

## Artículo de investigación

## Современное состояние и проблемы научных коммуникаций на русском языке на пространстве стран СНГ

The current state and problems of scientific communications in Russian language in the CIS countries space  
 Estado actual y problemas de las comunicaciones científicas en ruso en el espacio de los países de la CEI  
 O estado atual e problemas de comunicações científicas em russo no espaço dos países da CEI

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### Аннотация

Результаты исследования включают результаты опроса исследователей из стран СНГ, который позволил выявить уровень распространенности научных коммуникаций на русском языке в странах-участниках СНГ. Русскоязычные коммуникации в сфере науки, истоки распространения которых связаны с временами существования СССР, обеспечивают возможность развития интеграции между странами. В результате исследования сделаны выводы о степени использования русского языка в сфере науки в различных странах СНГ, в том числе для публикаций статей, подготовки диссертаций, проведения конференций, неформального общения. В результате опроса и аналитической работы авторов были выделены ключевые проблемы, связанные с

### Abstract

The results of the study include the consequences of the researchers survey from the CIS countries, that made it possible to identify the prevalence of scientific communications in Russian language in the CIS countries. Russian-language communications in the field of science, which origins are associated with the times of the USSR, provide an opportunity for the development of integration between countries. As a result of the study, the authors made conclusions on the degree of use of the Russian language in the field of science in various CIS countries, including for publishing articles, preparing dissertations, holding conferences, and informal communication. As a result of the survey and the authors' analytical work, key problems associated with scientific communications in Russian in the CIS space

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научными коммуникациями на русском языке на пространстве СНГ, и предложены мероприятия для их решения.

**Ключевые слова:** научные коммуникации, страны СНГ, русский язык, анкетирование.

were identified, and measures for their solution were proposed.

**Keywords:** scientific communications, CIS countries, Russian, questioning.

## Resumen

Los resultados del estudio incluyen los resultados de una encuesta de investigadores de los países de la CEI, que permitió identificar la prevalencia de las comunicaciones científicas en ruso en los países de la CEI. Las comunicaciones en idioma ruso en el campo de la ciencia, cuyos orígenes se asocian con los tiempos de la URSS, brindan una oportunidad para el desarrollo de la integración entre países. Como resultado del estudio, se sacaron conclusiones sobre el grado de uso del idioma ruso en el campo de la ciencia en varios países de la CEI, incluso para publicar artículos, preparar disertaciones, celebrar conferencias y comunicarse de manera informal. Como resultado de la encuesta y del trabajo analítico de los autores, se identificaron los problemas clave asociados con las comunicaciones científicas en ruso en el espacio de la CEI y se propusieron medidas para su solución.

**Palabras clave:** comunicaciones científicas, países de la CEI, ruso, cuestionamiento.

## Resumo

Os resultados do estudo incluem os resultados de uma pesquisa com pesquisadores dos países da CEI, que permitiu identificar a prevalência de comunicações científicas em russo nos países da CEI. As comunicações em língua russa no campo da ciência, cujas origens estão associadas aos tempos da URSS, proporcionam uma oportunidade para o desenvolvimento da integração entre os países. Como resultado do estudo, foram tiradas conclusões sobre o grau de uso da língua russa no campo da ciência em vários países da CEI, incluindo a publicação de artigos, a preparação de dissertações, a realização de conferências e a comunicação informal. Como resultado da pesquisa e do trabalho analítico dos autores, foram identificados os principais problemas associados às comunicações científicas em russo no espaço da CEI, e foram propostas medidas para sua solução.

**Palavras-chave:** comunicações científicas, países da CEI, russo, questionamento

## Introduction

After the collapse of the Soviet Union in the 90s, the Russian language became the most convenient means of communication and a link in the Commonwealth of Independent States (CIS) space.

The open policy pursued by Russia in the sphere of the functioning and development of the Russian language has become the basis for the modern solution of language problems not only within the country, but also abroad. If there are obvious difficulties in promoting Russian, positive tendencies to increase civic responsibility for the state of the state language and the resources of its progressive changes are gaining momentum, recognizing that Russian in multinational Russian society is a problem of statehood, consolidation of nations and unity of the country, its power and international authority.

(The concept of state support and promotion of the Russian language abroad, 2015).

In the CIS space (the structure is currently: the Republic of Azerbaijan, the Republic of Armenia, the Republic of Belarus, the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Moldova, the Russian Federation, the Republic of Tajikistan, the Republic of Uzbekistan, the associated members are Ukraine, Turkmenistan) the Russian language has a special role: it remains a carrier or, at a minimum, a translator of those meanings that are mutually intelligible to all who belong to the space of the former Soviet Union.

However, according to the Russkiy Mir Foundation, today in the CIS countries the process of consolidating the prevailing positions

of the title languages continues to the detriment of the positions of the Russian language (Zubov, 2016).

Before the collapse of the Soviet Union, 286 million people (out of 293 million in 1993) spoke Russian as the main state language. Almost all residents of the Union republics were a good command of language, and every pupil knew it obligatorily.

Today, the population of 14 former Soviet republics numbers over 140 million people (approximately equal in population to Russia). Of them:

- 63.6 million people - actively speak Russian (constantly used at work, in the learning process, in everyday life);
- 39.5 million people - passively speak Russian (understand it, but do not use it as a means of communication);
- 38 million people do not speak Russian.

The Russian language was not only a weapon of the existing state system, but at the same time it carried out its high mission to be a mediator, a language is bridge between countries and people and exerted a progressive influence on the development of these countries and peoples. All layers of republics intelligentsia, not to mention the scientific part, joined the world civilization through the Russian language.

Currently, the most important task of the ministries of education of the CIS countries and those responsible for the development of the educational space of the CIS's institutions is the coordination of the state's policies regarding the Russian language. If there is no consensus on this issue, then all the efforts made by Russia to preserve and promote the Russian language will not bring the expected results.

In the conditions of the modern language situation for all CIS countries, the following problems are relevant:

- Russian language status;
- teaching Russian at school;
- motivation for learning Russian;
- overcoming the competition of Russian and English languages in the educational systems of the CIS countries through multi-vector vocational education (by integrating the CIS countries into the Russian and international educational spaces).

First of all, the focus is on the status of the Russian language in the CIS space, which is directly related to what functions it performs, for what purposes and in what areas it is used, what communication needs of users it satisfies, and secondly, the issue of the connection between the Russian language and education (Vasilyeva, 2013).

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### Materials and methods

Modern science is characterized by dynamic development. In many ways, this fact is due to an increase in the number of scientists, including the rejuvenation of scientific community's representatives. Science is becoming one of the main conditions for sustainable development of the state and increasing the well-being of its population, increasing the attractiveness of scientific activity, intensifying the development of the scientific and technological base, improving scientific equipment, etc. In addition, in recent years there have been serious qualitative content and methodological transformations. This sphere is actively influenced by the processes of globalization, which give an international character to science, that implies the active interaction of scientific community's representatives from different countries. All of these factors to a large extent actualize the issues of scientific communication.

