway	49	22	23	18	45	64	101	115	40	100
in Estonia	-2	-5	-8	-8	-4	-17	-3	-17	-21	-9

III.3. Migration between Estonia and Russia

58. Migration flows between Estonia and Russia are relatively large (Table 4) and these data may be compared, except for 1995 and 1996 when Russian data are missing.

59. Immigration into Estonia from Russia was one third higher in the years 1997–1999 than emigration recorded in Russia. Starting from 2000, the Estonian figure falls strongly due to the change in the population registration system explained above.

60. The number of immigration events registered in Russia was somewhat higher than the number of emigration events registered in Estonia. Since 2001 the figures have been quite similar.

61. Compared with Finland and Norway, Estonian data seems to show better comparability with Russia, particularly in the case of emigration from Estonia, which does not mean *ipso facto* better reliability. The definitions are not the same in Estonia and Russia, but since in Estonia there are fewer incentives to register and the registration rules are less strict compared with Nordic countries, it may be that, as in Russia, it is mainly permanent migration that is recorded. It may also be that in order to be registered in Russia immigrants had to submit a document issued by the authority at the last place of residence, which might have some impact on the recording of emigration from Estonia to Russia in the mid-1990s.

Table 4. Migration flows between Estonia and Russia

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
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From Russia to Estonia

Immigration data (Estonia)	970	941	984	892	858	459	65	109	85	63
Emigration data (Russia)	:	:	702	550	564	385	402	321	351	265

From Estonia to Russia

Immigration data (Russia)	:	:	3483	1771	852	786	535	534	445	446
Emigration data (Estonia)	6746	4969	2333	1208	798	644	577	574	441	341

Net flows Estonia-Russia

in Russia	:	:	2781	1221	288	401	133	213	94	181
in Estonia	-5776	-4028	-1349	-316	60	-185	-512	-465	-356	-278

III.4. Migration between Finland and Norway

62. For Finland and Norway, both sets of data correspond perfectly (Table 5). The flows recorded in the two countries are almost equal (the differences never exceed 5%) and they present the same trends. These results were to be expected, as Finland and Norway have acceded to the Nordic Migration Agreement (see above).

Table 5. Migration flows between Finland and Norway

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
From Finland to Norway										
Immigration data (Norway)	563	587	1012	1358	1380	1311	1224	1249	934	647
Emigration data (Finland)	549	584	1015	1366	1383	1289	1215	1186	931	645
From Norway to Finland										
Immigration data (Finland)	347	405	356	613	955	1034	1107	1048	990	971
Emigration data (Norway)	368	407	353	632	978	1041	1135	1056	1017	1004
Net flows Norway-Finland										
in Finland	-202	-179	-659	-753	-428	-255	-108	-138	59	326
in Norway	195	180	659	726	402	270	89	193	-83	-357

III.5. Migration between Finland and Russia

63. Generally, the number of migration events, both immigration and emigration, recorded by Russia is smaller than that recorded by Finland (Table 6). The two countries use different definitions of migrants – Finland considers people who move for a period of at least one year to be migrants, while Russia records permanent migration only.

Table 6. Migration flows between Finland and Russia

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
From Russia to Finland										
Immigration data (Finland)	1844	2001	2386	2469	2204	2592	2600	2124	1730	2007
Emigration data (Russia)	:	:	923	990	1040	1142	980	1110	737	910
From Finland to Russia										
Immigration data (Russia)	:	:	140	164	117	83	97	136	125	141
Emigration data (Finland)	189	190	177	135	182	491	210	288	295	346
Net flows Finland-Russia										
in Russia	:	:	-783	-826	-923	-1059	-883	-974	-612	-769
in Finland	1655	1811	2209	2334	2022	2101	2390	1836	1435	1661

III.6. Migration between Norway and Russia

64. As in the case of Finland and Russia, migration recorded in Norway to and from Russia is also significantly larger than that recorded in Russia (Table 7).

65. Different registration rules may explain the discrepancy between these data but there may be even more important reasons, as explained above with regard to migration between Russia and Finland and Russia and Estonia.

