

CURRENT STATE AND DEVELOPMENT DIRECTIONS OF RUSSIAN FEDERATION'S INTERNATIONAL COOPERATION WITH THE CIS COUNTRIES IN THE FIELD OF TRAINING OF POST GRADUATE STUDENTS

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Abstract: The article considers such area of scientific and technological cooperation between Russia and the Commonwealth of Independent States (CIS countries) as training and certification of highly qualified scientific personnel. The authors presents characteristic of the system of training and certification of post graduate students in the CIS countries in comparison with the Russian experience. The authors analyze data on the number of post graduate students from the CIS countries studying at Russian universities. It is concluded that high-rated universities, universities participating in the 5-100 program are the most attractive for teaching post graduate students from CIS countries because of the higher quality level of students.

Keywords: international scientific and technological cooperation, certification of post graduate students, Commonwealth of Independent States, academic degrees, post graduate study, dissertation defense

1 Introduction

The development of multilateral interaction and integration processes in the space of the Commonwealth of Independent States are formulated by the President of the Russian Federation V.V. Putin as Russia's key foreign policy priorities (Decree of the President of the Russian Federation "On measures for the implementation of the foreign policy course of the Russian Federation", 2012). One of the forms of interstate cooperation among the CIS countries is scientific cooperation - the institutional efforts pooling of scientists from different countries in order to increase the performance of scientific activity, to increase the contribution of science to the economic development of countries, to increase their own scientific authority and potential (Khoperskaya, 2016).

The Russian Federation's strategic documents are also emphasize the importance of developing international cooperation to increase the competitiveness of the Russian education and science system (Maltseva et al., 2017), and the export of educational services. For example, the Strategy of Scientific and Technological Development of the Russian Federation (2016) defines as one of the main tasks of the scientific and technological development of the country "the formation of a model of international scientific and technical cooperation and international integration in the field of research and technological development, allowing to protect the identity of the Russian scientific sphere and state interests in the conditions of internationalization of science and improve the effectiveness of Russian science through mutually beneficial international interaction".

If the economic and political cooperation of the CIS countries is mostly based on institutional interaction, then educational and scientific integration is based primarily on personal communications (Skakovskaya et al., 2018). It is personal professional contacts in the scientific and educational community that most often turn into institutional channels of interstate cooperation, where joint research is made, educational programs are implemented, highly qualified personnel are trained, scientists and scientific information are exchanged, and promising directions for the development of modern science and education are discussed (Khoperskaya, 2016).

The development of international cooperation among the CIS countries concerns not only the joint acquisition and use of new scientific knowledge, but also the assessment of the quality of education (Filippov, 2017) and the level of training of highly qualified personnel involved in integration processes. Therefore, one of the most sought-after forms of interaction between states is the certification of highly qualified scientific personnel, which is implemented in the following aspects:

- evaluation by scientists from CIS countries of the results of scientific studies of applicants for scientific degrees at the national level, presented in publications. In most CIS countries, legal acts regulating the process of certification of highly qualified scientific personnel provide for the publication (full or partial) of the results of dissertation research of candidates for a doctoral degree in foreign scientific publications, for candidates of sciences such a rule is advisory. It is also recommended to present the results of dissertation research at international conferences and symposiums;
- expert evaluation of dissertations prepared by applicants of a scientific degree, with the involvement of scientists from CIS countries as official opponents, members of dissertation councils, expert councils of the Higher Attestation Commission;
- development of common approaches to the recognition of documents on science degrees and academic titles issued in other CIS countries;
- interaction in the field of improving the legal framework for certification of highly qualified scientific personnel, solving strategic issues in the field of their training.

2 Materials and methods

The research theoretical basis was theoretical analysis, analysis of documents, systematization, comparison, etc.

The official Internet resources of the Ministry of Science and Higher Education of the Russian Federation, Higher certification commission and a number of other structures were used as the information base for the study.

The relevance of training of highly qualified personnel proved in numerous sources (Solvberg and Rismark, 2016; Halawa et al., 2017). As part of postgraduate education, there is an opportunity for students to develop research competencies that are currently in demand in the field of engineering, innovation, and creative industries, since the career trajectories of postgraduate students are not limited to higher education and research organizations (Valla, 2014; Leirós-Rodríguez et al., 2018). In addition, as part of training, the additional competences are developed in the field of management, innovation and project activities (Kaspersma et al., 2012).