The term "communication" comes from the Latin word "communicatio" - to make common, to connect. The original "communis" means: common, universal. In another literal translation,

communication means "with people." The term appeared in the scientific literature at the beginning of the 20th century and has the following interpretations:

- means of communication of any objects of the material and spiritual world;
- communication as the transfer of information from person to person;
- transfer and exchange of information in society in order to influence it.

Scientific communication is distinguished from any other by a number of complementary criteria: subject, terminological, institutional, formal and organizational, methodological, etc.

For scientific communication, it is important to understand issues related to the subject, the addressee and, most importantly, their interaction in the act of communication. According to a number of researchers, the lack of competence in scientific communication is a significant gap in the preparation of graduates of various specialties (Kuehne et al., 2014).

The main goal of the communicative process of the receiving party is to achieve a precise understanding of the message meaning transmitted to it; side objectives are preventive, informative, explanatory, entertaining, descriptive, persuasive.

As a rule, a person, entering into the communication process, wants to satisfy certain needs. Most often within the limits of one communication several purposes are realized.

The implementation of scientific communications is possible both directly and with the involvement of a third party (intermediaries), such as academic journalists (Viķe, 2017).

Scientific communication is aimed not only at information exchange, but also at the formation of the results of a scientist's research activity by the scientific community (Shubina, 2009). The development of scientific communications contributes to the popularization of science in society and provides consulting for making management decisions at various levels of government (Hetland, 2015).

The main goals of scientific communications are the development of science and education, the advanced training of specialists, and the development of new technologies. The tools of scientific communication are special events

(Hill, 2015), scientific and popular science journals (Born, 2015), video and audio Internet resources (Both, 2015), scientific museums (Amelung, 2015; Stengler, 2015), etc.

Scientific communications are a natural derivative of science, but they arise under an important condition – if there is the competition in science at any level, so in theory they can serve as an indicator of the development of national science (Maltseva et al., 2017).

Issues of communications in the scientific and technical sphere are actively investigated in the literature. The attention of practitioners and theorists to this field of activity is largely determined by objective external factors: after the crisis of the 90s, modern Russian science is moving to a new intensive phase of its development. At the same time, there is a growing interest in science and the need for scientific communication as a tool for the mediation of science.

Scientific communication can be viewed in a broad and narrow sense. In a narrow sense, scientific communication is considered as the communication of scientists with the public, including with the involvement of popularizers of science. In a broad sense, the term is understood as a system of scientific education, including through the media (Medin and Bang, 2014).

Based on the interpretations of various authors, the following essential characteristics of the concept of "scientific communication" can be distinguished:

- the informational-process approach made it possible to consider communication as a process of moving a certain amount of information from one subject to another, having a certain effect (Medvedeva, 2014; Reshetnikova, 2014; Vydrin, 2009; Shirokanova, 2013);
- the systematic approach provides a presentation of scientific communication as a multilevel phenomenon consisting of horizontal and vertical links (Shubina, 2009; Mamaeva, 2011; Rudy, 2012; Chernozub, 2013).
- the resource approach provides the basis for interpreting of scientific communication as a specific resource (Dudenkova, 2010; Zamoshchansky et al, 2016);
- the structural-functional approach defines scientific communication as a complex of

internal and external communications, based on reports of scientific knowledge as such and the process of its acquisition (Davies, 2015).

Thus, taking into account the above, it can be concluded that scientific communication is a special phenomenon with an ordered system of multi-level connections and its structural elements, which the main purpose is to search for, accumulate, disseminate, share and discuss of new knowledge gained in certain scientific directions and carried out through various channels, means, forms and institutions of communication.

## Results

In order to develop recommendations for the development of scientific communications in Russian with partners from the CIS countries and the expansion of the Russian-speaking scientific environment in their territory, the authors carried out a survey of representatives of research organizations and universities from the CIS countries (with the exception of Russia) within the conducting project.

An express questionnaire “The Role and Importance of the Russian Language as a Means of Scientific Communication” was made for representatives of universities and research organizations from the CIS countries (with the exception of Russia) on the development of scientific communications in Russian.

In the framework of the study, on the basis of open sources, a list of respondents was drawn up from among research scientists of the CIS countries, including 2,000 e-mails of representatives of the scientific and educational community of the CIS countries, where a questionnaire was sent.

The questionnaire included 10 questions concerning the development of scientific communications in Russian with partners from the CIS countries and the expansion of the Russian-speaking scientific environment on their territory.

The survey involved 286 respondents. The number of respondents in the CIS countries was distributed as follows (Figure 1).

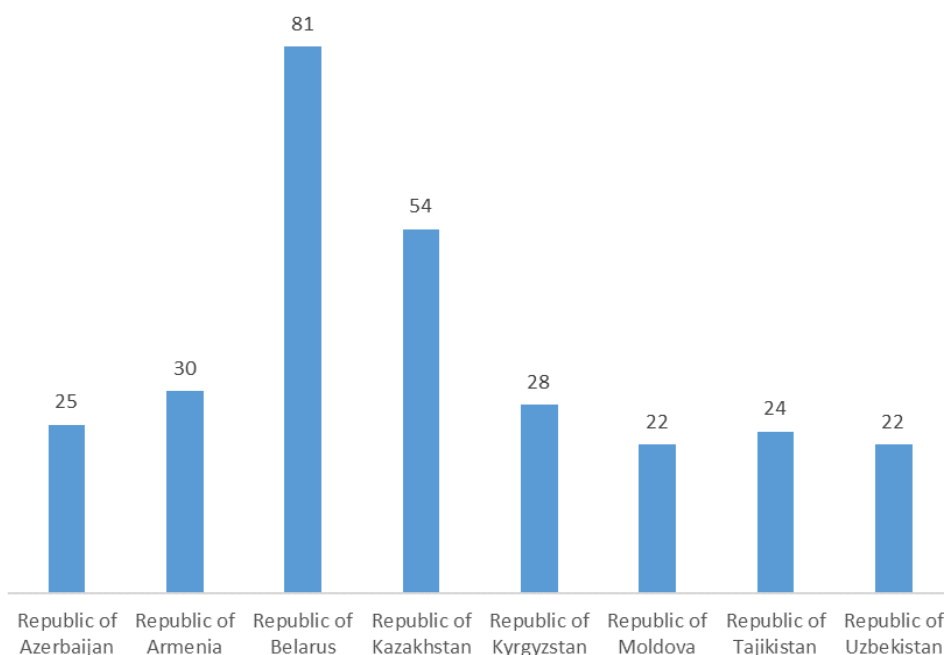


Figure 1. Distribution of respondents by the CIS countries

As the data of the figure shows, the largest number of respondents falls on representatives of the scientific and educational community of the Republic of Belarus and the Republic of Kazakhstan, which is explained by the high

proportion of the Russian-speaking population and the size of the countries themselves.

The survey obtained the following results, presented in detail below.

The following answers were received to the question “Indicate your level of proficiency in Russian” (Figure 2).