Table 7. Migration flows between Norway and Russia

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
From Russia to Norway										
Immigration data (Norway)		504	582	636	800	895	961	1350	1835	1724
Emigration data (Russia)	:	:	102	83	70	73	100	140	155	165
From Norway to Russia										
Immigration data (Russia)	:	:	32	44	22	22	5	11	12	11
Emigration data (Norway)	65	125	130	94	115	106	123	122	159	173
Net flows Norway-Russia										
in Russia	:	:	-70	-39	-48	-51	-95	-129	-143	-154
in Norway	313	379	452	542	685	789	838	1228	1676	1551

III.7. Migration between Kazakhstan and Russia

66. Migration flows between Kazakhstan and other countries in Group 4 are very small, except for Russia, for which the figures are very large for historical reasons. Accordingly, only migration flows between Kazakhstan and Russia are compared (Table 8).

67. The figures are quite similar but systematically higher when flows are recorded by Russia compared with Kazakhstan. As no metadata on definitions or coverage is available for Kazakhstan, we can put forward no explanation for the differences.

Table 8. Migration flows between Kazakhstan and Russia

	1996	1997	1998	1999	2000	2001	2002	2003	2004
From Kazakhstan to Russia									
Immigration data (Russia)	:	235903	209880	138521	124903	65226	55706	29552	40150
Emigration data (Kazakhstan)	138693	216765	178027	108115	108724	94917	80052	45451	44215

From Russia to
Kazakhstan

Immigration data (Kazakhstan)	31888	22739	26252	26719	23941	23497	21758	21565	18565
Emigration data (Russia)	:	25364	26672	25037	17913	15186	13939	14017	12504

Net flows Russia-Kazakhstan

in Kazakhstan	-106805	-194026	-151775	-81396	-84783	-71420	-58294	-23886	-25650
in Russia	:	210539	183208	113484	106990	50040	41767	15535	27646

III.8. MIGRATION BETWEEN GEORGIA AND OTHER GROUP 4 COUNTRIES

68. Georgia does not have annual data on migration flows by country of origin and destination for the period in question. Some information on the direction of migration is available from the 2001 sample survey "Migration Statistics", for which data was collected at border points. According to this survey, 51% of migration events are arrivals or departures from and to Russia and 61% of these migrants have Georgian citizenship compared with only 18% who have Russian citizenship.

69. Fortunately, other countries in Group 4 have recorded migration to and from Georgia, but with the exception of Russia and Kazakhstan these countries exchange few migrants with Georgia (Table 9).

Table 9. Migration flows from and to Georgia (data of countries of destination and origin).

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
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Russia

Immigration data	:	:	24517	21059	19626	20213	9674	7128	5540	4886
Emigration data	:	:	3286	2933	2574	1802	1339	964	939	740

Estonia

Immigration data	20	24	26	23	29	34	0	1	1	0
Emigration data	13	10	4	3	3	5	4	0	0	1

Finland

Immigration data	7	8	11	1	3	4	11	2	4	1
Emigration data	1	6	0	0	1	8	0	1	0	2

Norway

Immigration data	1	3	1	1	4	8	46	20	6	13
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Emigration data	2	1	2	5	3	0	0	1	2	1
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Kazakhstan

Immigration data	:	168	120	94	93	74	95	132	131	97
Emigration data	:	125	128	76	78	38	42	30	12	14

IV. MIGRATION BY COUNTRY OF RESIDENCE ONE YEAR AGO

70. Data on country of residence one year ago was provided only by Norway, showing the situation on 1 January 2005 (Table 10). Some limited data extracted from the census was also provided by Estonia.

71. The centre column of Table 10 shows the distribution of all persons living in Norway on 1 January 2005 whose country of residence one year before was not Norway. These are classified according to their country of origin and either their country of citizenship or country of birth. Note that, for example, Finnish citizens arriving to Norway from Estonia are included in the category "citizens of other countries" arriving from Estonia.

72. In the right-hand column, the number of immigrants during 2004 is given, broken down by country of citizenship or country of birth or country of last residence. As a result, the two columns are not directly comparable. In order to make the figures comparable, the data on immigrants would also have to be cross-tabulated by country of citizenship, country of birth and country of last or previous residence.