The starting point for the formation of national systems of training and certification of highly qualified scientific personnel in the CIS countries was the successful experience of the Higher Attestation Commission of the USSR, that ensured high prestige of Soviet science in the world. However, in the changing

political, social and economic conditions, there is a need to reform the system of certification of highly qualified scientific personnel.

It should be noted that in most of the western countries the training and certification of scientific personnel is carried out in universities post-doctoral programs. After graduation from post-doctoral programs, dissertations are defended and degrees are awarded (Savina, 2015; Garcia & Nogueira, 2017; Martin, 2012). At the same time, universities are fully responsible for the quality of training, therefore, high demands are made on applicants of scientific degrees.

In the CIS countries, including Russia, training of highly qualified personnel is carried out in research organizations, in educational institutions of higher education and in organizations of additional professional education (Kadnikova & Chvora, 2017). The award of scientific degrees is made by state structures - the highest (national) attestation commission. It should be noted that the Government of the Russian Federation adopted a resolution according to which some scientific organizations will be able to award degrees independently. This list includes universities that has the "Federal University" category and "National Research University" category and several other universities that has been granted the right to implement their own educational standards of higher education. Thus, this list includes almost all universities from the "5-100" program (Kiseleva, 2017).

However, the certification system for scientific personnel in the CIS countries also has its own characteristics due to the political and socio-economic features of development after the collapse of the USSR (Table 1).

Table 1

*Scientific degrees received in the CIS countries**

State	Scientific degrees	Legal act
THE REPUBLIC OF AZERBAIJAN	Doctor of philosophy(PhD) (with branches of science) Doctor of Sciences (with branches of science)	Law of the Azerbaijan Republic of June 19, 2009 No. 833-IIIQ "On Education"
THE REPUBLIC OF ARMENIA	Candidate of Sciences Doctor of Sciences	The Law of the Republic of Armenia dated December 26, 2000 No. ZR-119 "On Scientific and Scientific-Technical Activity"
THE REPUBLIC OF BELARUS	Candidate of Sciences / Doctor of Philosophy(PhD) Doctor of Sciences	The Law of the Republic of Belarus of October 21, 1996 No. 708-XIII "On Scientific Activities"
THE REPUBLIC OF KAZAKHSTAN	Master of Science Doctor of Philosophy(PhD) Doctor of Sciences	The Law of the Republic of Kazakhstan dated July 27, 2007 No. 319-III "On Education"
THE REPUBLIC OF KYRGYZSTAN	Candidate of Sciences Doctor of Sciences	Decree of the Government of the Kyrgyz Republic of August 22, 2012 No. 578 "On approval of regulatory legal acts regulating the activities of the Higher Attestation Commission of the Kyrgyz Republic"
THE REPUBLIC OF MOLDOVA	Doctor of Sciences Habilitation Doctor	Code of Moldova Republic on Science and Innovations of July 15, 2004 No. 259-XV
THE REPUBLIC OF TAJIKISTAN	Doctor of Philosophy(PhD)- Doctor of Sciences Candidate of Sciences Habilitation Doctor	Law of the Republic of Tajikistan dated March 18, 2015 No. 1197 "On Scientific Activity and State Scientific and Technical Policy"
THE REPUBLIC OF UZBEKISTAN	Doctor of Philosophy(PhD) (in the relevant branch of science) Doctor of Science(ScD) (in the relevant branch of science)	Decree of the President of the Republic of Uzbekistan dated February 16, 2017 No. UP-4958 "On the further improvement of the system of postgraduate education"

Currently, there are two models of the system of training and certification of scientific personnel in the CIS countries: Soviet

and Western system, each of which has features of training, procedures for certification of scientific personnel and the award of scientific degrees (Atabekova, 2017).

In the system of certification of scientific and scientific-pedagogical personnel in the Republic of Belarus, the Republic of Armenia, the Kyrgyz Republic, as well as in the Russian Federation, currently retains the Soviet model of awarding scientific degrees, that involves obtaining a scientific degree of a candidate of sciences in a particular branch of science, and then obtaining the scientific degree of doctor of sciences.

