

NEEDS ASSESSMENT

in the framework of development of Incentives policies for promoting Research Internationalization in Universities of Armenia and Moldova



COMRAT 2023









CONTENTS

List of abbreviations	2
Introduction	3
1. Methodology	3
2. Goals & Objectives	4
3. R&I landscape	5
3.1. Review of the RDI landscape of the Republic of Moldova	5
3.2. Legislative Framework	8
3.3. Institutional Framework	9
4. Survey Data Collection	12
4.1. Overview of R&D activities	12
4.2. Summarizing respondents' opinions	14
4.3. SWOT analysis	19
4.4. Force Field analysis	20
5. Priorities and actions	20
Conclusions & Recommendations	21
References	24
Annexes	25
Annex 1. Questionnaire "Expanding opportunities for scientific collaboration internationally"	25
Annex 2. Workshop program	26

List of abbreviations

CSU	Comrat State University
ERA	European Research Area
GII	Global Innovation Index
HE	Higher Education
HEIs	Higher Education Institutes
MECR	Ministry of Education Culture and Research
MEI	Ministry of Economy and Infrastructure
NARD	National Agency for Research and Development
R&D	Research and Development
RDI	Research, Development and Innovation
R&I	Research and Innovation
PTS	Professorial- teaching staff
PSF	Policy Support Facility











Introduction

Internationalization of research activity generates value for Research, Development and Innovation (RDI) and Higher Education (HE) in general and aims to enhance quality and improve the dissemination of results¹.

The European Research Area (ERA) is the basis of Europe's emerging "knowledge society", which mobilizes science, education, training and innovation to achieve the EU's economic, social and environmental goals. The Republic of Moldova became the first Eastern Partnership country to receive the status of a state associated with the seventh EU Framework Program for Research, Technological Development and Demonstration Activities (2007-2013)², and subsequently with the EU Framework Program for Research and Innovation (2014- 2020) "Horizon 2020" and Horizon Europe.

This has significantly expanded the opportunities for domestic actors to have access to European research projects. In view of this, the entry of higher education institutions of the Republic of Moldova is not just a necessity, but one of the key conditions for the internationalization of all higher education.

This document serves as the basis for developing a policy for Incentives policies for promoting Research internationalization at Comrat State University (CSU), as well as assisting researchers and research groups, heads of departments and university administration in developing this type of activity on the documents (Table 3).

Principles of international collaborations:

Transparency

Openness, integrity and ethics as the basis for international cooperation

Effectiveness

Mutual benefits (short-term and long-term) from cooperation

Outreach

Involvement of all academic staff and stakeholders in RDI processes

1. Methodology

The research methodology includes a number of stages:

Stage 1. Collection and analysis of data relating to the legislative and institutional framework for organizing and managing the internationalization of research activities of academic staff of universities and other R&D objects at the international level (including the experience of Linköping University), as well as national.

Stage 2. Analysis of existing documents at Comrat State University (CSU), coordinating the process of internationalization of research activities of teaching staff.

²Seventh framework programme of the European Community for research and technological development including demonstration activities(FP7). URL: https://cordis.europa.eu/programme/id/FP7









¹ Shih, T., Gaunt, A. & Östlund, S. (2020). Responsible internationalisation: Guidelines for reflection on international academic collaboration. Stockholm: STINT, 2020.



- **Stage 3.** Analysis of the current situation regarding the internationalization of research activities of the teaching staff (teaching staff) at CSU, which includes: conducting a survey of teaching staff, SWOT analysis, Force Field analysis.
- **Stage 4.** Identification and discussion of directions for the development of processes to promote the internationalization of research during seminars and consultations with the university leadership.
- **Stage 5**. Development and approval of a Policy to stimulate the promotion of internationalization of research at universities in Armenia and Moldova.
- **Stage 6**. Implementation, monitoring and evaluation of the implementation of the Policy to stimulate the promotion of internationalization of research at universities in Armenia and Moldova.

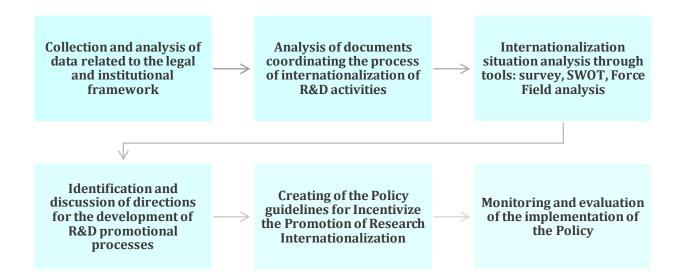


Figure 1. Needs assessment methodology

2. Goals & Objectives

Purpose of Needs assessment

Analysis and assessment of the need to develop incentive policies and recommendations to promote research internationalization processes

Needs assessment tasks

- 1. Conduct an analysis of the institutional framework at the R&D internationalization (Linköping experience), national and CSU level.
- 2. Investigate the current situation at CSU using strategic management tools.
- 3. Identification of directions for the development of processes to promote the internationalization of research.











