



Scientific, Technical, and Educational Cooperation in the EAEU

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7.1 INTRODUCTION

Integration processes in the Eurasian economic union may be characterized as «pragmatic Eurasianism» (Kofner 2019), aimed at achieving concrete, mutually beneficial goals without an ideological component. In the modern world—marked by a rapid growth of knowledge-driven economy—addressing this task is only possible with an impetus on developing science and higher education. Scientific and technical interactions not only facilitate pragmatic economic interactions, but also strengthen interpersonal ties, giving rise to humanitarian integration.

The EAEU appears to be experiencing difficulties forming a common scientific, technical, and educational space, due in part to member-states' fears of losing national sovereignty, as well as a lack of any exact mechanisms for studying concrete arrangements or methods for accounting for

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the interests of other members, leading to delayed integration (Obukhov and Golovko 2018). In order to overcome these challenges, the EAEU is working slowly yet consistently towards creating specialized funds to finance scientific and educational projects, developing relevant regulations, and eliminating bureaucratic barriers to innovation.

EAEU integration has a unique competitive advantage: using their Soviet experience, and building on the cooperation mechanisms developed within the former USSR (Torkunov 2019a). Russia is the engine of Eurasian scientific-educational integration due to its considerable economic and human resources, laying the foundation for a number of major multilateral projects with great potential for strengthening integration. Noteworthy among these projects are the Eurasian technological platforms, prioritizing the development areas of mutual interest. In the educational sphere, considerable effort is also made to strengthen cooperation between leading universities, develop joint programs, open branches in member-states, and promote academic mobility.

The chapter is organized as follows. After the introduction, the second part deals with key aspects of scientific-educational cooperation in the EAEU. It explains the “pragmatic Eurasianism” approach to integration processes within the Union which also pertains to scientific and educational cooperation. It also analyzes the economic preconditions for further integration in this sphere. Part 3 analyzes the existing multilateral projects in scientific research. Parts 4 and 5, respectively, deal with prospective areas of cooperation and challenges in the scientific-technological and educational spheres. Part 6 concludes the chapter with an assessment of the EAEU’s prospects for further scientific and educational integration.

7.2 SCIENTIFIC-EDUCATIONAL COOPERATION IN THE EAEU: KEY ASPECTS

The year 2019 marks the fifth anniversary of signing the EAEU Treaty and the 25th anniversary of the idea of modern Eurasian integration. It is possible to claim that, for the past few years, the Eurasian Economic Union has actualized itself as a dynamically developing, open integration association which has become an integral part of the major economic processes in Eurasia. According to Y. Kofner, the manager of the Eurasian sector of the Centre for Comprehensive European and International Studies of the National Research University Higher School of Economics (CCEIS NRU

HSE), enough time has passed to make it possible to call the theory of the modern Eurasian integration “pragmatic Eurasianism”, as it follows a purely pragmatic approach to the activity of the EAEU. It is the pragmatic setting of economic targets, but not the ideological contents, that takes the central place in the wording of the EAEU Treaty and in the logic of building institutions of Eurasian integration (Kofner 2019).

The assessment of cooperation in the scientific, technical, and educational spheres of the EAEU from the standpoint of “pragmatic Eurasianism” seems to be the most exact. In this context, social and humanitarian cooperation amongst the member countries of the Eurasian Union gains a new insight. As Professor and Diplomat A. Smbatyan notes, “without education, without science, without dealing with cultural, ethnic questions, it is extremely difficult to build relations between the peoples and the states. For people to understand each other, for the achievement of the atmosphere of absolute mutual trust, we especially need contacts created only by humanitarian cooperation—through culture, art, education. It is impossible to imagine the formation of the Eurasian Union without cooperation in these spheres... Sooner or later we will surely come to it. And why not get ahead of events and, in the closest time, start building these bridges which, for certain, will facilitate the development of the economic relations?” (Jun 2017)

In the context of the fourth industrial revolution, the strengthening of humanitarian cooperation on inter-state scientific, technical, and educational programs of EAEU countries is an important factor of the harmonization and integration of many scientific disciplines and technologies, and national and universal values that lead to breakthroughs; these are innovative discoveries which form the backbone for the creation of a new economy—“the economy of knowledge”, free from ideological and political clichés.

