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### **Expert Group on Migration Statistics**

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Item 6 of the provisional agenda

**Improvements in the use of administrative data for migration statistics**

## **Administrative data and migration statistics in the CIS countries**

**Interstate Statistical Committee of the Commonwealth of Independent States (CIS Stat Committee)\***

### *Abstract*

The Commonwealth of Independent States is an association of countries with different levels of economic development, which has a significant impact on migration flows within the CIS. The volumes and directions of population migration are influenced not only by economic factors, but also by ethno-cultural, linguistic and historical aspects.

Political and economic decision-making requires reliable and most complete information on migrants and their characteristics.

The system of statistical recording of population migration in most CIS countries is based on the development of data from primary records on the change of place of permanent residence. Such information is collected by national statistical services, as well as by agencies on the list of indicators of interest in the exercise of their powers (ministries of internal affairs, migration services, etc.). Here it is very important to maintain a comparable methodology of migration statistics.

In addition to traditional sources (censuses and sample surveys of the population), administrative sources are increasingly being used, in particular registers: population, foreigners, addresses, social insurance; and automated systems for tax records, border control, customs, immigration, etc.

With the variety of existing record-keeping systems, migration statistics can use data from which qualitative and relevant information can be obtained to classify long-term migration and to estimate migrant flows and characteristics. For this purpose, national statistical offices should have the right of access to the necessary resources and the process of obtaining and collating information should be integrated into the statistical framework.

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## I. Introduction

1. The Commonwealth of Independent States unites countries with different levels of economic development, which has a significant impact on migration flows within the CIS. The volumes and directions of population migration are shaped by economic factors, as well as ethno-cultural, linguistic and historical aspects. Political and economic decision-making requires reliable and complete information on migrants and their characteristics.
2. In today's world, open borders policies are being replaced by various kinds of restrictions on movement, stricter migration laws, and uncontrolled migration is becoming widespread. In these conditions, the availability of information on migrants and mass movements is of particular importance.
3. In the CIS, demographic, health and migration policies are regulated by the CIS Economic Council. In March 2020, an action plan for the implementation of the Concept of a Coherent Social and Demographic Policy of the Member States of the Commonwealth of Independent States for 2020-2023 was approved<sup>1</sup>.
4. And also the decision of the CIS Council of Heads of Government of 29 May 2020 on the Economic Development Strategy of the Commonwealth of Independent States for the period until 2030, according to which "The development of cooperation in the field of statistics will be aimed at:
  - i. to ensure comparability of official statistical methodology in accordance with international standards;
  - ii. regular comparisons based on purchasing power parity data;
  - iii. maintenance of statistical classifier systems harmonised with international standards;
  - iv. ensuring comparability and expansion of published aggregated statistical data on the socio-economic situation of CIS member states, as well as exchange of information on economic and social issues"<sup>2</sup>.
5. The system of statistical recording of population migration in most CIS countries is based on the development of information from primary records when changing the place of permanent residence.
6. Information on the change of residence with movement across state borders is collected by national statistical services as well as by agencies on the list of indicators of interest in the exercise of their competences (ministries of the interior, migration services, etc.). It is therefore very important to maintain a comparable methodology of migration statistics. In addition to traditional sources (population censuses and sample surveys of population and households), registers of population, foreign citizens, addresses, social insurance, as well as automated systems of tax registration, border control, customs, immigration services, etc.) are used.

### A. Administrative sources of data on population migration

7. Administrative sources of migration data are primarily population registers and similar state systems that register the population at the place of residence and place of stay. Often the

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<sup>1</sup> Source: Internet portal of the CIS Executive Committee, <https://cis.minsk.by/reestr2/doc/6208#text>

<sup>2</sup> Source: Internet portal of the CIS Executive Committee, <https://cis.minsk.by/reestr2/doc/6229#text>

work of these systems is related to the documentation of the population with identity documents - passports, or personal identification cards and numbers<sup>3</sup> .