3. R&I landscape

3.1. Review of the RDI landscape of the Republic of Moldova

Based on the latest population data (2,597,107 in 2021 compared to 2,869,226 in 2014), the World Bank recently changed the position of the Republic of Moldova from the group of lower-middle income to the group of upper-middle income countries³. The bubble chart shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation n performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations⁴.

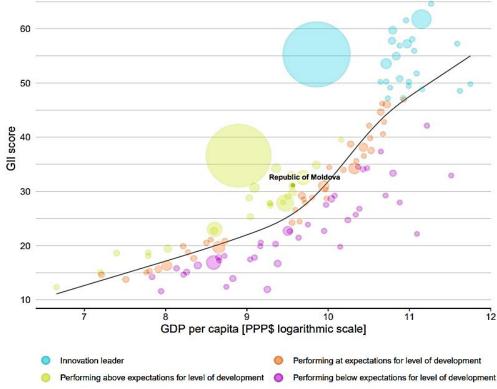


Figure 1. The positive relationship between innovation and development

According to the Global Innovation Index 2022 data, the Republic of Moldova ranks <u>56th among the 132 economies</u> featured in the GII 2022 and 78th in terms of contributions to innovation, which is higher than last year. However, despite low spending on R&D, in 2022 the Republic of Moldova shows better results in terms of contributions to innovation - 46th place. The position is higher than in 2021 and 2020. The trend line between income levels (GDP per capita) and innovation performance indicators (GII) shows the expected performance of innovations depending on the level of income⁵. It is necessary to note a paradoxical situation - the RM produces more innovation outputs relative to its

⁵ Global Innovation Index 2022. URL: https://www.wipo.int/global innovation index/en/2022/









³ New World Bank country classifications by income level: 2021-2022. URL: https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2021-2022

⁴ Global Innovation Index 2022. URL: https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2022/md.pdf



level of innovation investments, that is, they are effectively translating costly innovation investments into more and higher-quality outputs.

GIIYR	GII	Innovation inputs	Innovation outputs
2020	59	75	48
2021	64	80	54
2022	56	78	46

Note: The highest possible ranking in each pillar is 1.

Figure 2. Rankings for the Republic of Moldova (2020-2022)

The Republic of Moldova performs above the upper-middle-income group average in four pillars, namely: Human capital and research; Market sophistication; Knowledge and technology outputs and, Creative outputs. The Republic of Moldova performs best in Creative outputs and its weakest performance is in Institutions. The table below gives an overview of the indicator strengths and

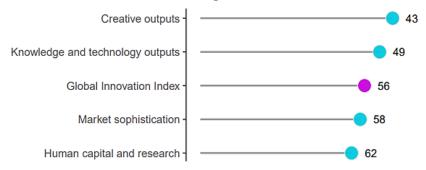


Figure 3. GII pillar ranks for the Republic of Moldova.

weaknesses of the Republic of Moldova in the GII 2022. The lack of science- business collaboration exploiting innovations is confirmed by the scores of both the Global Competitiveness Index and Global Innovation Index. Indeed, multi-stakeholder collaborations and university/industry collaborations are very modest.

	Strengths	Weaknesses				
Code	Indicator name	Rank	Code	Indicator name	Rank	
2.1.1	Expenditure on education, % GDP	13	1.3.1	Policies for doing business	107	
2.1.2	Government funding/pupil, secondary, % GDP/cap	23	2.3.3	Global corporate R&D investors, top 3, mn USD	38	
4.1.3	Loans from microfinance institutions, % GDP	5	2.3.4	QS university ranking, top 3	72	
4.3.1	Applied tariff rate, weighted avg., %	14	3.2.2	Logistics performance	106	
6.1.3	Utility models by origin/bn PPP\$ GDP	1	4.3.3	Domestic market scale, bn PPP\$	118	
6.2.1	Labor productivity growth, %	19	5.1.3	GERD performed by business, % GDP	74	
6.3.4	ICT services exports, % total trade	13	5.2.1	University-industry R&D collaboration	101	
7.1.2	Trademarks by origin/bn PPP\$ GDP	8	5.2.2	State of cluster development and depth	114	
7.1.4	Industrial designs by origin/bn PPP\$ GDP	13	5.3.5	Research talent, % in businesses	67	
7.3.4	Mobile app creation/bn PPP\$ GDP	22	7.1.3	Global brand value, top 5,000, % GDP	77	