At the same time, it should be noted that forming this common scientific, technical, and educational space is not easy. On the one hand, all the participants of the Union that are represented by higher education institutions, research establishments, or industrial and administrative structures understand the need of interaction in this sphere. On the other hand, representatives of the political establishment of member countries have some vigilance concerning the forced rapprochement with Russia that is caused by fears of losing national sovereignty. As it appears, realizing the mutual benefits of scientific, technical, and educational cooperation in the integration association is to be based on the principles of the inviolability

of the national sovereignty of each state of the Union. The methods and instruments of European integration cannot be mechanically carried over to the EAEU.

The EAEU has a unique advantage—the opportunity to make use of the experience Russia accumulated during the Soviet period, so as to create new formats of communication based on models and networks already approved. Researchers of the Russian Foundation of Fundamental Research and the Institute of World Economy and International Relations of the Russian Academy of Sciences believe that the intensification of the multilateral scientific, technical, and educational cooperation in the EAEU lays the foundation for the modernization of national economies as well as promoting the accumulation of the economic and political potential of the whole association, as the elimination of customs, legislative and further barriers in the field of high technologies creates favorable conditions for the restoration of the connections lost after the collapse of the USSR and the creation of new research and production chains. It is also promoted by the fact that, historically, the scientific schools were localized in Russia (Moscow, St. Petersburg, Siberia and the Volga region), and the objects of the hi-tech industry (in particular, microelectronics, thin chemistry and pharmaceuticals, biotechnologies) developed in the republics that creates the EAEU's competitive advantages (Federation Council of the Federal Assembly of the Russian Federation 2015).

According to the Eurasian Economic Commission (EEC), in 2017 the EAEU included 4926 organizations, which were carrying out research and advanced development, from which 3944 were in Russia (80 percent).

Research and development costs in the EAEU are growing, but still remain low compared to Western nations. The internal costs of research and development in 2017 were distributed as follows: Armenia—\$24.6 million, Belarus—\$319.5 million, Kazakhstan—\$211.3 million, Kyrgyzstan—\$8.2 million, Russia—\$17.4 billion (nearly 97 percent of the total internal costs of the EAEU for research and advanced development) (Eurasian Economic Commission 2018d). Over a ten-year period—from 2007 to 2017—the internal costs of research and advanced development in the Union have seen a sizeable increase, by 20 percent on average. That said, research and development costs as a share of GDP remain comparatively low. According to the World Bank, in 2017 R&D expenses reached 0.23 percent of the GDP in Armenia, 0.59 percent in Belarus, 0.13 percent in Kazakhstan, 0.11 percent Kyrgyzstan, and 1.11 percent Russia (by

contrast, Israel spent 4.58 percent of its GDP on research, and the USA 2.8 percent) (The World Bank 2017).

Russia plays a key role in the scientific and technical cooperation of the EAEU, bearing the main share of R&D expenses and possessing the greatest human resources. At the same time, Russia promotes the idea of the Eurasian transfer of technologies in order to share and exchange its experience with scientists of the neighboring states on a mutually advantageous basis within bilateral and multilateral projects.

7.3 CURRENT AND COMPLETED PROJECTS

Given the emerging nature of the association and the deterrents mentioned above, it should be noted that the number of complete multilateral projects in R&D scientific research and advanced development at the end of 2018 was not substantial: pipeline transport development; nuclear research on the basis of the Joint Institute for Nuclear Research in Dubna; joint implementation of space projects by Russia, Belarus and Kazakhstan; and the interstate EurAsEC target program of “Innovative biotechnologies” (26 projects of the Russian, Belarusian, Kazakh and Tajik scientists in the field of microbic and DNA technologies for food, biological and environmental safety), as well as the interstate target program of the implementation of the projects of the recultivation of the territory of Kyrgyzstan and Tajikistan to mitigate the impact of uranium mining. The issue of the creation of joint ventures for the production of hi-tech hoisting-and-transport equipment is also being worked out (Scientific and technical cooperation as a factor of Eurasian economic integration—Annual Report 2015).