8. The National Statistical Services of Armenia (since 2012) and Moldova (since 2000) receive migration data from population registers. In the Republic of Moldova, international migration is recorded by state authorities<sup>4</sup> :
  - i. BMU/MIA - registration and control of foreigners on the territory of Moldova;
  - ii. National Bureau of Statistics - Labour Force Survey (LFS) and Household Survey (HFS);
  - iii. The State Services Agency (State Register of Population) keeps records of emigration of Moldovan citizens for permanent residence;
  - iv. Ministry of Education and Research - migration of Moldovan citizens and immigration of foreigners for the purpose of education on the basis of international agreements;
  - v. Ministry of Labour and Social Protection - record of Moldovan citizens working under contract abroad;
  - vi. Main Inspectorate of Border Police - data on the number of departures and entries of Moldovan citizens and foreigners;
  - vii. Ministry of Foreign Affairs and European Integration - data on the number of Moldovan citizens abroad received from diplomatic missions and consulates abroad.

The generated reports on internal and external migration are submitted to the Database of the National Statistical Bureau in the form of ready-made reports with aggregated indicators.

9. Structures with relevant functions operate in other CIS countries as well. The population register is considered to be the best source of data for producing statistics on migration flows and contingents. Its main advantage is the direct linking of each person to a specific address and administrative-territorial unit. When the place of residence changes, appropriate changes are made to the individual information about the person; the data of the registers should be constantly updated.
10. The information of some resources is available to a wide range of users. In the Russian Federation on the platform of the Unified Interdepartmental Information System (EMISS, <https://www.fedstat.ru/> or via a link through the website of Rosstat) there is information of the Border Guard Service of the Federal Security Service of Russia on the entry of foreign citizens into the Russian Federation and exit of citizens of the Russian Federation abroad since 2010. By purpose of visit, by mode of transport, by country of citizenship of entering foreigners, by country of exit of Russian citizens.

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<sup>3</sup> International Migration Statistics. A Practical Guide for Eastern Europe and Central Asia. UNITED NATIONS EEC, UNFPA. 2011.

<sup>4</sup> Improving the use of administrative statistical data on migration for policy development in the Republic of Moldova. Bureau for Migration and Asylum of the Ministry of Internal Affairs of the Republic of Moldova. Geneva, 27 October 2022, [https://unece.org/sites/default/files/2022-10/A13\\_Presentation\\_Saganovski\\_RUS.pdf](https://unece.org/sites/default/files/2022-10/A13_Presentation_Saganovski_RUS.pdf).

Table 1  
Entry of foreign citizens, persons  
(according to the Border Guard Service of the Federal Security Service of Russia)

	2010	2015	2019	2020	2021	2022	2023
<b>Total by country of citizenship</b>	<b>22 281 217</b>	<b>33 729 187</b>	<b>32 866 265</b>	<b>9 645 675</b>	<b>12 118 564</b>	<b>14 119 188</b>	<b>15 477 848</b>
<b>citizens of CIS member states - total</b>	<b>14 009 690</b>	<b>22 868 754</b>	<b>21 234 947</b>	<b>7 329 905</b>	<b>9 850 699</b>	<b>10 585 349</b>	<b>11 507 002</b>
AZERBAIJAN	979 778	1 071 324	1 175 045	269 807	268 525	327 867	476 743
ARMENIA	459 040	850 137	816 454	209 812	416 926	491 583	616 659
BELARUS	259 191	423 531	440 438	176 601	190 701	289 291	414 677
KAZAKHSTAN	2 747 358	5 180 246	4 324 856	1 426 727	1 429 403	2 496 256	3 163 214
KIRGISIA	552 909	842 396	959 130	299 611	711 240	866 165	1 140 239
MOLDOVA, REPUBLIC	988 084	770 965	614 043	154 766	135 466	109 646	118 456
TAJKISTAN	830 160	1 200 972	1 577 148	401 888	986 341	1 582 149	2 153 956
TURKMENIA	35 017	51 170	92 616	21 680	7 686	25 850	87 651
UZBEKISTAN	1 584 086	2 163 256	2 588 922	720 041	1 453 415	2 048 730	3 109 445
UKRAINE	5 574 067	10 314 757	8 646 295	3 648 972	4 250 996	2 347 812	225 962
<b>Citizens of non-CIS countries and stateless persons - total</b>	<b>8 271 527</b>	<b>10 860 433</b>	<b>11 631 318</b>	<b>2 315 770</b>	<b>2 267 865</b>	<b>3 533 839</b>	<b>3 970 846</b>
STATELESS PERSONS	679 757	326 841	303 851	74 215	34 848	58 511	112 329

11. At first glance, the most obvious thing that is apparent in these data is the impact of the COVID-19 pandemic and the gradual trend towards "pre-pandemic" rates. There is a story behind each data figure and one must be quite cautious in interpreting any information that comes to the researcher's attention.