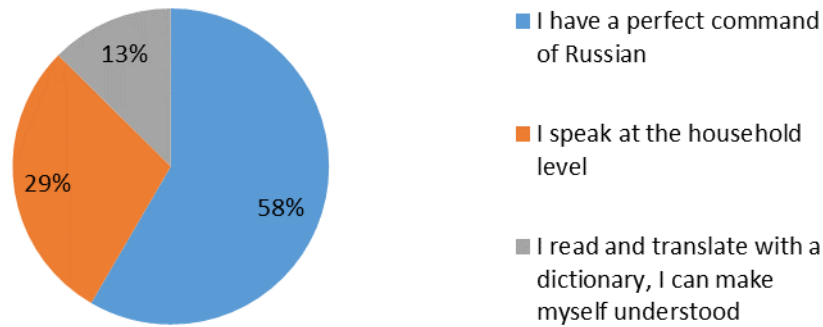


Figure 2. Russian language proficiency of survey participants

On average, in the sample, the majority of respondents indicate a high level of proficiency in Russian, about a third speak at the household

level. Persons who do not speak Russian did not participate in the survey.

The specification of responses for the CIS countries is presented in Figure 3.

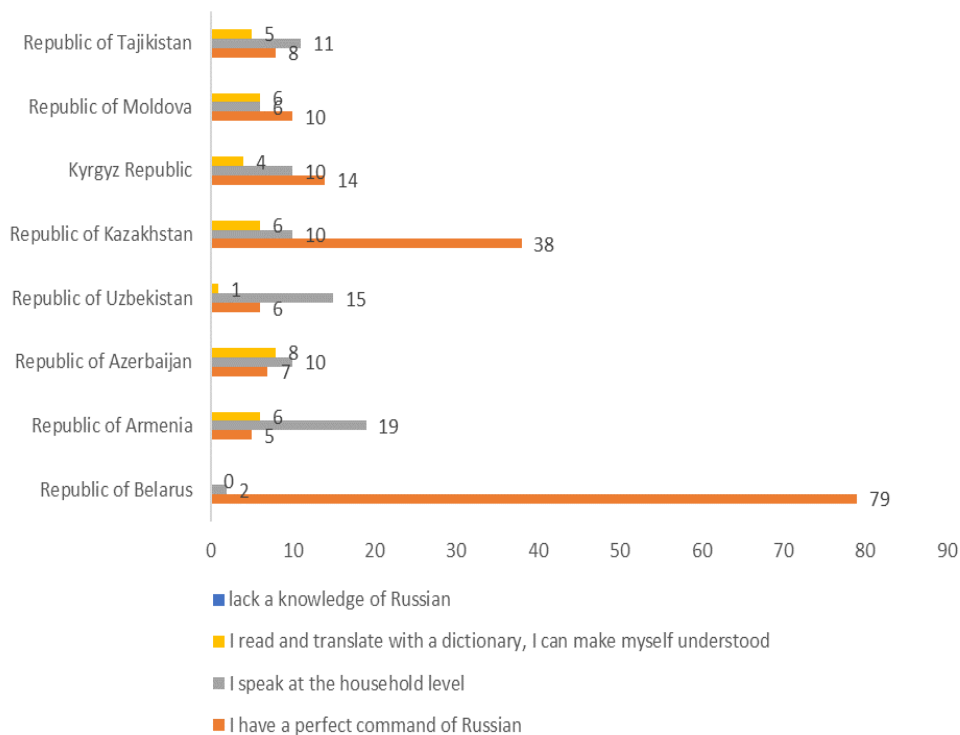


Figure 3. Russian language proficiency of respondents in CIS countries

Most respondents who indicated the level of proficiency in Russian as high are from the Republics of Belarus and Kazakhstan. The number of respondents from the Kyrgyz Republic and the Republic of Moldova, who

indicated that they have a perfect command of Russian is the biggest, compared to other answer options. In the responses of survey participants from the Republics of Armenia, Uzbekistan, Tajikistan, and the Republic of Azerbaijan, the



option “I speak at the household level” is prevails, which demonstrates, on average, a lower prevalence of Russian as a means of communication as a whole.

For the majority of respondents, Russian is not native (54% of respondents). The question “Is Russian your native language?” were received the following answers by the CIS countries (Figure 4).

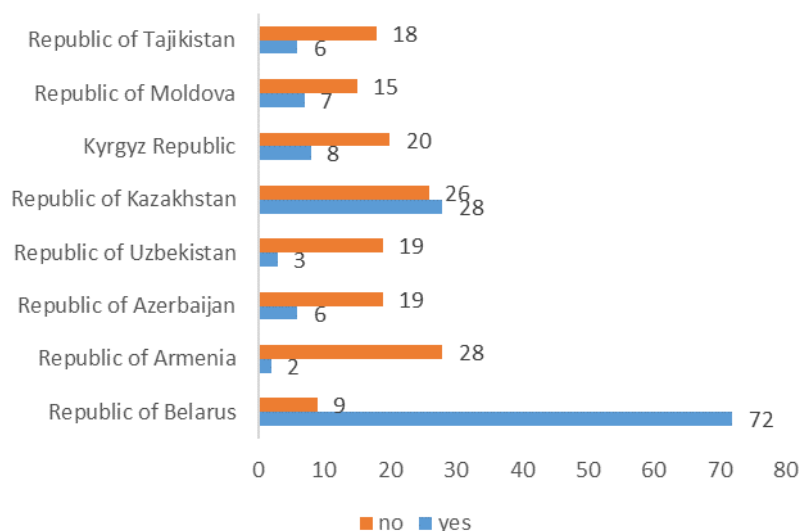


Figure 4. Distribution of respondents' answers from CIS countries to the question “Is Russian your native language?”

As the figures show, the largest number of respondents which native language is Russian are from the Republic of Belarus, as well as for the majority of respondents from the Republic of Kazakhstan. For the majority of representatives from other CIS countries, Russian is not a native language. These data were taken into account during analyzing answers to questions directly related to scientific communications, since its dissemination is important especially for those

countries and individual members of the scientific and educational community where Russian is regarded as foreign language.

Respondents were also asked about using the Russian language to communicate with colleagues in their own country. Most respondents use Russian along with the national language (Figure 5).

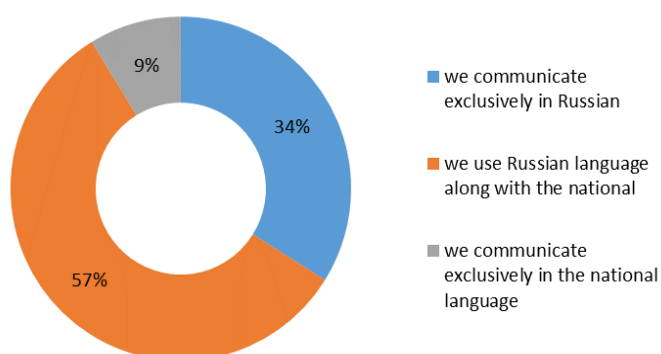


Figure 5. Using the Russian language to communicate with colleagues in own country

As the figure data shown, more than a third of the respondents speak exclusively in Russian, 57%

indicated that they use Russian along with the national language. Communication with

colleagues exclusively in the national language occurs in 9% of cases.