The cornerstone of the listed projects is the agreed decision, adopted in 2016, to form the priority Eurasian Technological Platforms (ETP) as tools of the international scientific-technological and innovative-production cooperation of the scientific organizations, governmental institutions, business and industrial enterprises in the format of the implementation of specific projects. In fact, the ETP is a system mechanism and an innovative platform for discussion, maintaining advanced research and development and their introduction in the economic practice. At the moment, the formation of 13 priority technological platforms is supported: “Space and Geoinformation Technologies”, “Biomedicine”, “Supercomputers”, “Photonics”, “Light-emitting diodes”, “Technologies of extraction of solid minerals”, “Technologies of ecological

development”, “EurasiaBio”, “Technology of food and processing industry of agrarian and industrial complex”, “Agriculture”, “Consumer goods manufacturing”, “Technologies of metallurgy and new materials”, “Industrial technologies of providing construction industry” (Eurasian Studies 2018).

The list of technological platforms, including 417 scientific and industrial institutions of the EAEU, is not final and can be corrected and enlarged further. Such mobility indicates that EAEU member-states are studying international scientific and technological experience and trying to coordinate corresponding national interests in order to deepen the research and production cooperation in these hi-tech areas.

One of the successful projects is the ETP “Space and Geoinformation Technologies—Products of Global Competitiveness”, which started the formation of the EAEU’s Integrated system on providing space and geoinformation services on the basis of the national data sources of the remote sensing of the Earth. The founders of the platform are “The Kazakhstan Garysh Sapary Oil Company Limited” (Astana, Kazakhstan); the non-commercial joint-stock company “Almaty University Of Power and Communication” (Almaty, Kazakhstan); the private limited company “International Space Technologies” (Moscow, Russia); LLC “SOVZOND Company” (Moscow, Russia); Lomonosov Moscow State University (Moscow, Russia); the scientific and engineering republican unitary enterprise “Geographic Information Systems” of Belarus NAS (Minsk, Belarus); and BSU of V.I. Lenin (Minsk, Belarus) (Eurasian Commission 2016). This project is indicative of the modern integration realities of the Eurasian space. Firstly, by means of the space ETP, the parties express their intention to cooperate within a strategic realm of space exploration, which has been provoking serious international discussions for many years. This signals to international partners that the association views itself as durable and its plans as long-term (Kasatkin et al. 2019). Secondly, the participants of the project are located in the capitals and the largest cities of the member countries where their main scientific potential is concentrated. The leading research organizations are to become the leaders of the scientific thought who will be followed by the regional institutions by means of interaction and exchange of experience.

7.4 AREAS OF FURTHER SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT

In December 2018 at the meeting of the Supreme Eurasian Economic Council, the President of Russia, V. Putin, designated the further direction of this research and industrial cooperation: “cooperation of the states of the EAEU in the sphere of providing space services, including the creation of the general group of orbital devices and advance of geoinformation services for the markets of the third countries, appears to have prospects. It is possible to think over the adoption of a joint program of the scientific and technological development” (Sputnik 2018).

For implementing the plans drawn up by the ECE, a set of proposals were made:

- to create a special fund for financing scientific research, including special funds for financing venture projects;
- to carry out the unification and harmonization of legal regulation in the field of scientific, technical, and innovative cooperation, including the additional fine-tuning of the funding mechanisms for the projects in the scientific and technological sphere and the formation of a common digital industrial space;
- to include a provision on the scientific, technical, and educational cooperation in the EAEU Treaty (Eurasian Economic Commission 2018d).

According to Chokan Laumulin, researcher of the Center of Development Studies of the University of Cambridge (Great Britain), the EAEU has the potential to alter the industrial picture of the world: the EAEU’s own landscape could change completely owing to the joint development of three directions—non-silicon electronics, superconductivity, and cryogenics. The world’s electronic industry approaches the limit of silicon’s conductivity of 1 electron/volt, single-crystal silicon being its basic element. The most outstanding physicists, including Professor G. Lonzarich (former head of the group of quantum matter of the Cavendish Laboratory of the University of Cambridge), developed the theories that if the experiments with polymers and rare-earth metals continue in Eurasia, it is possible to substantially increase the efficiency of semiconductors, which will increase the conductivity and lead to a revolution in the electronic industry. As for superconductivity, research under