Table 2  
Departure of Russian citizens, persons  
(according to data of the Border Guard Service of the Federal Security Service of Russia)

	2010	2015	2019	2020	2021	2022	2023
<b>Total by country of destination</b>	<b>39 323 033</b>	<b>36 815 802</b>	<b>48 072 441</b>	<b>14 140 044</b>	<b>21 413 678</b>	<b>24 347 355</b>	<b>27 065 132</b>
<b>to CIS member states - total</b>	<b>13 823 222</b>	<b>6 742 352</b>	<b>8 274 850</b>	<b>2 759 090</b>	<b>4 243 675</b>	<b>5 590 986</b>	<b>5 842 158</b>
AZERBAIJAN	789 242	631 700	782 249	162 265	216 491	402 721	559 350
ARMENIA	272 315	307 068	594 094	169 871	477 881	842 793	1 105 432
BELARUS	45	-	-	-	-	-	-
KAZAKHSTAN	2 888 598	3 283 143	3 417 996	864 055	805 689	2 692 533	2 942 277
KIRGISIA	136 208	271 476	268 760	89 674	278 849	446 574	444 531
MOLDOVA, REPUBLIC	61 009	238 683	211 737	51 546	149 172	17 943	65
TAJKISTAN	110 159	125 101	165 294	41 639	98 282	306 174	313 941
TURKMENIA	45 052	28 470	30 504	11 322	6 096	5 256	10 782
UZBEKISTAN	153 015	122 479	226 345	53 839	203 443	405 666	456 671
UKRAINE	9 367 579	1 734 232	2 577 871	1 314 879	2 007 772	471 326	9 109
<b>to non-CIS countries - total</b>	<b>25 499 811</b>	<b>30 073 450</b>	<b>39 797 591</b>	<b>11 380 954</b>	<b>17 170 003</b>	<b>18 756 369</b>	<b>21 222 974</b>

12. With the growing role of migration in interstate interactions, experts highlight<sup>5</sup> the main factors of changes in the directions and volumes of international migration flows: socio-economic gap between countries; ageing population and shrinking labour resources in certain countries; gap between demographic changes and economic opportunities (employment, education, health care, housing); urbanisation; transformation of the world labour market (including the spread of telecommuting); climate migration; and climate change.
13. The main purpose of statistical data collection is to provide correct information for the development of national action programmes and policies at the international level. Administrative sources on migration provide an opportunity to study different categories of migrants and types of migration. Most often, these sources are part of a universal system providing various administrative services and procedures related to migration. The use of administrative data<sup>6</sup> in the preparation and conduct of population censuses continues to grow. Obtaining relevant characteristics of new sides of migration processes and analysing them requires additional measures to ensure comparability of indicators.
14. With the development of record-keeping systems, data for migration statistics can be derived from information on work permits issued, visas, tax records, social security and utilities (e.g. telephone or energy supply), surveys in refugee hosting areas and other information.
15. Technologies for collecting, processing and analysing big data are being developed, database architectures and algorithms for automatic selection of relevant events in large arrays of unstructured data on the Internet are being developed, and the use of artificial intelligence (AI-artificial intelligence) is expanding. The AI development strategy will be included in the federal national project "Data Economy" of Russia. Many states are showing interest in the development of data economy. The Institute for Statistical Research and Knowledge Economy of the National Research University Higher School of Economics has identified<sup>7</sup> common priorities in this area: formation of a data market, creation of conditions for involving data in economic turnover, and extracting maximum value from users.
16. Technological innovations are expanding the use of information (including on international migration) recorded in new data sources on mobile devices, social media, satellite imagery, and the use of Internet platforms for measurement.
17. Information on irregular migration can be used in analysing the situation of international migration. In the CIS, the availability of wide opportunities for employment, education and certain social guarantees within the common migration space minimises the impact of factors that contribute to irregular migration. At the same time, the control of entry, exit, stay or transit passage of third-country nationals and stateless persons and the prompt exchange of relevant information can indirectly characterise the situation.

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<sup>5</sup> International Relations: the Edge of the Present and the Future. RIAC. Moscow 2023.