At the same time, the rapid process of globalization in all spheres of human life, including education and science, encouraging the CIS countries, that are full members of international educational and scientific organizations, to adopt foreign experience in the attestation of scientific personnel.

It is known that the western analogue of the scientific degree of the candidate of science is the science degree of the doctor of philosophy (PhD) (Marinosyan, 2014). Such degrees were introduced in the Republic of Azerbaijan, the Republics of Kazakhstan, Tajikistan and Uzbekistan.

According to the law "On Education", adopted in 2009, graduate school in the Republic of Azerbaijan was closed. The training of scientific personnel is carried out according to the PhD programs and Doctor of Science programs. In accordance with the Law of the Republic of Kazakhstan "On Education", the training of postgraduate students and applicants for a scientific degree was stopped since 2012.

It should be noted that in the Republic of Tajikistan both degrees are awarded: Candidate of Sciences and Doctor of Philosophy.

In the Republic of Moldova and the Republic of Tajikistan, by analogy with Western countries (Germany, Switzerland, Austria, etc.) the degree of "doctor of habilitat"* (Habilitation Doctor) was introduced. This degree in a number of characteristics is comparable to a doctoral degree in the Russian Federation and gives the right to occupy a professorship at a university. It should be noted that in the Western countries the title "habilitated" is not a separate science degree, but an additional qualification for a doctoral degree.

The main stage of the "habilitation" procedure is the defense of a dissertation that is the research of a much higher level than for a doctor's degree (Savina, 2015). In the countries of Western Europe, "habilitation" assumes that the subject of peer review is not only the dissertation itself, but also the entire work of the applicant, including scientific publications, teaching activities, participation in international scientific organizations, management of research projects, etc.

In order to respect human rights and freedoms, international treaties on the recognition and equivalence of educational documents and scientific degrees were made between the CIS countries.

Originally, the Government of the Republic of Belarus, the Government of the Republic of Kazakhstan, the Government of the Kyrgyz Republic, the Government of the Russian Federation and the Government of the Republic of Tajikistan adopted the Agreement of 11/24/1998 "On the mutual recognition and equivalence of degree certificates, scientific degrees and academic titles" (Republic of Armenia is not joined to the Agreement).

Subsequently, some provisions of the Agreement were integrated into the Treaty on the Eurasian Economic Union (2014) (Articles 96-97), while the agreement, without being formally canceled, in connection with the signing of the Treaty on the EEU, continues

* Compiled by the authors on the basis of an analysis of the regulatory legal acts of the CIS countries

* Habilitation - the procedure for obtaining the highest academic qualifications, following the degree of doctor of philosophy in some European and Asian countries.

to apply subsidiary to the provisions of the Treaty in those part that not contradictory to provisions.

Along with the Agreement and the Treaty on the EEU, certain issues of mutual recognition of documents on education, scientific degrees and scientific titles are addressed in bilateral agreements between the CIS countries, which may provide for special rules for mutual recognition of this category of documents.

The list of existing agreements between the Russian Federation and the CIS countries on mutual recognition of education certificates is below:

The Agreement between the Government of the Russian Federation and the Government of the Republic of Belarus on mutual recognition and equivalence of degree certificates, science degrees and academic titles (Moscow, February 27, 1996);

Agreement between the Government of the Republic of Tajikistan and the Government of the Russian Federation on cooperation in the field of certification of highly qualified scientific personnel (Dushanbe, February 12, 1997);

The Agreement between the Government of the Russian Federation and the Government of the Republic of Armenia on the mutual recognition of degree certificates, science degrees and academic titles (Yerevan, September 15, 2001);

The record on the accession of the Republic of Tajikistan to the Agreement between the Government of the Republic of Belarus, the Government of the Republic of Kazakhstan, the Government of the Kyrgyz Republic and the Government of the Russian Federation on mutual recognition and equivalence of degree certificates, science degrees and academic titles of November 24, 1998 (Moscow, February 26, 2002);

The Agreement between the Government of the Russian Federation and the Government of the Republic of Azerbaijan on the mutual recognition of degree certificates, science degrees and academic titles (Moscow, September 23, 2002);

Agreement between the Government of the Russian Federation and the Government of the Republic of Moldova on the mutual recognition of degree certificates (Chisinau, March 3, 2003);

The Agreement of the Members of the Commonwealth of Independent States on the mutual recognition of certificates on higher / higher vocational education (Minsk, May 31, 2013, ratified by Belarus and Kyrgyzstan).