Table 10. Number of persons residing in Norway who lived somewhere else one year earlier and immigration into Norway (Norwegian data).

	Number of persons residing in other country one year before (1.01.2005)	Number of immigration events (2004)
	(a)	(b)

Persons originating in Estonia

1a) Citizens of Estonia	135	142
1b) Citizens of Norway	10	x
1c) Citizens of other countries	7	x
2a) Persons born in Estonia	129	138
2b) Persons born in Norway	10	x
2c) Persons born in other countries	13	x
Persons whose country of last residence was Estonia (in column (a) = 1a)+1b)+1c)= 2a)+2b)+2c)	152	155

Persons originating in Finland

1a) Citizens of Finland	467	616
1b) Citizens of Norway	72	x
1c) Citizens of other countries	18	x
2a) Persons born in Finland	455	609
2b) Persons born in Norway	57	x
2c) Persons born in other countries	45	x
Persons whose country of last residence was Finland (in column (a) = 1a)+1b)+1c)= 2a)+2b)+2c)	557	647

Persons originating in Russia

1a) Citizens of Russia	1629	1697
1b) Citizens of Norway	35	x
1c) Citizens of other countries	35	x
2a) Persons born in Russia	1622	1748
2b) Persons born in Norway	10	x
2c) Persons born in other countries	67	x
Persons whose country of last residence was Russia (in column (a) = 1a)+1b)+1c)= 2a)+2b)+2c)	1699	1724

Table 10. (cont.)

Persons originating in Georgia

1a) Citizens of Georgia	12	15
1b) Citizens of Norway	-	x
1c) Citizens of other countries	-	x
2a) Persons born in Georgia	12	15
2b) Persons born in Norway	-	x
2c) Persons born in other countries	-	x
Persons whose country of last residence was Georgia (in column (a) = 1a)+1b)+1c)= 2a)+2b)+2c)	12	13

Persons originating in Kazakhstan

1a) Citizens of Kazakhstan	38	40
1b) Citizens of Norway	4	x
1c) Citizens of other countries	-	x
2a) Persons born in Kazakhstan	37	50
2b) Persons born in Norway	4	x
2c) Persons born in other countries	1	x
Persons whose country of last residence was Kazakhstan (in column (a) = 1a)+1b)+1c)= 2a)+2b)+2c)	42	42

73. Estonia had a question in the last 2000 census questionnaire about the year of first arrival for people who were born abroad. This data, disaggregated by country of birth, was provided only for those arriving in 1999 and up to 31 March 2000 (the census date). The data should also be cross-tabulated with country of citizenship but this was not provided. In Table 11, the distribution by country of birth of these persons and data extracted from the population registration system on immigrants into Estonia in 1999 by country of birth, is shown.

Table 11. Number of foreign-born persons arriving in Estonia in 1999 and up to 31 March 2000 (census date).

Country of birth	Foreign-born persons who arrived for the first time in Estonia in 1999 and up to 31 March 2000 (according to census)	Immigrants arriving in 1999 by country of birth (according to the population register)
Finland	119	82
Georgia	19	29

Kazakhstan	11	21
Norway	5	1
Russia	331	546

V. DIFFERENT WAYS OF MEASURING MIGRATION FLOWS

74. Identifying all migrants who enter the country from abroad or who left the country to live abroad is a precondition for measuring international migration. Thereafter data about the country of citizenship or country of birth of such migrants is the most valuable information for policy purposes. Indeed, information on country of citizenship is available in administrative data sources because of its legal importance. The country of birth is also recorded for administrative purposes but statistical data are usually extracted from census results. Country of last and next residence is considered to be of less interest to many countries. Nevertheless, for statistical purposes and international comparison it is helpful if all countries also record countries of last and next residence. All three variables may be used for studying the nature of migration flows between countries. In this study, different ways of measuring international migration are proposed in order to assess whether one of the three variables may serve as a proxy for another. We have to bear in mind that we are dealing with three different distributions of the total number of migrants.

75. Data on migration flows, defined along with the different variables, are presented in the tables at Annex (Tables A1-A15). Note that the data was compiled separately for these three variables without any cross-tabulation between them.