<sup>6</sup> Guidelines on the use of registers and administrative data for population and housing censuses. UNECE, 2018.

<sup>7</sup> ISIEZ OF THE NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS. Data Economy: World Approaches to Management. Andreev M.Yu., Zinina T.S., Sokolova E.V. October 2023. <https://issek.hse.ru/news/865612618.html>.

Figure 1  
Sources of Big Data in Russia<sup>8</sup> (as a % of the total number of organisations)

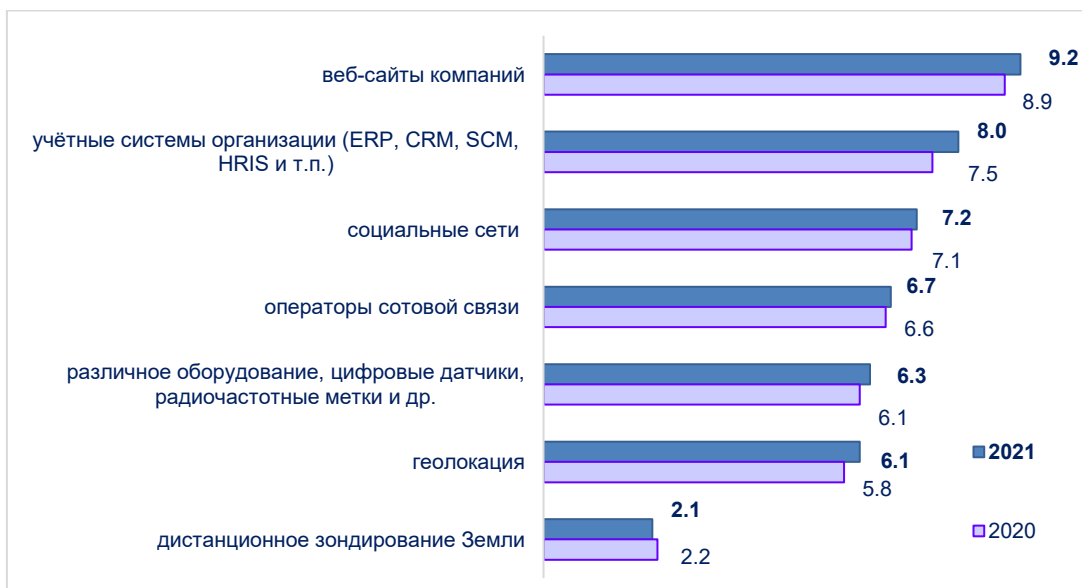
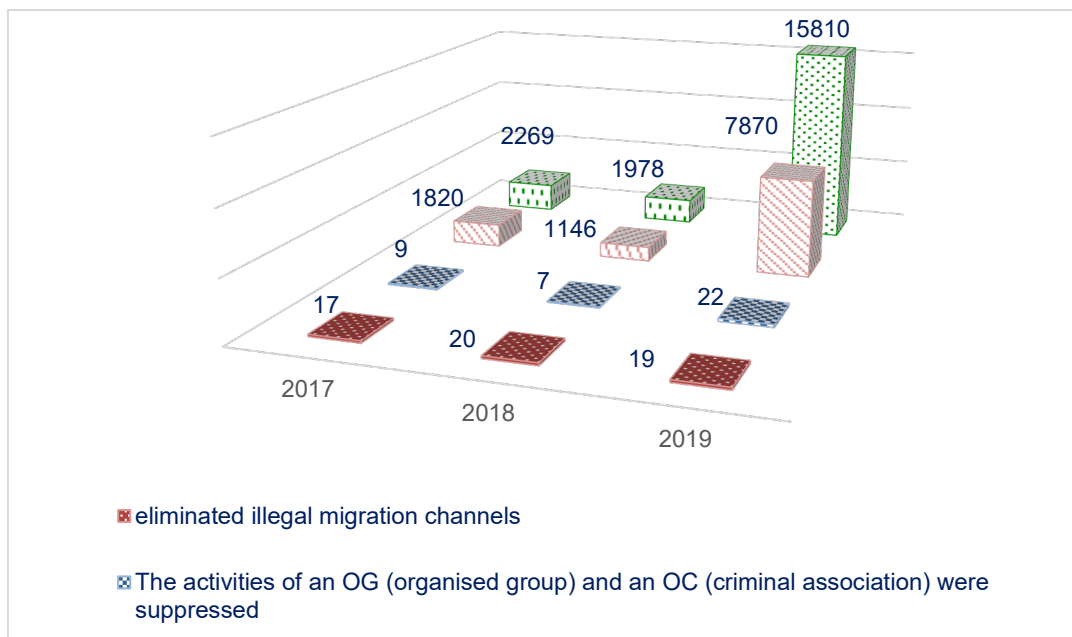