the conditions of low temperatures can help to discover new properties of these materials and to change mankind's energy perception by means of reducing energy losses during transportation (30–40 percent of losses) from remote centers of generation. Russia and Kazakhstan possess large reserves of various rare-earth metals, experiments with which will increase the efficiency of solar battery chips that, in the long term, will give cheap energy to many Asian countries where sunny days are numerous. This scientist believes that the EAEU preserves a potential environment, scientifically and educationally, for reproducing human capital. An example of that are science cities which are penetrated by the ideas, experience and space for scientific experiments; their atmosphere invites communication between scientists, and the development of theories and training. The only thing that is needed is a balanced state policy which will attract prospective young people, as well as raising the social status of the scientists and the prestige of the science. However, besides the direct financing of the researchers' activity and material and technical resources, it is necessary to reduce the extent of the bureaucratization of the science in the EAEU. According to C. Laumulin, scientific and technological research in the EAEU represents nothing but the global demand of the time, which will result in changing the political, social, and economic realities (Heritage 2016).

The share of the EAEU in the international market of knowledge-intensive products is only 2.5 percent, compared with the 80 percent share of the market of high technologies held by the states of the Group of Seven. (Gavrilyuk 2015). In many respects, such a low share is due to the consequences of the disintegration of the scientific and industrial associations and the loss of the connections acquired during the Soviet period in the 1990s, and also the fact that, in the USSR, a powerful scientific and technical complex coexisted, paradoxically, with the lack of practical application of the results of R&D research and development in the civil sphere.

Despite this, the EAEU has serious chances of effectively developing and strengthening its global positions. The keys to the sustainable development of the EAEU economies which have a positive impact on the development of science and education are: bolstering the sectors of the economy and the enterprises which make highly processed products and deepen the amount of scientific and technological cooperation; and corporate integration. It is necessary to develop the institutions of both national and interstate stimulation of the technological and scientific cooperation and innovative activities within the development of the sixth

wave of innovation, as the scientific and technological competitiveness serves one of the main indicators of the dynamism of the development of the Eurasian integration (Gavrilyuk 2015).

For this purpose, it is important not so much to increase the public financing of science as to take measures for the productive transfer of technologies among the five Eurasian countries (Glazyev 2012), including the transfer of know-how, technological information, innovative developments, patents for inventions, engineering, and joint development projects carried out by the enterprises (Terebova 2010). The Eurasian transfer of technologies will allow the member countries to effectively commercialize the results of scientific developments and to generate new investments and technologies. To make the realization of such an approach successful, it is necessary to create a new institution—an international network of centers for transferring technologies in the EAEU. This will facilitate the spread of technological information and the search for collaborators for new projects, and promote the increasing, innovative commercialization of the results of this scientific research, as well as also promoting the transfer of technologies to areas remote from their centers of production (Gavrilyuk 2015).

Another prospective direction of Eurasian cooperation, which is closely connected with science and education, is the creation of a digital space in the EAEU and the implementation of the EAEU's digital agenda before the year 2025. The introduction of digital technologies in cross-border interaction within the association plays an important role in increasing its regional and global connectivity as well as competitiveness (Pak 2020). Digitalization is likely to have a synergetic effect on all EAEU economies. It is expected that more widespread broadband internet access will increase the GDP of the association by 1.7 percent, the rising international throughput will bring another 0.66 percent, and electronic trading will yield a 0.88 percent GDP increase. Digitalization will also create 2–4 million jobs. The elimination of standard and legal barriers will further add \$46.5 billion to the GDP of the Union (Eurasian Economic Commission 2018).

7.5 EDUCATIONAL COOPERATION—CHALLENGES AND PROSPECTS

The formation of the common market of the EAEU, including the implementation of its digital agenda, assumes the free movement of human resources that requires special attention to the development of human capacity and poses a question about the development of a coordinated educational policy. In 2017–2018 in Russia, there were 766 higher educational institutions of state and non-state-owned legal entity forms (taking into account branches, about 1000); in Armenia there were 61 higher educational institutions; in Belarus 52; in Kazakhstan 122; and in Kyrgyzstan there were 51 such institutions. The number of higher education students in the EAEU exceeded 5 million people: in Russia 4.28 million students; in Armenia 94.7 thousand; in Belarus about 300 thousand; in Kazakhstan more than half a million people are getting higher education; and in Kyrgyzstan more than 162 thousand people are (Eurasian Economic Commission 2018). Simple arithmetic shows that in all the countries of the EAEU the number of students fluctuates at the level of 2–3 percent of the total number of the population, which demonstrates a rather comparable higher education coverage of the citizens, and, therefore, is a favorable factor for the creation of the general educational space in the long term.