76. When analysing data in these tables, one observation is very important: for a given country A the number of immigrants entering from country B or entering and having country B citizenship or entering and being born in country B is different. This difference exists even if most immigrants tend to come from country B, hold the citizenship of country B and were born in country B. Some immigrants arriving from country B may nonetheless be returning citizens of country A or immigrants born in country C. In conclusion, the comparison between these three variables is very complex. The following examples give different situations observed in Group 4 countries.

77. The number of immigrants to Finland from Estonia (the previous country of residence) is much higher than the number of Estonian citizens and persons born in Estonia immigrating into Finland (Table A1). Accordingly, one may suppose that immigration flows to Finland from Estonia do not consist only of Estonian citizens but may include Finnish citizens or citizens of third countries. Similarly, immigration may include persons born in a country other than the country of origin of destination. Unfortunately, data used in this survey cannot give precise information about the share of these groups in the migration flow.

78. In the second example, in immigration to Russia from Estonia far more Estonian-born persons were observed than Estonian citizens (Table A5). The first number is about equal to the number of immigrants to Russia from Estonia. In the opposite direction, from Russia to Estonia, a similar tendency is observed – few Estonian citizens are counted as emigrants while the number of Estonian-born emigrants is nearly as large as the total number of emigrants from Russia to Estonia. When the variable "country citizenship" is used for migration from and to Estonia, and possibly also in the case of other countries where host country citizenship was not automatically acquired by all residents after the dissolution of the Soviet Union, there may be relatively large numbers of persons whose country of citizenship is not determined. This makes it more difficult to use the data disaggregated by country of citizenship available from these countries.

79. Moreover, when producing data on migration flows identified by country of last or next residence, country of citizenship, or country of birth, it can happen that the results are affected by past migration (and possibly naturalisation) events. For example, data on immigration into Russia by country of citizenship show that immigration into Russia of citizens of any other country in Group 4 is relatively small compared to total immigrations into Russia from that country. By contrast, the number of Russian citizens in the migration flows to and from other countries is significant and some interesting tendencies may be observed. For example, immigration by Russian citizens into Finland is almost equal to immigration into Finland by persons whose last residence was Russia, while immigration by Russian-born persons into Finland is 4-5 times smaller (Table A9). The same tendency seems to be seen in migration from Georgia and Kazakhstan to Finland but the numbers are very small (Tables A6 and A7).

80. Conversely, the inflow of citizens or persons born in a certain country may be larger than immigration from that country as last country of residence. This kind of situation is observed in the case of immigration of people of Finnish origin into Norway (Table A 8). For example, in 1997, 23 more Finnish citizens and 52 more persons born in Finland immigrated into Norway than the total number of people immigrating into Norway from Finland. Moreover, the latter immigrants could include other foreigners, as noted above.

81. The final example also concerns flows between Finland and Norway. Norway recorded almost equal numbers of migration events identified according to the three abovementioned variables as originating from Finland. By contrast, Finland records ten times less immigration and emigration by people born in Norway or having Norwegian citizenship compared to migration between Norway and Finland. Accordingly, one could assume that Norway is attractive for people of Finnish origin while Norwegian citizens and persons born in Norway less often migrate to Finland.

VI. DIFFERENT WAYS OF MEASURING POPULATION WITH FOREIGN BACKGROUND

82. Population stock with foreign background is usually disaggregated by country of citizenship or country of birth. This study required data on population groups in country A by country of birth B cross-tabulated by country of citizenship. Both distributions are limited to three options: the host country A, partner country B, or other.

83. Data cross-tabulated by country of birth and country of citizenship were available from Estonia and Norway. Russia provided only total numbers of citizens of Estonia, Georgia and Kazakhstan and persons born in Estonia, Finland, Georgia and Kazakhstan. Estonian and Norwegian data are based on the population register, while Russia uses census data.

84. As shown for Estonia in Table 12, the proportion of people who are citizens of their country of birth varies from country to country. Two groups of countries could be differentiated: Finland and Norway, on the one hand, and Georgia, Kazakhstan and Russia, on the other. Two thirds of Estonian residents born in Finland and Norway are citizens of their country of birth. Fewer than one third of all Estonian residents born in Russia are Russian citizens, while persons born in Georgia and Kazakhstan are even less likely to be citizens of their country of birth.