Detailed data by individual CIS countries is below (Figure 6).

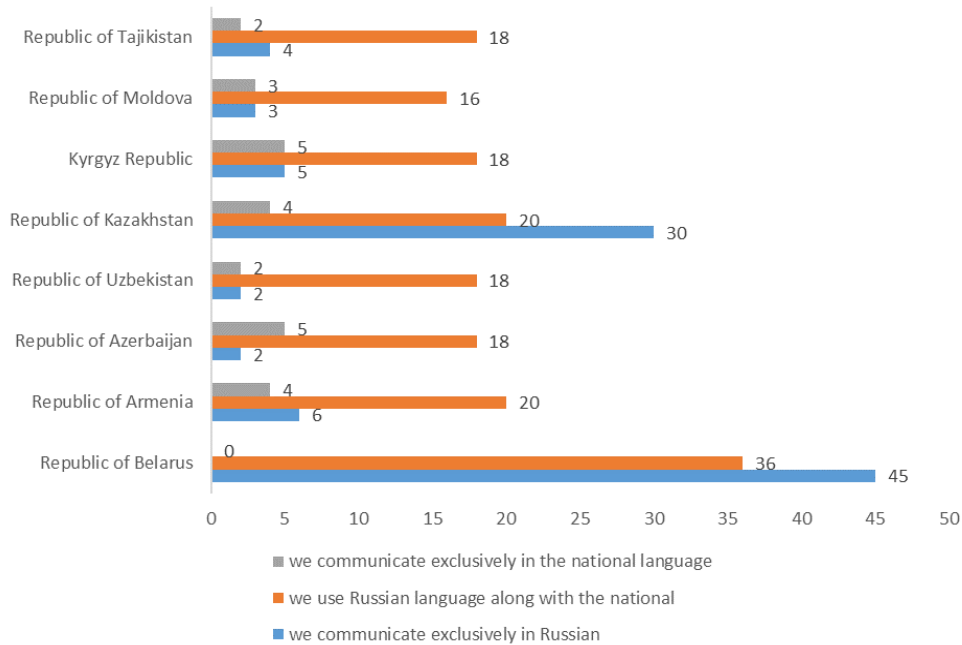


Figure 6. The use of the Russian language to communicate with colleagues in the context of the CIS countries

Against the general background, the responses from the Republic of Belarus and the Republic of Kazakhstan are stand out, where, according to the survey results, the majority use exclusively Russian to communicate with colleagues in their own country. In other cases, it is noted that the majority of respondents use Russian along with the national language. Most of the respondents who indicated that they communicate with

colleagues exclusively in the national language are representatives of the Azerbaijan and Kyrgyz Republic.

To the question “Specify the directions of using the Russian language as a means of scientific communication”, the answers were distributed as follows (Figure 7).



Figure 7. Directions of the Russian language use as a means of scientific communication



The most popular answer was “informal communication with Russian-speaking colleagues.” On the second / third place is “participation in Russian scientific events”, “reading scientific papers and periodicals in Russian”. Somewhat lower are the indicators characterizing the activity on the preparation of publications, scientific and qualification, research works in Russian. This is due, among other things, to the higher demand for English-language publications in journals indexed in the

Scopus and Web of Science databases, the availability of their own systems of training highly qualified personnel and the defense of scientific and qualification works in the CIS countries, as well as an insufficient number of grants and programs to finance R&D in Russian, including joint ones.

The detailed response of respondents is below (Figure 8).

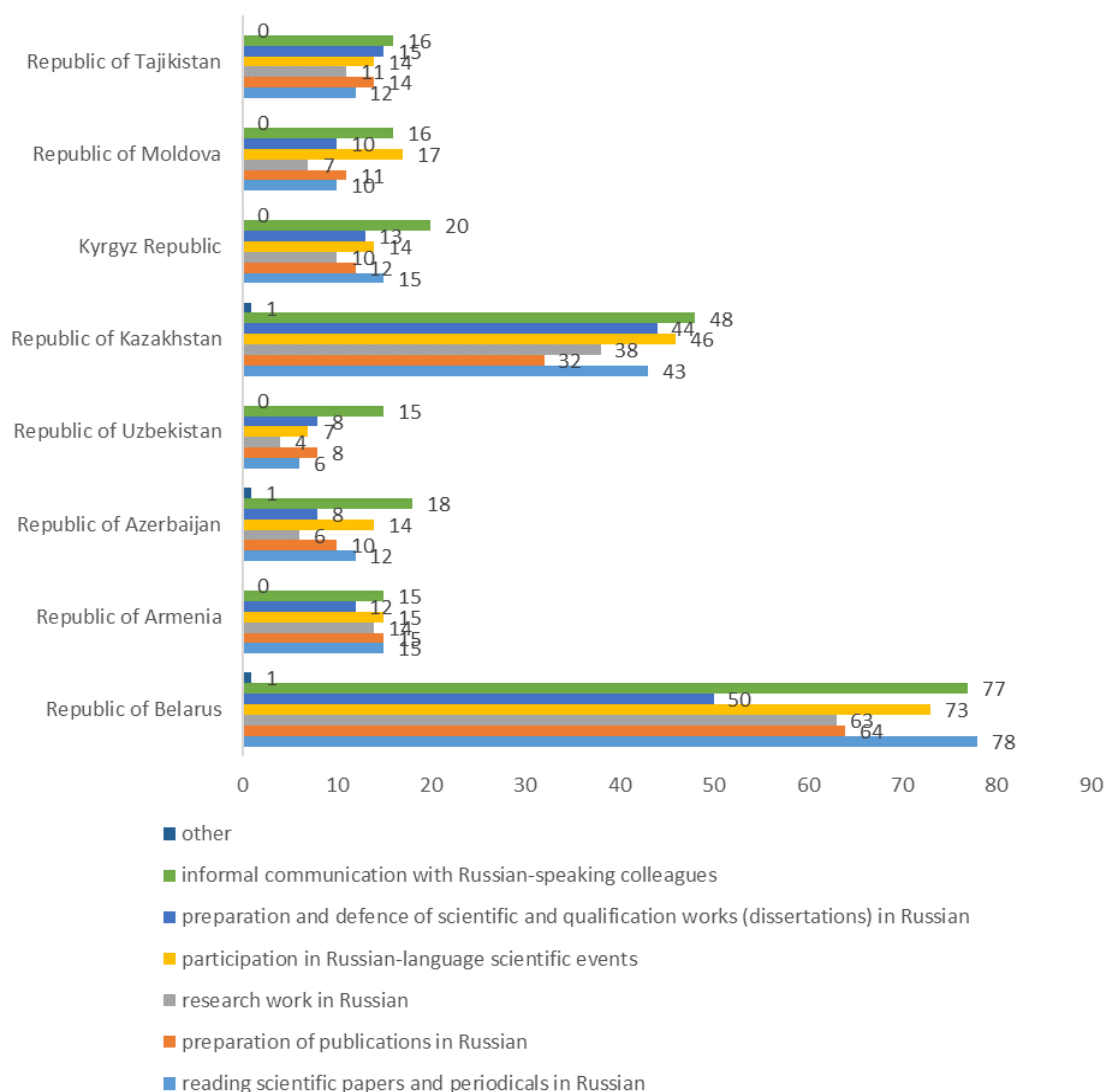


Figure 8. Directions of the Russian language use as a means of scientific communication in the context of the CIS countries

As the figure data shows, the trend established in the average for the CIS countries is largely preserved by individual countries. At the same time, there is a relatively lower value of indicators for the preparation of publications in Russian in the Republics of Belarus and

Kazakhstan and a greater degree of participation in Russian-language scientific events in comparison with other CIS countries. As in general, and in individual CIS countries, it is stated that performing R&D in Russian is less common. Low indicators are particularly

prominent in the Republic of Azerbaijan, the Republic of Uzbekistan, and the Republic of Moldova.