Diagram 2  
On the results of co-operation of CIS member states in combating illegal migration<sup>9</sup>



<sup>8</sup> ISIEZ OF THE NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS. How are Big Data technologies used in Russia? (<https://issek.hse.ru/news/776383019.html>)

<sup>9</sup> On the results of the activities of the Bureau for Coordination of the Fight against Organised Crime and Other Dangerous Types of Crime in the CIS for 2019 [Electronic resource] // Bureau for Coordination of the Fight against Organised Crime and Other Dangerous Types of Crime in the CIS. Access mode: <https://www.bkbopcis.ru/bkbop/rezultaty-deyatelnosti/>

18. In recent years, climate problems have been added to the difficulties of migration arising from economic and political instability and the expansion of various conflict situations. One of Ravenstein's laws of migration remains relevant; its main causes are economic. The report<sup>10</sup> of the World Bank notes that climate change increases the impact of economic factors of migration. About 40 per cent of the world's population - 3.5 billion people - live in areas that are highly vulnerable to the impacts of climate change: water scarcity, drought, heat stress, sea-level rise and extreme events such as floods.
19. In this regard, there is a need to expand work on forecasting and taking effective measures to prevent climate migration, mitigate and adapt to climate change, and reduce the distance and scale of resettlement. Economic opportunities in affected regions are shrinking, increasing vulnerability and migration pressures.
20. Orientation on environmental<sup>11</sup> issues is one of the strategic development priorities of all CIS member states. Environmental protection is monitored in all Commonwealth countries, and appropriate development concepts have been adopted at the national level, taking into account the development of alternative energy, environmental safety and providing for the strategic nature of environmental protection. Co-operation in the field of environmental protection and rational use of natural resources is expanding, including those aimed at combating climate change, preventing emergencies and dealing with the consequences of natural disasters.
21. Migration entails both benefits and costs for all stakeholders - the migrants, the country of origin and the country of destination. In 2020, about 84 per cent of migrants lived in a country that was richer than their own<sup>12</sup>. In 2023, IOM announced Guidance<sup>13</sup> on data innovation and predictive migration policy. The increasing digitalisation of human activity is creating vast amounts of data generated by mobile, social media. Combined with innovative analytical techniques, new sources can complement existing data, including on migration. The issues of data access and co-operation with multiple stakeholders (including the private sector), as well as data security and protection, are addressed.
22. Information on cross-border students can serve as an indirect characteristic of migration processes. Educational migrations increasingly affect the countries of origin and reception of students. Cross-border education is considered as a direction of economic development.

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<sup>10</sup> World Development Report 2023. Migrants, Refugees and Societies Overview, One of the World Bank Group's flagship reports. International Bank for Reconstruction and Development/World Bank.

<sup>11</sup> Development and activities of the Commonwealth of Independent States in 2022. Collection of information and analytical materials, issue No. 11. CIS Executive Committee, Minsk, 2023. <https://e-cis.info/upload/iblock/a9f/72c2d0mrdm8goc51dwc81pkse1pze3k.pdf>