In this context, the indicators of the academic mobility of students within the integration association are also important. 86,788 students from EAEU member countries studied in Russia in the academic year of 2017/18: 3049 from Armenia; 10,792 from Belarus; 65,700 from Kazakhstan; 7247 from Kyrgyzstan. In the same year 1156 citizens from the EAEU studied in Armenia; 1857 people in Belarus; 2229 in Kazakhstan; 4817 in Kyrgyzstan (Eurasian Economic Commission 2018). These statistics show that Russia remains the most attractive destination for Eurasian students; first of all, this shows Russia's competitive advantage in the export of educational services, and, secondly, this allows member-states to exchange experience and to build in educational strategies adequate to labor market demands.

Examples of the Eurasian Educational Cooperation are the national Slavic universities, the EAEU Network University, branches of Russian higher educational institutions in countries of the Union, and the Eurasian Association of Universities (EAU). The EAU carries out its activity by means of organizing conferences, forums, and the development of

interuniversity connections and contacts. Since its foundation (1989) the EAU has held 13 congresses, including in Moscow, Astana and Minsk, at which the problems of national education, forming a uniform educational space, and cooperation between universities in the educational and scientific spheres were discussed (Eurasian Association of the Universities 2019).

Lomonosov Moscow State University has five branches in post-Soviet cities—Astana, Baku, Dushanbe, Yerevan, and Tashkent—where about 2500 students study and joint academic scientific research is conducted in Russian. About 500 professors of MSU visit these branches every year. One recent achievement of leading Russian higher education institutions is the creation of an open remote education national platform which can be spread over to EAEU countries as well. It should be noted that, according to forecasts by scientists, by the year 2030 there will be about 180 new professions and specialties in the Eurasian labor market, including Russia, and about 50 professions will become low demand. Therefore, the states of the Union need to realize general measures for preventing the problems of qualified personnel deficiency, or economic backwardness which will lead to a migration imbalance. It is possible to carry this out by means of modernization and the improvement of the higher education system, and by interaction amongst employers and higher educational institutions which will increase the compliance of educational services to the changing demands of the labor market (Eurasian Economic Commission 2018). The new systems of practical cooperation—being built today within the EAEU—demand thousands of qualified employees for their upkeep and should understand what the EAEU is and how it works. Therefore, for the preparation of such staff in the Eurasian space, a uniform educational standard and general educational policy are necessary (Torkunov 2019b).

On April 12, 2016, at the meeting of the Council of the Eurasian Association of Universities, the memorandum of the creation of the Network EAEU University—representing an association of higher education institutions of EAEU member countries, led by Tomsk State University, Lomonosov Moscow State University and St. Petersburg State Economic University—was signed (Eurasian Economic Commission 2018). The pilot project is the one-year master program “Eurasian Research”. The Gumilev Eurasian National University (Kazakhstan), Al-Farabi Kazakh National University, the Belarus State University, the Armenian-Slavic National University, and some other higher education institutions also participate in the project (The Rhythm of Eurasia 2016). On September 1, 2016, Tomsk State University started the joint network

master's program for training specialists in the field of Eurasian integration with the universities of Kyrgyzstan and Kazakhstan. On September 1, 2017, St. Petersburg State University started the network master's program "The Personnel for Eurasian Economic Integration" (Rusinov 2016). The project of the Eurasian Network University is actively promoted by the Russian part, but it has not received intergovernmental status so far, owing to lack of support from all the members of the EAEU, thus remaining a framework initiative for universities.