The following answers were received to the question “How often do you publish articles (conference reports) in Russian?” (Figure 9).

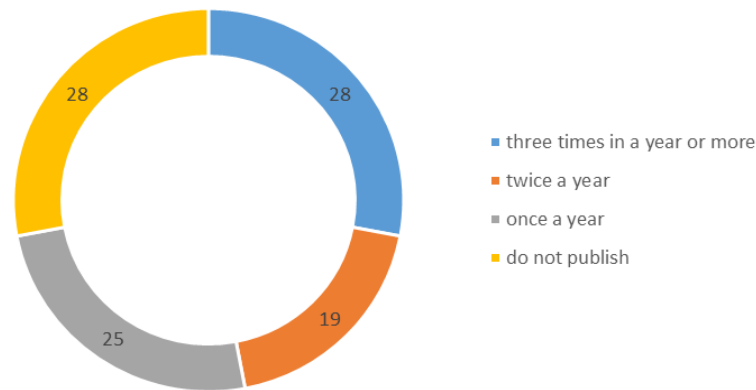


Figure 9. Publication of articles / reports in Russian by scientists from CIS countries

As the figure data shows, the share of scientists from the CIS countries who publish articles and (or) reports in Russian at least once a year is more

than 70%, while almost one third noted publications 3 times in a year or more.

The detailed answers to the question by the CIS countries are shown in Figure 10.

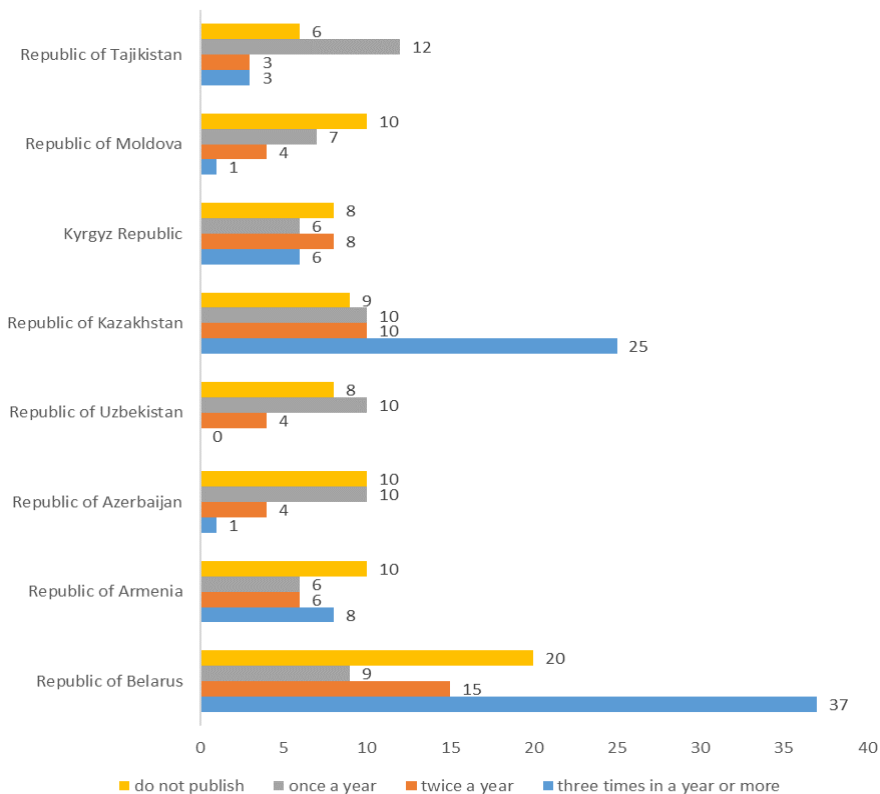


Figure 10. Publication of articles / reports in Russian by scientists in the context of the CIS countries

The most active in terms of publications in Russian were the representatives of the Republic of Belarus and the Republic of Kazakhstan - 3 times in a year or more. The “do not publish” option leads among representatives of the Republic of Moldova, the Republic of Armenia, the Republic of Azerbaijan, and the Kyrgyz Republic. At the same time, the percentage of respondents who publish, even in these CIS countries, is quite high. Obviously, in this case,

the factor of publication activity of scientists itself could not be taken into account, since in some cases there is their low motivation to research activity due to the lack of immediate tasks and funding.

The following answers were received on the question “How often do you held scientific events in Russian in your organization?” (Figure 11).

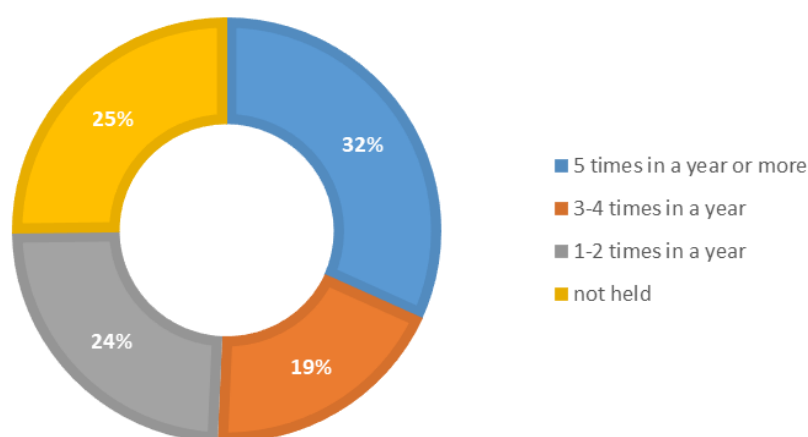


Figure 11. Statistics of scientific events in Russian held in scientific organizations and universities of the CIS countries

It is noted that in more than 30% of cases, events in Russian are held 5 times in a year or more, 3-4 times in a year - 19%, 1-2 times in a year - 24%, which demonstrates the prevalence of the Russian language as a means of scientific communication. In 25% of cases, it is noted that the organization in which the respondent works

does not hold events in Russian, using the national or English languages as a means of communication.

The detailed answers of respondents are shown in Figure 12.