Figure 4. Strengths and weaknesses for the Republic of Moldova











The National Bureau of Statistics of Moldova reports that, in 2022, research and development activities were carried out in 67 organizations, including 39 research institutes and centers, 18 higher education institutions and 10 other types of organizations. About 75% of the total number of organizations carrying out research and development activities in 2022 were state-owned (50 government agencies). The basis of the quality of any education and science is personnel. Let's consider how many researchers Moldova has in scientific areas.

Table 1. Employees from the research and development activity by occupation, in 2021-2022

	People				Structure, %			
	20	021	20	022	2021		2022	
	Total	including	Total	including	Total	including	Total	including
		women		women		women		women
Total	4,157	2,150	3,889	2,023	100	100	100	100
researcher	2,920	1,459	2,809	1,429	70.2	67.9	72.2	70.6
technicians	245	172	173	125	5.9	8.0	4.4	6.2
auxiliary	561	291	430	248	13.5	13.5	11.1	12.3
staff								
other	431	228	477	221	10.4	10.6	12.3	10.9
categories								

Source: Research and development activity in 2021. URL: https://statistica.gov.md

In the period 2020-2021, most researchers worked in the field of natural sciences (32.2%), and the fewest researchers worked in the field of humanities (8.5%). At the same time, in 2021, the share of researchers from the natural sciences (by 1.7 p.p.), engineering and technical sciences (by 0.6 p.p.), and medical sciences (by 0.2 p.p.) decreased), and the share of researchers from the fields of social sciences (by 1.9 p.p.), agricultural and human sciences (by 0.3 p.p.).

Table 2. Researchers by scientific fields, 2020-2021

	Researchers, pers.			Researchers, %			ı	
	20	20 г	2021 г		2020 г		2021 г	
	Total	Incl.	Total	Incl.	Total	Incl.	Total	Incl.
		women		women		women		women
Researchers - total	2907	1430	2920	1459	100	100	100	100
Natural sciences	985	487	941	469	33,9	34,0	32,2	32,1
Engineering sciences	351	71	336	69	12.1	5,0	11,5	4,7
Medical sciences	402	251	396	240	13,8	17,6	13,6	16,5
Agricultural sciences	453	217	464	226	15,6	15.2	15,9	15,5
Social sciencies	477	278	535	323	16,4	19,4	18,3	22,1
Humanitarian sciences	239	126	248	132	8,2	8,8	8,5	9,1

Source: Research and development activity in 2021. URL:https://statistica.gov.md

The proportion of women researchers is higher than that of men in the following fields - medical sciences (60.6%), social sciences (60.4%) and humanities (53.2%), a minority in three other fields - natural sciences (49.8%), agricultural (48.7%) and engineering sciences (20.5%).











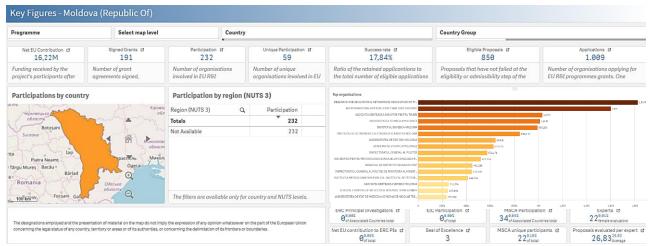


Figure 5 (a). EU Funds statistical data for Republic of Moldova, total million euro

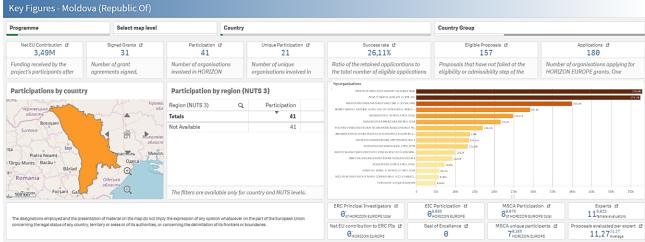


Figure 5 (b). HORIZON EUROPE statistical data for Republic of Moldova, total million euro Sourse: https://dashboard.tech.ec.europa.eu/

Funding received by the project's participants from EU funds 16.22 mil. Euro for 191 grants (Fig. 5a). 3,5 million euro received under the HOROZON EUROPE program, 31 applications signed. The successful rating is quite high and amounted 26% (Fig. 5b).