For the purpose of cooperation in the spheres of education, science, and finance, for the personnel, and for scientifically ensuring the effective interface of the national financial systems in the EAEU, Network Financial Institution functions include the Russian-Armenian (Slavic) university, the Belarus State Economic University, the Yeltsin Kyrgyz-Russian Slavic University, "The Financial Academy" (Kazakhstan), the Financial University under the Government of the Russian Federation, and St. Petersburg State Economic University. Within the NRU HSE, since 2017, the Eurasian sector has been working on a multipurpose division created within the Center of Complex European and International Research of the Faculty of the World Economy and World Politics of the NRU HSE, implementing educational programs and research. Also, there is the exchange of information, as well as scientific and practical events in the field of Eurasian Economic Integration. In the RANEPa there is the master's program "International Relations and Integration Processes in Eurasia", within which specialists are trained in the field of international relations, specializing in the Eurasian perspective, and leaders of digital transformation of the international social, political and economic processes are conducted (Eurasian Economic Commission 2018).

The Eurasian Information and Analytical Consortium (EIAC) is the association of expert and educational organizations of the member-states, and was created on April 17, 2018, on the basis of the association of assistance to the development of the analytical potential of the personality, society and state "Analytics", Financial University under the Government of the Russian Federation and the Institute of Scientific Information on Social Sciences in the RAS. The purpose of the EIAC is to promote the efficiency of the integration processes of EAEU countries on the basis of their information and analytical provisions (Eurasian Economic Commission 2018).

The Russian-Armenian (Slavic) University mentioned above was created by agreement between the Government of the Russian Federation

and the Government of Armenia in 1997. For the EAEU, the functioning of this university is an indicative model of the interaction of the two member countries of the Union, as it is a higher educational institution under joint jurisdiction of the Russian Federation and the Republic of Armenia and uses the status of a state university of Russia and Armenia. Training at the University is conducted in Russian, Armenian and other foreign languages, according to more than 60 specialties within eight institutes. Active research activities are carried out; it is home to centers of cooperation with employers, and international cooperation directed to the integration of the Russian Academy of Public Administration into world educational and scientific space is developing, in particular having signed cooperation agreements with more than 200 foreign higher education institutions from 40 countries (Russian-Armenian (Slavic) University 2019).

On April 13, 2016, at the initiative of the Ministry of Education and Science of the Russian Federation in Moscow, the first meeting of Ministers of Education and Science of the countries of the Union occurred. During this, all the parties (except for Kazakhstan) signed the Memorandum of Cooperation on educational, scientific, and technological cooperation within the Eurasian space; this provides the formation of the advisory boards in the field of science and higher education. However, this initiative has not gone any further than the declarations on intent in many respects, because of the position of Kazakhstan and, partly, Belarus, which shows their discontent in connection with the outflow of students to Russian higher education institutions which can have negative consequences for the labor market of the donor countries (June 2017). In connection with this, Nur-Sultan and Minsk counteract the inclusion of the regulations on scientific, technical, and educational cooperation in the EAEU Treaty.

In the academic and educational environment, there are discussions concerning the transition of the Eurasian states to the Bologna system: today four countries of the EAEU are participants of the Bologna Process, and Kyrgyzstan adopted the two-level higher education system in 2011 but has not yet become an official participant of the Bologna Process. That the system of values—the social, political and economic relations in the EAEU and the European Union where the Bologna Process has proved its efficiency—is significantly different and cannot but affect the scientific and educational complex, which also reflects these features. This issue is studied by Belarusian researcher L. Titarenko, who believes that the EAEU states need to approach the implementation of the Bologna

principles with care and to develop their own educational integration projects which would promote regional and national interests and not just “the interests of global development, in many respects only deepening the processes of social inequality both in economy, education and in science” (Titarenko 2018). This is connected with the fact that “the idea of the internationalization of the market of education advanced by western countries is an expression of the market needs of these countries in their advance to the non-western space (including the Post-Soviet countries)” (Titarenko 2018). This remark gains a special importance today as the EAEU countries share the principles of the Soviet education system, which has indisputable advantages. Furthermore, today one of the major tasks in this direction is the preservation of and adaptation to modern conditions of the best practices of both the organization of educational process and of interuniversity cooperation. Moreover, certain national specifics in the sphere of higher education, which should not be rejected as they are caused by deep welfare reasons, are characteristic of all the states of the economic space; with the proper adaptive approach it is not an obstacle for the harmonization of the EzaAEAEU’s educational systems. According to M. Lebedeva, it is important for the European and Eurasian educational spaces to intersect with each other “not to create tension between various educational models, but, on the contrary, to contribute to the mutual enrichment and development” (Lebedeva 2017).