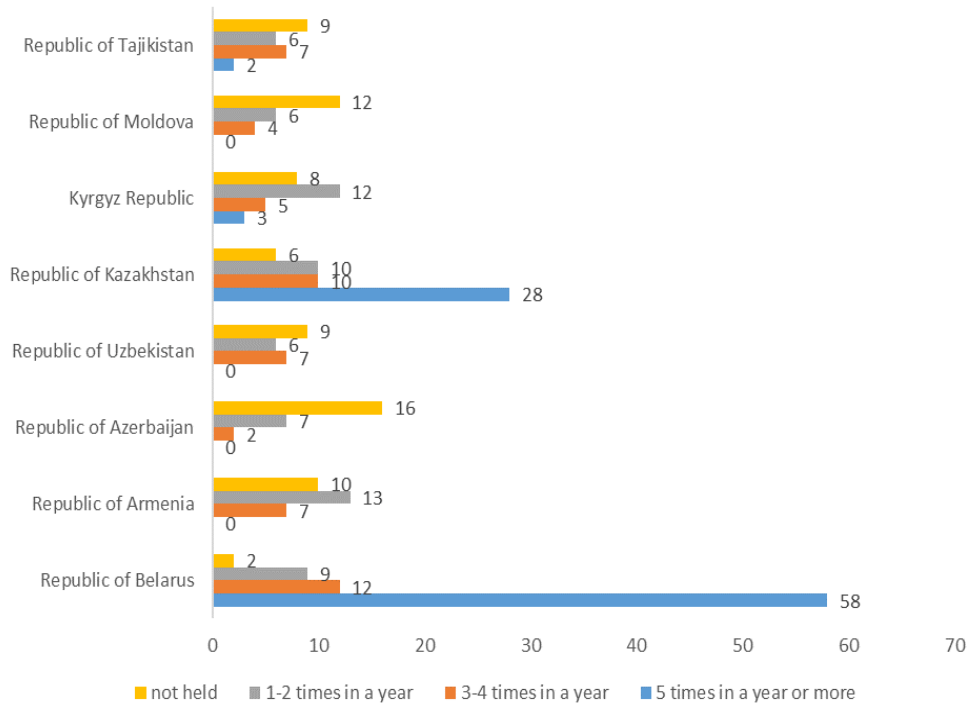


Figure 12. Statistics of scientific events in Russian held in scientific organizations and universities in the context of the CIS countries

As the data in the context of individual CIS countries shown, a significant number of scientific events in Russian are held in the Republics of Belarus and Kazakhstan. In other CIS countries respondents practically do not indicate that events are held 5 times in a year or more. The majority of survey participants from the Republic of Azerbaijan and the Republic of Moldova noted that there are no events in Russian in their organizations. Among the CIS countries where respondents noted on average a higher frequency of holding events in Russian, the Republic of Armenia and Tajikistan and the

Kyrgyz Republic are stand out. In general, even taking into account a certain percentage of responses indicating the absence of Russian-language events, the activity regarding their holding in the CIS countries can be characterized as quite high, and there is a need to further popularize the Russian language as a means of scientific communication and the development of a system of Russian-language events.

The level of participation of the respondents themselves in scientific events on the territory of the Russian Federation is shown in Figure 13.

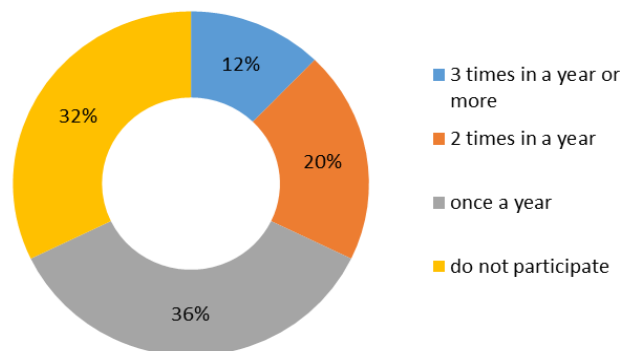


Figure 13. Participation of representatives of the scientific and educational community of the CIS countries in Russian-language scientific events in the territory of Russian Federation

More than half of the respondents indicated participation in Russian-language events in the Russian Federation, which demonstrates rather high activity and interest in cooperation with colleagues from Russia. At the same time, the majority of respondents (36%) participate in scientific events in the Russian Federation on average ones a year, which is due to the limited capacity of many universities and research organizations in the CIS countries to pay travel expenses. These same reasons largely determined the fact that 32% of respondents

indicated that they did not participate in scientific events in Russia. With the development of digital technologies and the prevalence of online scientific events, this problem significantly reduces its severity, while the feasibility of “live” communication with colleagues still remains.

The statistics of participation of representatives of the scientific and educational community of the CIS countries in the scientific events on the territory of the Russian Federation is shown in Figure 14.

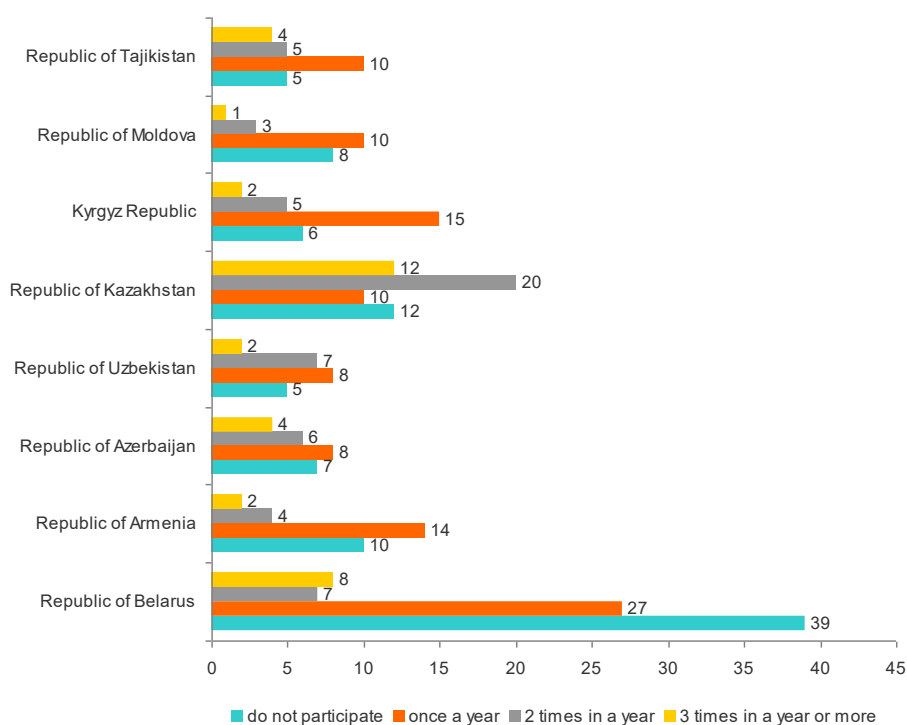


Figure 14. Participation of representatives of the scientific and educational community in Russian-language scientific events on the territory of the Russian Federation in the context of the CIS countries

The statistics of participation of representatives of the CIS countries in the scientific events on the territory of the Russian Federation demonstrates the heterogeneity of answers in the context of individual states. Thus, almost half of the respondents from the Republic of Belarus did not participate in such events. In the case of other CIS countries, the majority of respondents indicate that they participated in Russian events. It is noted that the number of respondents who participate in scientific events on the territory of the Russian Federation 2 times in a year and more is the largest in the Republic of Kazakhstan. Rather high rates of participation in Russian scientific events is noted from among the respondents of the Kyrgyz Republic and the Republic of Armenia. In our opinion, the results

of the survey on this issue may not fully reflect the current situation in the CIS countries, since respondents voluntarily answered the questionnaire, and the sample contains the most part of representatives from CIS countries who actively cooperating with Russian colleagues and in many respects interested in development of scientific communications in Russian.