Table 12. Population by country of birth and citizenship in Estonia (country A), 1 January 2005

Country of birth	Country of citizenship	Country B				
		Finland	Georgia	Kazakhstan	Norway	Russia

Persons born in country B	Citizens of country B (1)	3520	128	58	131	58618
	Citizens of Estonia (country A) (2)	1753	683	1502	61	75970
	Persons with other citizenship (country C) (3)	145	722	2601	8	47038
TOTAL persons born in country B (1+2+3)		5418	1533	4161	200	181626
Persons born in Estonia (country A)	Citizens of country B (4)	375	5	8	2	21218
Persons born in other countries (country C)	Citizens of country B (5)	167	12	24	14	13113
	TOTAL citizens of country B (1+4+5)	4062	145	90	147	92949

85. In terms of the country of origin, the situation is very different, as for example every fifth citizen of Russia living in Estonia was born in Estonia, while only every ninth citizen of Finland and few citizens of other countries living in Estonia were born in Estonia.

86. Norway provided time series that enable us to observe the changes that have occurred since 1996 (Table 13). The trends are generally similar, with an overall increase in foreign citizens and persons born abroad except for Norwegian citizens born in Finland.

Table 13. Population by country of birth and citizenship in Norway, 1996 - 2005

Country of birth	Country of citizenship	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Persons born in Estonia	Citizens of Estonia (1)	166	190	201	210	248	277	354	436	430	486
	Citizens of Norway (2)	20	25	29	30	31	40	43	92	90	93
	Persons with other citizenship (3)	19	19	22	22	23	22	30	42	49	53
TOTAL persons born in Estonia (1+2+3)		205	234	252	262	302	339	427	570	569	632
Persons born in Norway	Citizens of Estonia (4)	5	6	4	5	7	8	11	10	12	9

Persons born in other countries	Citizens of Estonia (5)	4	3	5	6	7	7	10	11	9	8
	TOTAL citizens of Estonia (1+4+5)	175	199	210	221	262	292	375	457	451	503
Persons born in Finland	Citizens of Finland (1)	3140	3279	3866	4563	4942	5170	5236	5399	5311	4924
	Citizens of Norway (2)	1359	1354	1379	1382	1381	1375	1362	1336	1326	1334
	Persons with other citizenship (3)	218	241	281	322	312	302	301	289	290	280
TOTAL persons born in Finland (1+2+3)		4717	4874	5526	6267	6635	6847	6899	7024	6927	6538
Persons born in Norway	Citizens of Finland (4)	485	493	517	551	580	616	661	718	752	788
Persons born in other countries	Citizens of Finland (5)	92	103	144	176	191	193	199	213	238	235
	TOTAL citizens of Finland (1+4+5)	3717	3875	4527	5290	5713	5979	6096	6330	6301	5947
Persons born in Georgia	Citizens of Georgia (1)	7	10	11	7	11	15	58	78	85	94
	Citizens of Norway (2)	-	-	-	1	1	2	5	7	7	14
	Persons with other citizenship (3)	3	5	5	4	4	4	8	15	19	17
TOTAL persons born in Georgia (1+2+3)		10	15	16	12	16	21	71	100	111	125
Persons born in Norway	Citizens of Georgia (4)	1	1	1	1	1	1	-	-	-	-
Persons born in other countries	Citizens of Georgia (5)	-	-	-	-	-	-	-	-	-	-
	TOTAL citizens of Georgia (1+4+5)	8	11	12	8	12	16	58	78	85	94
Persons born in Kazakhstan	Citizens of Kazakhstan (1)	3	6	7	16	18	22	94	105	129	163
	Citizens of Norway (2)	-	-	1	2	3	5	9	13	21	28
	Persons with other citizenship (3)	4	7	16	21	25	33	38	51	85	101