One of the aspects of scientific communication in the CIS space is the defense of dissertations for the degree of candidate or doctor of science by citizens of CIS countries in Russian dissertation councils.

The Decree of the Government of the Russian Federation of September 24, 2013 No. 842 "On the Procedure for Awarding Science Degrees" determined that "persons with a higher education certified by a specialist's or master's degree certificate are allowed to apply for the degree of candidate of sciences", "persons with the degree of candidate of sciences are allowed to apply for the PhD degree."

In accordance with Part 13 of Article 107 of the Federal Law of December 29, 2012 No. 273-FZ "On Education in the Russian Federation", documents on foreign education and (or) foreign qualifications recognized in the Russian Federation must be legalized according to the procedure established by the Russian Federation legislation.

Part 1 of Article 107 273-ФЗ establishes the recognition of foreign education and (or) foreign qualification, which is made in accordance with the international treaties of the Russian Federation governing the recognition and determination of equivalence of foreign education and (or) foreign qualification.

Citizens from the CIS countries who have documents on postgraduate and vocational education that are not covered by the above contracts need to go through the procedure of nostrification (recognition) of documents, that is, obtaining the

consent of the relevant government authorities on the validity of these documents on the territory of the state in order to defend a dissertation in the Russian Federation*. For example, this applies to applicants from Uzbekistan, since diplomas of higher professional education of this country are not recognized in Russia, the nostrification is necessary for documents issued in the CIS countries in the 90s of the last century.

As for the rest, the procedure for submitting dissertation to the defense for citizens from CIS countries is the same as for citizens of the Russian Federation.

According to the Decree of the Government of the Russian Federation of September 24, 2013 No. 842 "On the Procedure for Awarding Science Degrees", applicants who have prepared a dissertation "during training programs for scientific and pedagogical personnel in postgraduate training program (adjuncture)" and those applicants who have "higher education, confirmed by a diploma of a specialist's or a master's degree, who prepared a dissertation for the degree of a candidate of sciences without mastering the program of training scientific and pedagogical personnel in postgraduate training program (adjuncture)" are admitted to the degree of candidate of sciences.

A dissertation for a doctoral degree can be prepared in a doctoral program of scientific and educational organizations where dissertation councils are created.

3 Results

The CIS countries are currently the main source of candidates for a dissertation interested in Russian science degrees. Admission of foreign citizens to graduate school is carried out on the basis of international agreements of the Russian Federation, as well as under individual contracts concluded by the university, a scientific organization with legal entities or individuals.

According to information and analytical materials on the results of monitoring the performance of educational institutions of higher education for 2015–2017 the data on the number of graduate students from the CIS countries enrolled in 509 state universities of Russia were studied. The analysis showed that the number of post-graduate students from the CIS countries is steadily growing: in 2015 - 1,822 people, in 2016 - 3,218 people, in 2017 - 3,408 people**. Over 2 years, the increase was more than 90%.

In 2015, graduate students (adjuncts, interns, residents) from the CIS countries studied at 223 universities of Russia, in 2016 - at 271 universities, in 2017 - at 287 universities.

The leaders in the number of graduate students from the CIS countries in the period under review are: Peoples' Friendship University of Russia, St. Petersburg State University, National Research Tomsk Polytechnic University, I.I. Mechnikov North-Western State Medical University, St. Petersburg State Pediatric Medical University (Fig. 1).

* Justification: part 4–11 of Article 107 of the Federal Law of 29.12.2012 No. 273-ФЗ "On Education in the Russian Federation" in accordance with the Administrative Regulations for the provision of state service for recognition of education and (or) qualifications obtained in a foreign country by Federal Service for Supervision in Education and Science, approved by order of the Ministry of Education and Science of the Russian Federation of December 24, 2013 No. 1391 (Registered in the Ministry of Justice of Russia on February 21, 2014 No. 31387).