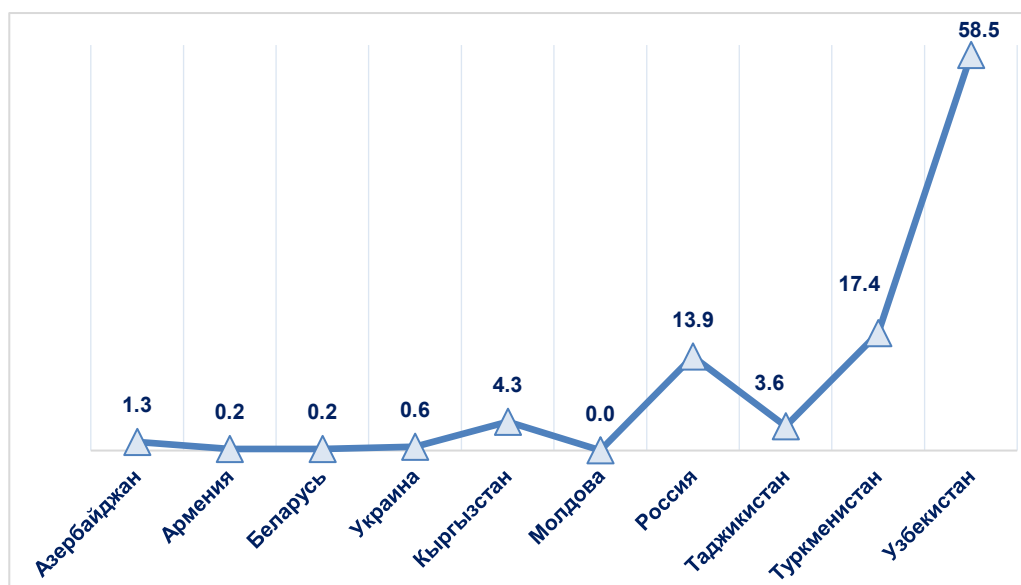
<sup>12</sup> Review (<https://openknowledge.worldbank.org/server/api/core/bitstreams/af8d0468-3219-41f5-92b5-04f5b185c776/content>) of World Development Report 2023, 'Migrants, Refugees and Societies', doi: 10.1596/978-1-4648-1941-4. <https://openknowledge.worldbank.org/>; <http://documents.worldbank.org/>.

<sup>13</sup> <https://publications.iom.int/books/harnessing-data-innovation-migration-policy-handbook-practitioners>.

Table 3  
Distribution of students in higher education institutions of the Republic of Kazakhstan at the beginning of the academic year 2023-2024 by country of arrival<sup>14</sup>

	Accepted in the reporting year	Total number of students at the beginning of the school year	Issue for the previous year academic year
Total (persons)	171 699	592 694	157 106
Kazakhstan	165 957	567 464	152 147
in % of total	96,7	95,7	96,8
From CIS countries	3 785	11 847	3 482
in % of total	2,2	2,0	2,2
Azerbaijan	68	150	28
Armenia	8	25	256
Belarus	16	26	1
Ukraine	28	69	6
Kyrgyzstan	199	504	125
Moldova, Republic of	2	4	1
Russia	658	1 649	323
Tajikistan	208	426	70
Turkmenistan	1 429	2 061	425
Uzbekistan	1 169	6 933	2 247
From abroad	1 957	13 383	1 477
in % of total	1,1	2,3	0,9

Figure 3  
Distribution of students in higher education institutions of the Republic of Kazakhstan<sup>13</sup> at the beginning of the academic year 2023-2024 by country of arrival (as a percentage of the total number of arrivals to HEIs from CIS countries)



<sup>14</sup> Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Bureau of National Statistics. Release 25.12.20203. 19 series, Education Statistics.



## B. On statistics of population migration in CIS countries

23. In most CIS member states statistical observation of interstate migration flows is carried out on the basis of current records of general migration associated with change of permanent residence. The source of data for statistical development of data on population migration is mainly primary documents of statistical registration of arrivals and departures from internal affairs bodies in paper or electronic form, which are prepared during registration and discharge (registration and deregistration) at the place of residence and at the place of stay. In statistical offices there is an automated processing of data contained in primary documents on arrival and departure. As a result statistical offices generate analytical tables with aggregated statistical data by territorial sections and socio-demographic characteristics (sex, age, marital status, level of education etc.) depending on the availability of information in primary documents.

Table 4  
Organisation of the current record of population migration in the CIS countries  
(in case of change of place of permanent residence)<sup>15</sup>