86.4% of respondents answered negative to the question “Do you participate in joint research projects with Russian colleagues?”, that is due to the insufficient number of competitive events aimed at selecting and financing joint research projects. Detailing the answers for the CIS countries, the following statistics were obtained (Figure 15).

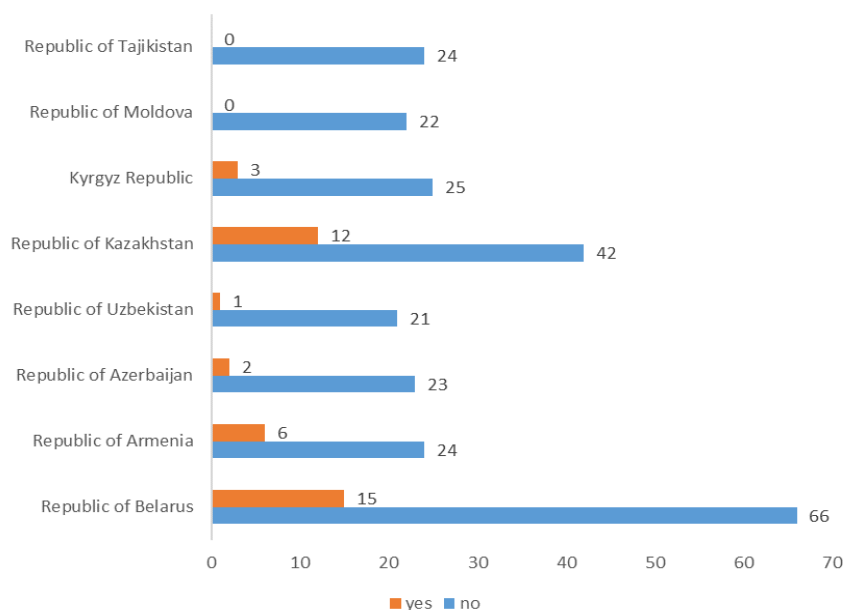


Figure 15. The degree of participation in joint research with Russian colleagues of representatives of the scientific and educational community of the CIS countries

As the figure data shown, the largest number of respondents who indicated a positive response in the questionnaires came from representatives of the Republic of Belarus and the Republic of Kazakhstan. Among the survey participants from the Republic of Moldova and the Republic of Tajikistan there are no representatives who participated in joint research with Russian colleagues.

The sources of co-financing included the budget of the Union State, including the Union State Program “Development of Innovative Technologies and Techniques for the Production of Competitive Composite Materials, Matrices and Reinforcing Elements for 2012-2016” (code “Compomat”), as well as the funds of joint projects of Russian Foundation for Basic Research and National Scientific Foundations, first of all the Republic of Belarus.

In addition, it was noted the participation in joint research projects with Russian colleagues funded

from the funds of the Ministry of Education and Science of Russia, including in the framework of cooperation with Saratov State Technical University and Samara State University. Thus, it is stated that not only joint competitions for R&D are sources of development of cooperation in the field of research, but also initiatives of specific Russian representatives of the scientific and educational community, attracting representatives from the CIS countries to participate in their own R&D, thereby maintaining established connections and expanding the boundaries of the Russian language as a means of scientific communication.

82.5% of the participants who took part in the survey responded positively to the question “Do you think that it is necessary to expand the use of Russian language as a means of scientific communication?”. The statistics of responses for the CIS countries is below (Figure 16).



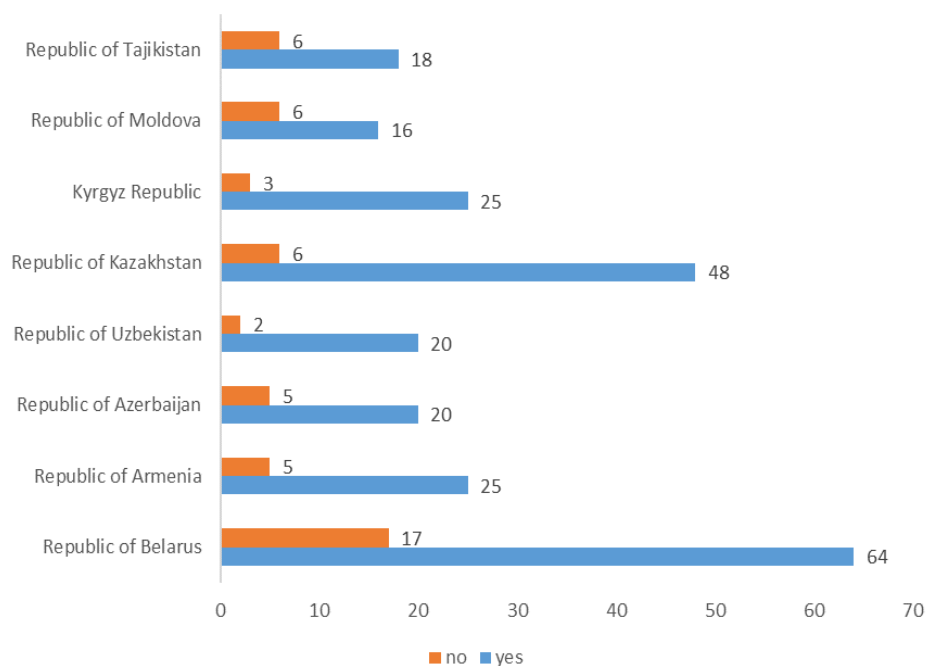


Figure 16. Distribution of answers of respondents from CIS countries to the question “Do you think that it is necessary to expand the use of Russian language as a means of scientific communication?”

It is noted that in each of the CIS countries there is a share of respondents who consider that the level of development of the Russian language as a means of scientific communication on their territory is acceptable. The highest rates are observed among respondents from the Republics of Moldova and Tajikistan. In quantitative terms, in accordance with the number of survey participants, the largest number of respondents positively answered to the posed question is noted in the Republics of Belarus and Kazakhstan.

Additionally, within the framework of the study, the authors collected proposals from representatives of the scientific and educational community of the CIS countries, aimed at expanding scientific communications in Russian in the CIS space. It is noted that about 30% of survey participants wrote the recommendations in their questionnaires.

Proposals can be divided into thematic blocks.

#### 1. Reducing administrative barriers in the science sphere

- unconditional recognition of the diplomas of the doctor (candidate) of science (to eliminate the need for nostrification);
- elimination of existing barriers when an applicant cannot go to Russia to defend a dissertation without a relevant permit from

Higher Attestation Commission (Republic of Belarus).