3.2. Legislative Framework

1. Code on Education of the Republic of Moldova (Monitorul Oficial, 2014, No. 319-324, Article No. 634).

This Code establishes the legal basis for relations to the planning, organization, functioning and development of the education system in the Republic of Moldova. This document includes Chapter IV. Scientific research in higher education, article 116. Scientific research, which regulates:

- 1. In HEI providing higher education programs, RDI and artistic and creative activities are carried out for the purpose of producing knowledge and professional training of highly qualified specialists.
- 2. In HEI, RDI activities are carried out within departments, laboratories and other own units and/or in partnership with other institutions, business entities or public authorities.











3. The procedure for organizing and conducting scientific research in HEI is regulated by the university charter, regulations on the organization and functioning of the doctoral school, doctoral programs approved by the Senate, and other regulations.

2. Law of the Republic of Moldova of November 17, 2022 No. 315 On approval of the National Development Strategy "European Moldova - 2030".

The National Development Strategy "European Moldova – 2030" is a long-term strategic vision document that defines the directions of development of the country and society and adapts to the national context the priorities, goals, indicators and objectives of the international obligations assumed by the Republic of Moldova.

This strategic document includes Priority 5.26. Policy in the field of education, scientific research, youth and sports, which in turn regulates:

- 1) Development and implementation of a mechanism for the balanced use of resources allocated for fundamental and applied research.
- 2) Gradual increase in the amount of funds allocated for research and development by 0.1 percent of GDP annually.
- 3) Creating conditions for the development and strengthening of connections between the research and business environment. Development and implementation of a regulatory and financial framework for the development of technological entrepreneurship and technology transfer, including by stimulating the creation of start-ups.

3. Resolution on approval of the Development Strategy "Education 2030" and the Program for its implementation for 2023-2025 (No. 114 of March 7, 2023).

The Development Strategy "Education 2030" includes Section 8 "Current scientific research for introducing innovation and improving the quality of education", Main Goal 8. Promoting innovation and transformation in education through the development of scientific research. Where the following priority areas of activity are highlighted:

- 1) Development and integration of education and research in the field of higher education to meet the needs of the country's socio-economic development.
- 2) Increasing the role of scientific research from the point of view of sustainable development of the education system.
- 3) Ensuring the international competitiveness of research and higher education through joint scientific projects, mobility and attracting doctoral students from abroad.
- 4) Consolidation of scientific research within higher education to synchronize teaching and research activities; coordination of education with research and the labor market; ensuring the quality of scientific research and training of human resources.

3.3. Institutional Framework

The main legal act governing the sector – the Code on Science and Innovation, in force from 2004, was modified by the Law no. 190 adopted in 2017, and MECR became the body responsible for elaborating











the state policy in the fields of R&I⁶. One year later, the Government of the Republic of Moldova established the National Agency for Research and Development (NARD), as the main public funder of research and innovation activities.

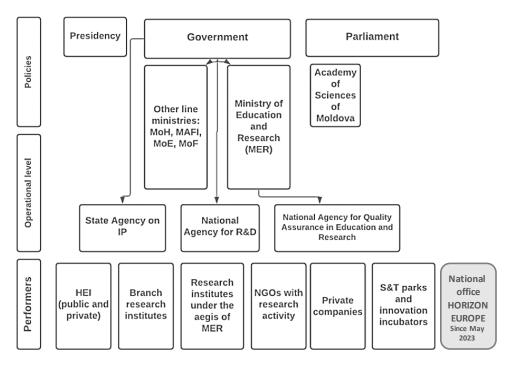


Figure 6. Levels of R&D activity management.

The Academy of Sciences of Moldova (ASM), which had previously been the main policy-making and research body and managed most public R&D funds, became a strategic advisory body to the government (Figure 1). 19 research institutes that were previously part of the ASM were transferred under the auspices of MEKR. On March 9, 2020, the Ministry of Education, Culture and Research (MECR) of the Republic of Moldova requested PSF support on three topics:

- Topic 1: Policy for the development and effective use of public R&I infrastructures;
- Topic 2: Review of the funding system for public research;
- Topic 3: Measures aimed at strengthening the links between research and business

The reform of the Moldovan R&I system is still on-going and the new PSF activity is expected to feed into the design of future R&I policies. The next R&I National Programme is planned to cover the 2024-2027 period. It will outline a complex set of activities designed to address the deficiencies identified and provide the conditions needed to increase the effectiveness, relevance and international competitiveness of Moldovan R&I⁷.