TOTAL persons born in Kazakhstan (1+2+3)	7	13	24	39	46	60	141	169	235	292
Persons born in Norway	Citizens of Kazakhstan (4)	-	-	1	1	1	1	3	7	8
Persons born in other countries	Citizens of Kazakhstan (5)	2	1	-	1	-	1	1	1	2
	TOTAL citizens of Kazakhstan (1+4+5)	5	7	7	17	19	24	96	109	137

Persons born in Russia	Citizens of Russia (1)	949	1298	1606	1967	2527	3057	3602	4484	5698	6788
	Citizens of Norway (2)	96	183	274	376	472	688	911	1290	1565	1894
	Persons with other citizenship (3)	84	100	105	115	115	121	145	176	202	231
TOTAL persons born in Russia (1+2+3)		1129	1581	1985	2458	3114	3866	4658	5950	7465	8913
Persons born in Norway	Citizens of Russia (4)	30	35	46	55	63	63	88	112	173	265
Persons born in other countries	Citizens of Russia (5)	52	55	90	114	117	121	139	163	224	217
	TOTAL citizens of Russia (1+4+5)	1031	1388	1742	2136	2707	3241	3829	4759	6095	7270

87. The only data provided by Russia show that the links between country of birth and country of citizenship are relatively weak and that migration history between pairs of countries may have a significant impact on the composition of population by citizenship and country of birth (Table 14).

Table 14. Population by country of birth and citizenship in Russia, 2002

Country B	Born in country B	Citizen of country b
Estonia	67402	1066
Finland	2004	:
Georgia	628973	52918
Kazakhstan	2584933	69472
Norway	:	:

SUMMARY OF RESULTS AND ISSUES

1. The availability of data on migration flows varies significantly between Group 4 countries in terms both of the period covered and of the variables available to identify the foreign background of migrants, depending on the data source used. Age and sex distributions are usually available.
2. Three main sources of migration flow data in Group 4 countries are the census, administrative sources (the population register or registration of place of residence) and surveys. No country uses more than one source to compile its tables even if, for some countries, it seems to be possible to use alternative sources with additional processing. Most countries provided data for this study based on administrative records that are normally used for providing official statistics in these countries.
3. Generally, if a country produces data on immigration flows, data on emigration is also produced. In that case, data on migration flows by country of last or next residence is always available. Data by country of birth or country of citizenship may only be produced based on the population register or census. Data on migration flows by country of citizenship seems more often available compared to tables on country of birth, while cross-tabulation of these two variables is not usually available.
4. The definition of international migration as an event depends greatly on the data source, but even if the type of source is the same the definition may differ between countries. Most variations in definition are related to the time criterion used to identify or record migration (duration of intended stay). A fixed minimum duration of stay is often used but in some countries only permanent stay is considered while in others there is no time criterion. The time criterion may also be different when counting immigrants or emigrants in the same country.
5. When comparing data on the same flows recorded as emigration by the sending country and as immigration by the receiving country, an analysis of the Group 4 countries confirms that comparability of data on flows is weak even on the basis of total numbers of migration events. The difference may appear because of different definitions, sources, coverage of the population groups and variables studied, and because of the time lag between registration of such events in these countries.
6. Fortunately, there is an example of almost perfect comparability: flows in both directions between Finland and Norway are comparable all over the period with a maximum difference of 6%. This is explained by the fact that systems of registration of migrants are linked in the two countries by the Inter-Nordic Migration Agreement. More or less comparable flows were also found for 1999-2003 between Estonia and Russia with less than 8% difference with the exception of year 1998. This may be due to the historical links between the two countries. For all other cases the relative difference is larger and may be caused by the small number of migrants between countries.
7. In a given country A, the number of immigration events involving citizens of country B, the number of persons born in country B and the number of immigration events originating from country B may be very different; accordingly, none of these variables may be considered as a proxy for another. The reason for these differences could be recent past migration, naturalisation processes in the sending country, current links between countries and other factors.
8. The composition of migration flows by the country of citizenship or country of birth of migrants may differ significantly. Usually citizens of sending and receiving countries are dominant, but not necessarily in comparative terms, while in specific cases the proportion of citizens of third countries may not be neglected. The same applies to country of birth.

9. Combining the three proposed variables for identifying the country of origin would give more information about the nature of migration flows.