#### 2. Development of a joint research system

- expansion of joint grants and programs for conducting research in various branches of basic and applied science.

#### 3. Increasing publication activity in terms of joint publications and expanding access to citation databases.

- development of joint bibliographic and printing activities in scientific disciplines;
- expansion of the possibility of free publications in publications included in the Higher Attestation Commission of Russian Federation List;
- joint preparation of educational materials with Russian colleagues;
- availability of published scientific publications of the Russian Science Citation Index, raising the status of the Russian Science Citation Index and scientific journals published in Russian;
- wider use of the Russian language in the publications included in the scientometric database Web of Science and Scopus;
- regular competitions for the best scientific publication in Russian.

4. Expansion of opportunities to organize joint educational programs, including in the field of additional education of scientific and pedagogical personnel

- development of joint educational programs with Russian universities;
- expansion of the internship program for teachers from CIS countries in the universities of the Russian Federation;
- involvement of Russian colleagues for scientific management of doctoral students;
- lecturing to students in Russian by leading Russian scientists (at the invitation of the leadership of universities of the CIS countries).

5. Development of a system of joint scientific and educational activities and scientific exchange programs

- organization of interdisciplinary seminars and round tables, which would allow researchers from different fields of science to find points of contact, discuss opportunities for joint research;
- reduction of financial barriers to participation in scientific events (cancellation of registration fee, search for sources to finance travel expenses);
- scholarships (scientific exchange with a business trip to a partner country);
- development of joint activities aimed at the popularization of science;
- conducting subject joint academic competition; international movements, for example, environmental;
- exchange of research groups of students in the summer and during the holidays on the study of cultural heritage by regions.

These recommendations cover a fairly wide range of issues of joint activities of representatives of the CIS countries in the scientific and educational sphere, while in many cases the focus was not only and not so much on the issues of scientific communications in Russian, but on issues of financing joint activities. Russia continues to promote the Russian language on the territory of the CIS countries as a means of communication, which is a factor of “soft power”, influence on neighboring countries, which, among other things, should be supported by financial investments. The system of such events is implemented in the CIS territory and is more associated with the development of schools in

Russian, but to a lesser extent with the involvement of the scientific community and representatives of higher education in the development of the Russian language as a means of scientific communication.

One of the recommendations received from the representative of the Republic of Armenia was the expansion of directions and the number of joint projects in the sphere of the Russian language and literature that the Russian Federation can organize for representatives of the CIS countries, which will ensure the expansion of the influence sphere of the Russian language.

In addition to directly organizing joint activities, representatives of the scientific and educational community of the CIS countries made a proposal on the need for a thesaurus of the terminological apparatus in Russian for uniformity of the scientific dispute. Indeed, the active development of a number of scientific fields leads to the emergence of fundamentally new terms that require clarification for colleagues which Russian is not native.

Thus, the study clearly demonstrates the active presence of the Russian language as a means of scientific communication in the CIS space, it is noted that it is more common in the Republics of Belarus and Kazakhstan, due to historical features and a high proportion of the Russian population on its territories. In other CIS countries, the Russian language is used in the scientific and educational sphere not so actively, but it does not lose its popularity for the most part of the teaching staff of universities and scientific organizations.

Obviously, in the context of the active spread of English in the field of science, it is necessary to increase attention to the issues of preserving the Russian-speaking scientific space in the CIS countries with the direct participation of representatives of state bodies and scientific and educational organizations from the Russian Federation.

### **Conclusion**

The analysis of the Russian-speaking scientific space of the CIS countries demonstrates the feasibility of improving the existing forms of scientific communications in Russian with partners from the CIS countries and expanding the Russian-speaking scientific environment on its territory. The following activities which implementation will enhance the role and importance of the Russian language as the

language of scientific communication in the CIS space are proposed.

1. Expansion of the number and content of Internet pages of official sites of universities and research organizations of the CIS countries with Russian-language content. It is viable to organize interactive sections (forums, chats, etc.) that can provide communication in Russian between site users. The contact information and proposals for cooperation including participation in joint projects is important.
2. An increase in the number of publications in Russian of scientists from the CIS countries, including in Russian journals, as well as joint publications with Russian scientists (Maltseva, Barsukova, Gridchina, and Kuzmina, 2017), for which it is advisable to intensify the formation of international research teams, including placing an invitation to cooperate in the research field on official websites.
3. Expansion of the range of areas and the number of joint scientific competitions and grants for scientists from the CIS countries and their Russian colleagues, as well as the organization of joint initiative research to form a scientific reserve on topical issues.
4. Active replication of information on joint scientific competitions and grants, opportunities for research exchanges and internships.
5. Popularization of dissertations defenses by applicants from the CIS countries in Russian dissertation councils, as well as training highly qualified personnel in postgraduate studies in the Russian Federation.
6. The organization of experience exchange in the field of training highly qualified personnel and writing dissertations, including on the platform of a specially organized online resource.
7. Expansion of the number of scientific events in Russian, as well as its active promotion on the Internet, including as part of an aggregator site specially created for the CIS countries, as well as activating the distribution of invitation letters to universities and research organizations of the CIS countries by Russian initiators of scientific events.
8. Activation of registration of intellectual property created by scientists from the CIS countries in the Eurasian patent system.
9. Ensuring the high quality of journals in Russian and increasing its scientific level, including strengthening the requirements for the structure and content of articles, increasing the status of a journal's editorial board by attracting reputable scientists from Russia with high citation rates, increasing the quality of the review system, including by attracting internationally recognized experts from Russia.
10. Activation of work to increase the "visibility" of journals in the Russian scientific space.
11. Increasing journals' bibliometric indicators based on the results of its monitoring. Various support mechanisms can be created to achieve full compliance with international standards and enter the Russian global citation indexes for periodicals that has high rates in the national citation index.
12. Promotion of scientific journals of higher education institutions and scientific organizations of the CIS countries by creating and maintaining its official websites in Russian, placing archives of journals on the websites of higher education institutions and scientific organizations in Russian, in Russian repositories (electronic libraries) of open access etc.
13. Presentation of scientific journals of universities and scientific organizations in Russian electronic libraries and databases.
14. Maximum involvement of national mass media in the process of popularization of the Russian language, as well as the formation of specialized portals for these purposes in the national segment of the Internet.

15. Formation of an Internet resource in Russian to provide communication between scientists from the CIS countries.
16. Dissemination of information about the possibilities of passing mass open online courses to improve the skills of scientific and teaching staff in the Russian language.
17. Organization of regular monitoring of the state of the prevalence of the Russian language in the CIS space.
18. Expansion of the system of personal branding of scientists from the CIS countries in the Russian-speaking segment of the Internet, including within the framework of the specialized portal "Scientists of the CIS countries", which include information about scientists and their scientific achievements.
19. Organization of rating scientific periodicals in the framework of the CIS (catalogs), where the results of research, linked to the national characteristics of the states would reflect.

These recommendations apply both to managers and individual researchers from the CIS countries, and to the Russian side. It seems appropriate that its mutual implementation is capable to create an additional effect on the expansion of the Russian-speaking scientific space in the CIS countries.

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