Country	State bodies that keep records of population migration	Primary documents of current accounting		Submission of information to statistical authorities (periodicity, paper/electronic)	Office providing information or access to the digital resource/registry
		arrivals	disposals		
<b>Azerbaijan</b>	Ministry of Internal Affairs, State Migration Service	Arrival sheet coupon	Disposal slip coupon	Monthly	State Migration Service
<b>Armenia</b>	Statistical Committee of the Republic of Armenia (ARMSTAT)	Database from the State Population Register on registration and de-registration of the population		In electronic form, quarterly periodicity	Migration and Citizenship Service RA MINISTRY OF INTERNAL AFFAIRS
<b>Belarus</b>	Citizenship and migration units of internal affairs bodies and address and enquiry bureaus	Migration registration coupons to address lists Arrival / departure when citizens move to a new place of residence, including those arriving from abroad and those leaving for permanent residence outside the Republic (also in case of cancellation of permanent residence in the Republic of Belarus)		Once a month on paper From 2022, the transfer of data on intra-republican migration to the national automated information system will be tested.	The Ministry of Internal Affairs is responsible for providing information from the AIS "Registration Record"
<b>Kyrgyzstan</b>	Ministry of Digital Development of the Kyrgyz Republic (MDC KR)	Electronic entry of primary data for permanent residence registration Online entry of indicators into the automated information system AIS "Address and Reference Bureau" (for citizens of the Kyrgyz Republic)	When registering for a new permanent place of residence, the automated information system <i>automatically deregisters</i> at the previous place of residence	Monthly. The electronic database of primary data is sent to the Intelligent Data Centre (IDC) of the National Statistical Committee of Kyrgyzstan to form tables with aggregated data	Ministry of Digital Development of the Kyrgyz Republic (MDC KR)
<b>Moldova</b>	Public Services Agency	-	-	Annually, electronically	Department of Identity Documents, Citizenship and Population Records, State Population Register

<sup>15</sup> Source: information provided by the National Statistical Services of the CIS member states at the request of the CIS Statistical Committee in March 2024.

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Country	State bodies that keep records of population migration	Primary documents of current accounting		Submission of information to statistical authorities (periodicity, paper/electronic)	Office providing information or access to the digital resource/registry
		arrivals	disposals		
<b>Russia</b>	Ministry of Internal Affairs of the Russian Federation	N1-PRIB, N1-VYB information on arriving / departing citizens of the Russian Federation; N1-PRIB_InGr, N1-VYB_InGr information on incoming / outgoing foreign citizens and stateless persons		Monthly, on paper	-
<b>Tajikistan</b>	Ministry of the Interior	Form No. 18 - Arrival-registration coupons of registration at the place of residence (stay) for both internal and international migration, issued permits for residence, work, notifications of employment of foreign citizens, internal resettlement of population associated with change of place of residence; Form No. 18 - Departure coupons - registration of registration by stay and residence		Annual, on paper	-
<b>Uzbekistan</b>	Ministry of the Interior	Statistical record coupon to the arrival sheet	Statistical record sheet to the withdrawal slip	Daily, electronically	Ministry of the Interior

## II. Conclusion

24. According to expert judgement, data on international migration are the most inadequate of all demographic indicators collected. Administrative sources collect data for purposes other than the collection of information on population migration that are more reflective of their activities. However, the variety of record-keeping systems available makes it possible to obtain good quality and up-to-date information for migration statistics. On the basis of such information it is possible to classify long-term migration, estimate volumes, directions of flows, and compare characteristics of migrants. For this purpose, national statistical offices should have the right of access to the necessary resources and be able to integrate the information into the statistical framework.
25. The CIS Member States have developed and continue to develop strategies aimed at improving official statistics. In order to obtain quality and up-to-date statistical information necessary for the development, monitoring and evaluation of the implementation of economic, social and environmental policies, decisions of public authorities and businesses, for the development of scientific research, as well as for informing society as a whole.
26. There are positive aspects of using administrative data for international migration statistics. Mainly for estimating the population of the country as a whole. However, the quality of information should be taken into account when working with these data. They may not always be considered accurate, as they reflect rather administrative procedures with regard to migrants. In particular, border crossing statistics do not contain sufficient structural, socio-demographic characteristics of the migrant or this information is not available to statisticians. This is mainly information on citizenship, country of previous/next residence and sometimes the purpose of the trip. In addition, it is difficult to determine from border statistics data on migrants entering the country their final destination, distribution across the territory of the state, which affects the estimation of the population of subjects within the country.
27. The Commonwealth's national statistical services are endeavouring to improve migration statistics in order to produce more comprehensive, accurate and comparable data. To this

end, administrative data are increasingly being used, including a gradual transition to the use of databases from the automated systems of the various agencies that collect population data. Difficulties in the transition to the use of administrative data from the information resources of different agencies are related primarily to the different purposes of creating information resources on the population, which leads to incomparability of migration data.

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