7.6 CONCLUSION

The analysis of the modalities of scientific and educational cooperation in the EAEU shows that it is restrained by fears held by the political establishment “to dissolve” the sovereignty in integration. Objective social and economic problems are masked under propagandistic slogans about “the exploitation of the republics by Moscow” and the consequences of “the Soviet oppression”. There is a need to develop the ideology of Eurasian integration which will be able to explain the advantages of the common economic space. At this point a special role is played by the joint work of the partners of the program of scientific research into the social and humanitarian profile, which promotes a favorable perception of the ideas of new Eurasianism by the population. The ideological justification of the community and the reciprocity of member countries’ interests, when increasing cooperation between the universities, will allow the restoration of the humanitarian dimension of integration for the formation of the

common educational space and the harmonization of labor law (Tkachuk and Mityaev 2018).

Speaking about the difficulties of the current state of scientific and educational cooperation in the EAEU, it is possible to locate the meta-problem which is characteristic of the majority of spheres of integration cooperation. It is the lack of any exact mechanisms for studying concrete arrangements or ways of accounting for the interests of other member-states—this leads to delayed integration. Besides, it creates the serious threat of negative intervention by extraregional players who seek to achieve their own economic and political goals (Obukhov and Golovko 2018). Measures for strengthening support for integration projects by the population act as a guarantee of successful implementation of joint innovative projects, and have to be directly promoted by the scientific and technical cooperation which carries a real increase in the level and quality of the life of the population, as well as favorably influences the formation of a system of Eurasian values (Andronova et al. 2018).

The Eurasian Economic Union has enormous potential for strengthening the national economies of its member countries, accumulating volumes of the internal cooperation, and taking the lead at the regional and, later, global level. Today it is extremely important to provide an advanced integration processes and association competitiveness by means of increasing the knowledge intensity of the economies of EAEU member-states; this can be reached by effective scientific, technical, and educational cooperation, the adjusted transfer of technologies, the implementation of joint educational and scientific projects, and through carrying out research by mixed groups of scientists.

REFERENCES

- Andronova, I., Belova, N., Ganeeva, M., & Moseykin, Y. (2018). Scientific and Technical Cooperation Within the EAEU as the most Important Factor of the Loyalty of the Population of the Member Countries to the Integration Association and Its Attractiveness for New Members. *The RUDN Bulletin. Series: Sociology*, 1(18), 117–130.
- Eurasian Association of the Universities. (2019). *About the Association*. Retrieved from <http://www.eau-msu.ru/about>.
- Eurasian Economic Commission. (2018a). *Education*. Retrieved from http://www.eurasiancommission.org/ru/act/integr_i_makroec/dep_stat/econstat/Pages/education.aspx.