** The following monitoring indicators were used for the calculation: The total number of graduate students (adjuncts), interns, residents, interns assistants; the proportion of the number of foreign citizens from the CIS countries from among the graduate students (adjuncts), residents, interns, interns assistants of an educational organization in the total number of graduate students (adjuncts), residents, interns, interns assistants.

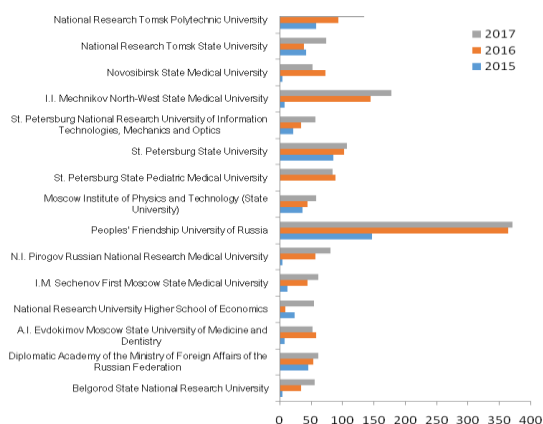
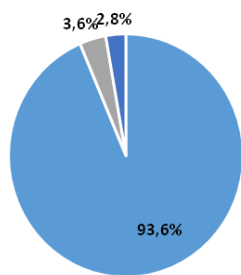


Figure 1. Russian universities - the leaders in the number of postgraduate students from the CIS countries in 2015–2017.

Compiled by the authors on the basis of information and analytical materials on the results of monitoring the performance of educational institutions of higher education for 2015–2017. (URL: <http://indicators.miccedu.ru/>)

1911 dissertation councils operated in the system of certification of scientific and scientific-pedagogical workers of the Russian Federation as of October 31, 2018. Due to the large number of studied objects and the lack of complete and unified information on the defense dissertations for the degree of candidate and doctor of science by citizens from CIS countries on their Internet sites, orders to issue diplomas of doctors and candidates of science placed on the website of the Higher Attestation Commission under the Ministry of Education and Science of the Russian Federation in the section "Diplomas, certificates and certificates" for the period 2014–2017 and 10 months 2018 (from January to October) were used for the analysis.

In the period under review, 63296 people were awarded the degree of doctor and candidate of science, of which 4053 are foreign citizens (6.4%), including citizens of the CIS countries - 1755 people (2.8%) (Figure 2).



Russian citizens ■ Foreign citizens (except CIS) ■ Citizens of the CIS countries

Figure 2. The share structure of the number of defended dissertations in dissertation councils of Russia in the period 2014–2018 in terms of citizenship of applicants

Compiled by the authors based on the analysis of orders to issue diplomas of doctors and candidates of sciences, posted on the website of the Higher Attestation Commission (HAC) under the Ministry of Education and Science of the Russian Federation in the section "Diplomas, certificates and certificates" for the period 2014-2017 and 10 months 2018 (from January to October) (URL: <http://vak.ed.gov.ru/121>)

Figure 3 provides information on dissertation defenses for each studied year.

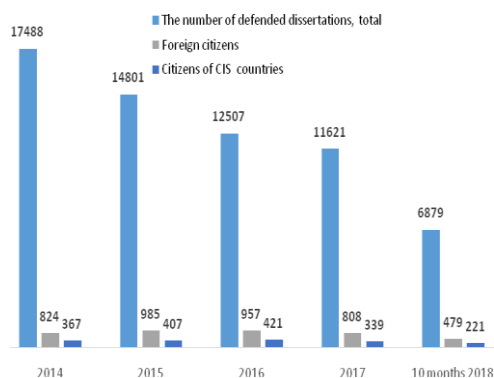


Figure 3. Statistics of dissertations defense in Russian dissertation councils with awarding a scientific degree in 2014–2018.

Compiled by the authors based on the analysis of orders to issue diplomas of doctors and candidates of sciences, posted on the website of the Higher Attestation Commission (HAC) under the Ministry of Education and Science of the Russian Federation in the section "Diplomas, certificates and certificates" for the period 2014-2017 and 10 months 2018 (from January to October) (URL: <http://vak.ed.gov.ru/121>)

It should be noted that alongside a decrease in the total number of defenders in Russian dissertation councils, the percentage of applicants for degrees from CIS countries changed slightly (no more than 0.6%) in both smaller and larger directions.