- Eurasian Economic Commission. (2018b). *In the Union the Eurasian Personnel Potential is Developed*. Retrieved from <http://www.eurasiancommission.org/ru/nae/news/Pages/10-05-2018-1.aspx>.
- Eurasian Economic Commission. (2018c). *Report on the Realization of the Main Directions of Integration within the Eurasian Economic Union*. Retrieved from <https://clck.ru/GDAVz>.
- Eurasian Economic Commission. (2018d). *Science and Innovations*. Retrieved from http://www.eurasiancommission.org/ru/act/integr_i_makroec/dep_stat/econstat/Pages/science.aspx.
- Eurasian Economic Commission. (2018e). *The Digital Agenda of the EEU to the Year 2025: Prospects and Recommendations. Review of the World Bank Group*. Retrieved from eurasiancommission.org/ru/act/dmi/SiteAssets/O63opWB.pdf.
- Eurasian Studies. (2018). *Eurasian Technology Platforms: Description, Directions, Financing Methods*. Retrieved from <http://eurasian-studies.org/archives/8263>.
- Federation Council of the Federal Assembly of the Russian Federation. (2015). *Scientific and Technical Cooperation as a Factor of the Eurasian Economic Integration*. Retrieved from <http://www.council.gov.ru/media/files/rAMxT-Gk0OVCzWQHTXaq4AwGba6Iplopl.pdf>.
- Gavrilyuk, A. V. (2015). A Transfer of Technologies in the Conditions of the International Economic Integration of the Countries of the EEU. *Public Administration. Electronic Bulletin*, 52, 101–119. Retrieved from <http://cyberleninka.ru/article/n/transfer-tehnologiy-v-usloviyah-mezhdunarodnoy-ekonomicheskoy-integratsii-stran-caes>.
- Glazyev, S. Y. (2012). To a Steady Growth Through a Fair World Economic Order. *The Russian Economic Magazine*, 2, 59–61.
- Heritage. (2016). *New Discoveries Will Change the Industrial Reality in the EAEU*. Retrieved from <http://nasledie.ru/?q=node/6583>.
- Jun, S. M. (2017). Education as the Sphere of Cooperation within the Eurasian Economic Union: Problems and Prospects. *Bulletin of Tomsk State University. History*, 50, 89–92.
- Kasatkin, P. I., Kovalchuk, J. A., & Stepnov, I. M. (2019). The Modern Role in the Formation of the Digital Wave of Kondratiev's Long Cycles. *Voprosy Ekonomiki*, 12, 123–140.
- Kofner, Y. (2019). Pragmatic Eurasianism: Four Approaches for Better Understanding the Eurasian Economic Union. Russian International Affairs Council. Retrieved from: <https://russiancouncil.ru/en/blogs/GreaterEurasiaEnglish/pragmatic-eurasianism-four-approaches-for-better-understanding-the-eur/>
- Lebedeva, M. M. (2017). International Political Processes of Integration of Education. *Education Integration*, 3(88), 385–394.

- Obukhov, A., & Golovko, N. (2018). Reconstruction of the World-System Approach in the Context of the Integration Processes in Modern Eurasia. *The Bulletin of the Novosibirsk State Pedagogical University*, 2(8), 173–185.
- Pak, E. (2020). Transit Potentials of Russia and Kazakhstan. *World Economy and International Relations*, 64(11), 132–138
- Rusinov, A. (2016). Cooperation on Education Within the Eurasian Economic Union (EAEU). In *The Ministry of Education and Science of the Russian Federation*. Retrieved from http://nic.gov.ru/Media/Default/Images/anons/inter-2016/PDF/25_A.C.Rusinov.pdf.
- Russian-Armenian (Slavic) University. (2019). Retrieved from <http://www.rau.am/rus/>.
- Sputnik. (2018). The EAEU Can Adopt a General Program of Scientific and Technological Cooperation. Retrieved from <https://ru.sputniknews.kz/politics/20181206/8379480/putin-otkrytie-vechs-prezidenty.html>.
- Terebova, S. V. (2010). A Transfer of Technologies as an Element of the Innovative Development of the Economy. *Problems of the Development of the Territory*, 4, 33–35.
- The Eurasian Economic Union Treaty. (2014). Retrieved from http://www.consultant.ru/document/cons_doc_LAW_163855/.
- The Rhythm of Eurasia. (2016). *'The Eurasian Network University' Will Train the First Experts in the Sphere of the EAEU Integration in 2017*. Retrieved from <http://www.ritm Eurasia.org/news%2D%2D2016-04-19%2D%2DDevrazijskij-setevoj-universitet-v-2017-godu-podgotovit-pervyh-specialistov-v-sfere-integracii-caes-23067>.
- The World Bank. (2017). *Research and Development Expenditure*. Retrieved from <http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS>.
- Titarenko, L. G. (2018). The Place and Role of the Integration of the Higher Education Systems in the International Cooperation of the EAEU Countries. *Big Eurasia: Development, Safety, Cooperation*, 1-2, 319–321.
- Tkachuk, S., & Mityaev, D. (2018). 'Soft Power' of Science and Education in the Development of the Eurasian Economic Integration. *Integration: Eurasian Ark. Economic Strategies*, 2, 182–188. Retrieved from http://www.inesnet.ru/wp-content/mag_archive/2018_02/es2018-02-182-188_Tkachuk_Mityaev.pdf.
- Torkunov, A. V. (2019a). Diplomacy of the Academic Community: The Past and the Present. *World Economy and International Relations*, 9(63), 22–28.
- Torkunov, A. V. (2019b). University as a Part of National Economy. *Voprosy Ekonomiki*, 12, 111–122.