As for the share of applicants from the CIS countries in the total number of foreign applicants, it increased from 44.5% in 2014 to 46.1% in 2018.

The highest rates of the number of defenders in Russian dissertation councils are observed in the Republic of Tajikistan - 56.0% of the defenses for the entire period under consideration (Figure 4). This is due to the fact that in the Republic of Tajikistan attestation for the award of degrees of candidate and doctor of science is carried out by the Higher Attestation Commission of the Ministry of Education and Science of Russia. Despite the fact that the dissertation councils of universities from the Republic of Tajikistan award a science degree in some areas of science, science degrees are awarded exclusively by the Higher Attestation Commission of the Ministry of Education and Science of the Russian Federation and only after reading the content of the dissertation. Applicants after defending dissertations receive Russian diplomas on the award of science degrees of candidate and doctor of science.

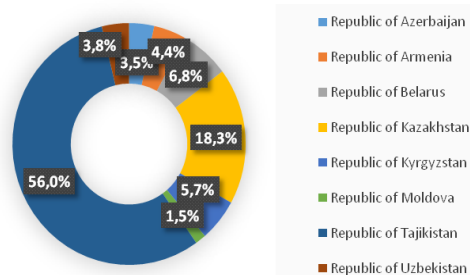


Figure 4. The share structure of the CIS countries in the total number of defended dissertations in dissertation councils of Russia in the period 2014–2018

Compiled by the authors based on the analysis of orders to issue diplomas of doctors and candidates of sciences, posted on the website of the Higher Attestation Commission (HAC) under the Ministry of Education and Science of the Russian Federation in the section "Diplomas, certificates and certificates" for the period 2014-2017 and 10 months 2018 (from January to October) (URL: <http://vak.ed.gov.ru/121>)

The second place by the number of defended dissertations in dissertation councils of Russia took the Republic of Kazakhstan

(18.3% of defenses). The lowest value of the indicator is in the Republic of Moldova (1.5%), which is largely due to the fact that the degree of the candidate of science and its counterpart - Doctor of Philosophy - is absent in Republic (not awarded). Science degree of the candidate of sciences was preserved prior to the opening of doctoral programs, in accordance with the Code of the Republic of Moldova dated July 17, 2014 No. 152 "On Education". With the opening of new doctoral programs, a re-attestation of candidates of science was carried out with awarded of science degrees "master" or "doctor" depending on the results of certification.

The figure 5 shows the number of citizens who have been awarded science degrees by orders of the Higher Attestation Commission of Russia, by CIS countries and by year.

The figure does not show a single trend of changes in the number of citizens who defend dissertation in the period under review. A significant decrease in defended dissertations is observed in the Republic of Tajikistan and the Kyrgyz Republic. As for the Republic of Tajikistan, it is probably connected with the suspension of some dissertation councils of the Higher Attestation Commission of Russia on the territory of this state.

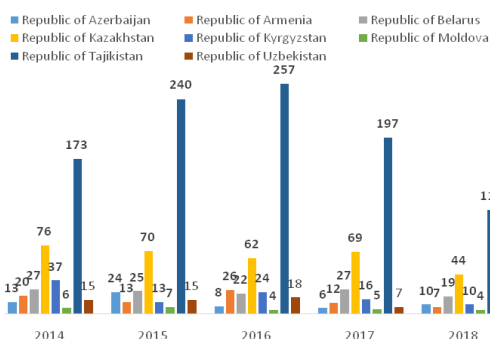


Figure 5. The number of citizens from CIS countries defended dissertation in Russian dissertation councils in 2014–2018.

Compiled by the authors based on the analysis of orders to issue diplomas of doctors and candidates of sciences, posted on the website of the Higher Attestation Commission (HAC) under the Ministry of Education and Science of the Russian Federation in the section "Diplomas, certificates and certificates" for the period 2014-2017 and 10 months 2018 (from January to October) (URL: <http://vak.ed.gov.ru/121>)

The data presented in Figure 6 allow us to conclude that the defense of candidate dissertations in dissertation councils is more in demand by citizens of CIS countries than doctoral dissertations, the ratio on average is 86/14 in percent.

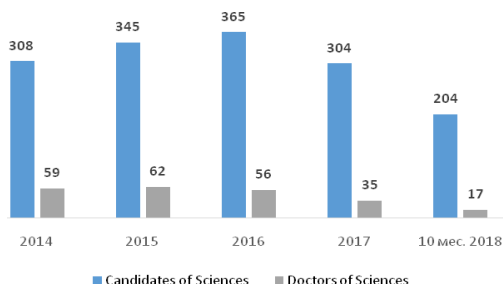


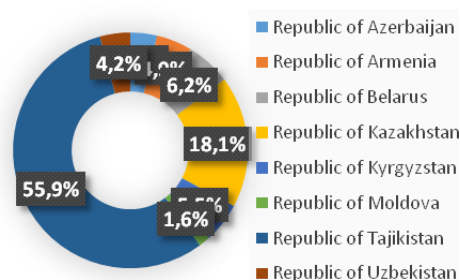
Figure 6. Statistics of the number of citizens from CIS countries who defended their candidate and doctoral dissertations in Russian dissertation councils in 2014–2018.

Compiled by the authors based on the analysis of orders to issue diplomas of doctors and candidates of sciences, posted on the website of the Higher Attestation Commission (HAC) under the Ministry of Education and Science of the Russian Federation in the section "Diplomas, certificates and certificates" for the period 2014-2017 and 10 months 2018 (from January to October) (URL: <http://vak.ed.gov.ru/121>)

At the same time, starting from 2016, there has been a decrease in the number of candidate of sciences and doctor of sciences degrees awarded by HAC of Russia to citizens from CIS countries by 16.7% and 37.5%, respectively.

The leaders in the number of defended dissertations for candidate of sciences degree are the Republic of Tajikistan (55.9%) and the Republic of Kazakhstan (18.1%), the lowest indicators are in the Republic of Moldova (1.6%). Other CIS countries account for from 3.7 to 6.2 percent of the defended dissertations (Figure 7).

Candidates of Sciences



Doctors of Sciences

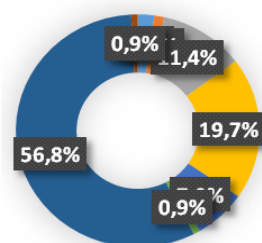


Figure 7. The share structure of the CIS countries in the total number of defended dissertations for candidate of sciences and doctor of sciences degrees in dissertation councils of Russia

Compiled by the authors based on the analysis of orders to issue diplomas of doctors and candidates of sciences, posted on the website of the Higher Attestation Commission (HAC) under the Ministry of Education and Science of the Russian Federation in the section "Diplomas, certificates and certificates" for the period 2014-2017 and 10 months 2018 (from January to October) (URL: <http://vak.ed.gov.ru/121>)

The defense of dissertations for doctor of sciences degree are practically not demanded in such countries as the Republic of Azerbaijan (5 people), the Republic of Armenia (3 people), the Republic of Moldova (2 people), the Republic of Uzbekistan (2 people). The low indicator of the number of applicants for science degrees from the Republic of Uzbekistan is most likely due to the fact that diplomas of higher professional education of this country are not recognized in the Russian Federation, the relevant agreement on the recognition of degree certificates, science degrees and academic titles was not concluded between the Russian Federation and the Republic of Uzbekistan, that causes additional difficulties associated with the need for nostrification of documents.

In the Kyrgyz Republic no one defended his doctoral dissertation in Russia in 2017–2018.

The leaders in the number of defended doctoral dissertations are the Republic of Tajikistan (130) and the Republic of Kazakhstan (45).

The greatest interest among applicants from the CIS countries is caused by scientific branches: medical - 17.55% of all defenses, philological - 12.99%, pedagogical - 11.11%, economic -

10.37% and technical - 10.26% (Table 2). Cultural studies are less in demand - 0.06% of all defenses, architecture - 0.06%, pharmaceutical sciences - 0.11%, sociological sciences - 0.23%. Veterinary, geographical, geological, mineralogical, psychological sciences, art history - also less than 1%. Recently, the interest of foreign applicants in agricultural sciences has grown: in 2014 - 7 defended dissertations, in 2017 - 29 defended dissertations.

Table 2
Scientific areas for which foreign citizens from CIS countries defended dissertations

Scientific branches	2014	2015	2016	2017	10 months of 2018
Architecture	19	11	10	6	6
Biological Sciences	0	4	0	4	2
Veterinary Sciences	0	1	2	6	2
Geographical Sciences	8	3	0	0	0
Geological and mineralogical sciences	0	1	4	4	3
Art history	13	19	39	17	9
Historical sciences	72	89	49	48	50
Culturology	1	0	0	0	0
Medical sciences	53	60	46	19	17
Pedagogical sciences	6	4	2	3	1
Political science	15	29	9	7	2
Psychological sciences	7	6	24	29	16
Agricultural Sciences	0	0	0	2	2
Sociological sciences	37	33	48	38	24
Technical science	0	0	0	2	0
Pharmaceutical Sciences	9	18	34	33	23
Physics and Mathematics	54	48	44	54	28
Philological Sciences	0	15	12	10	5
Philosophical Sciences	2	2	24	7	1
Chemical Sciences	45	28	48	40	21
Economics Sciences	25	36	26	10	9
Jurisprudence	1	0	0	0	0

Compiled by the authors based on the analysis of orders to issue diplomas of doctors and candidates of sciences, posted on the website of the Higher Attestation Commission (HAC) under the Ministry of Education and Science of the Russian Federation in the section "Diplomas, certificates and certificates" for the period 2014-2017 and 10 months 2018 (from January to October) (URL: <http://vak.ed.gov.ru/121>)

If we consider this problem in a country context, then applicants from the Azerbaijan and Kyrgyz Republics most often defend dissertations in Russian dissertation councils in the field of medical sciences (50.8% and 36% of defenses, respectively); the economic direction is the most popular in the Republic of Armenia (25% of defenses); technical and physical and mathematical sciences are the most popular in the Republic of Belarus (35% of defenses); technical, medical and pedagogical sciences are in demand in the Republic of Kazakhstan (18.7%, 16.2% and 15.3%, respectively); pedagogical sciences (23% of defenses) are the most popular in the Republic of Moldova; philological sciences (19.5%), medical sciences (13.6%) and pedagogical sciences (12.4%) are the most popular in the Republic of Tajikistan; medical sciences (45.5% of defenses) and technical sciences (39.4% of defenses) are the most popular in the Republic of Uzbekistan.

4 Conclusions

Thus, the analysis shows the presence of active cooperation in the field of training highly qualified personnel between Russia and the CIS countries.

Scientific cooperation at the institutional level, the exchange of leading scientists for consultation and acquaintance with the results of scientific research, the participation of Russian specialists in the training and certification of graduate students and doctoral students from the CIS countries (Khoperskaya,

2016), the promotion of advanced training of scientists of the post-Soviet republics, participation of scientists in science events (congresses, seminars, conferences, etc.) held by the CIS countries can be considered as scientific communications (Mal'tseva, et al., 2018), that aimed, including to strengthen the role of the Russian Federation, the Russian science and education in the CIS countries space. In turn, scientific and educational communications, along with economic and political cooperation, are an instrument of the "soft power" of the foreign policy of the Russian Federation and the realization of national interests.

In the conditions of active globalization of science in the CIS countries, as well as political trends, communications with organizations from the European Union, the USA, and China are becoming increasingly important for the scientific and educational sphere of the CIS countries (Maltseva, Veselov, Monakhov, Karasyova, 2017). The domestic system of training highly qualified personnel and their certification, retaining its individuality against the background of other countries, must increasingly meet international requirements in order to remain attractive to applicants from CIS countries.

Obviously, taking into account the change of generations, the relations between scientific and educational organizations in Russia and the CIS countries formed in Soviet times are increasingly weakened. The question of expanding opportunities for applicants from the CIS countries on the preparation and defense of dissertations for the science degrees is very relevant, including taking into account the possibilities of introducing (expanding) quotas for training highly qualified personnel in Russia.

The analysis also demonstrated the obvious role of the quality level of training of personnel by domestic universities. Thus, high-rated universities, universities participating in the 5-100 program are the most attractive for teaching graduate students from the CIS countries. Taking into account the ongoing and outlined process of reforming the national education systems of the CIS countries, it is the qualitative component in the training of highly qualified personnel that can become the basis for expanding scientific cooperation in this area.

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Primary Paper Section: A

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