⁷ Support to Moldova on reforms in the public R&D sector. Background report. URL: https://op.europa.eu/en/publication-detail/-/publication/d493e387-7e5e-11ec-8c40-01aa75ed71a1/language-en/format-PDF/source-250629061









⁶ The Law No. 190 from 21 September 2017,

https://www.legis.md/cautare/getResults?doc_id=101618&lang=ro



Institutional framework

Table 3 presents existing strategic documents of KSU that contain or reflect policies in the field of internationalization of research activities.

Table 3. Strategic documents in the field of internationalization of R&D activities.

Document	Description
1. Strategic development program of Comrat State University 2023-2027 (Approved by the decision of the CSU Senate dated June 22, 2023)	The strategic development priorities reflected in this document include goal No. 6: "Internationalization of scientific, educational and innovative activities," which regulates the development of academic mobility programs; attracting foreign scientific and pedagogical workers to carry out teaching activities at CSU; internationalization of scientific and innovative activities of the University.
2. Internationalization strategy of Comrat State University for 2020-2025. Approved by the decision of the CSU Senate dated 07/09/2020	Approved by the decision of the CSU Senate dated July 09, 2020, the CSU internationalization strategy is aimed at using the best international experience to improve the quality of educational and research activities, and increase competitiveness in the international scientific and educational spaces. Priority 3 "Professional development of teaching staff": 1. Increasing the number of teaching staff through the "Visiting Professor" mobility system 2. Encouraging employees to conduct joint research 3. Encouraging employee participation in international conferences,
	symposia, seminars and other events. 4. Organization of international scientific conferences and seminars 5. Growth of scientific publications in rating journals SCOPUS, Web of Science. 6. Increasing the number of joint publications with foreign university scientists.
3. Regulations on the management of research activities and support of talents (Approved by the decision of the CSU Senate dated February 18, 2020)	The Regulations determine the procedure for planning, organizing, conducting and financing fundamental, applied research, development work and research services by structural divisions of CSU. Chapter VII. "International cooperation in the field of research activities": - joint research and development of projects; - supply and sale in foreign markets on the basis of contracts of its scientific and technical products; - sale of licenses, know-how and other intellectual property in accordance with the established procedure; - attracting foreign investment in the implementation of scientific and innovative projects; - mutual exchange, training and internship of scientific personnel; - holding joint international conferences, seminars, business meetings; - joint publications based on research results.
4.Guide to attracting foreign teachers and researchers to Comrat State University (Approved by the decision	The main goal is to attract foreign researchers to develop new directions and methodological approaches, improve the effectiveness of scientific and publication activities, and increase the recognition and image of CSU. Chapter II. "Teaching and/or research activities of foreign specialists,











of the Senate of CSU dated	2.2. The status is "Research" activity, which corresponds to the
02/18/2020)	following types of activities of foreign specialists:
	- Conducting scientific research at the request of CSU, including the
	preparation of joint publications in specialized journals in the Republic
	of Moldova and abroad.
	- Implementation of fundamental and (or) applied research projects;
	- Participation in conferences, seminars, symposiums, round tables, etc.
	as a speaker.
5. Action plan of Comrat	University for integration in the European Research Area (ERA)
State University for	The priority of this plan is to permanently strengthen the research
integration in the	potential of the university, adapt to changing external and internal
European Research Area	conditions, maintain and increase the competitive advantages of the
(ERA) (Approved by the	university.
decision of the CSU Senate	1 priority regulates:
dated 02/18/2020)	1. Diversification of access to international and national databases for
dated 02/10/2020j	researchers
	2. Modernization of infrastructure and equipment affecting research
	and scientific processes at CSU, including remote collaboration through
	research networks.
	3. Expanding joint research partnerships, supporting and promoting
	the mobility of researchers, strengthening relations with foreign
	research centers. Identification of potential partners in the
	development of international projects.
	4. Ensuring standards and labor protection, social protection in
	accordance with national legislation.
	5. Providing links between education, research, media and the labor
	market.
	6. Stimulating the participation of CSU researchers in projects funded
	by the EU or other international, national and regional organizations.
	7. Signing new agreements on the mobility of researchers, research
	internships with universities, research institutions.
	8. Stimulating the participation of scientific researchers in educational
	programs, including distance learning.
	9. Organization of regular seminars, round tables for sustainable
6 Codo of University	development of research skills.
6. Code of University	Defines universal ethical values and principles for CSU employees:
Ethics of KSU (Approved	• Freedom through knowledge,
by the decision of the KSU	• Dignity as the elevation of oneself through the elevation of others,
Senate dated January 26,	Personal development as a goal and a unique ability of a person.
2012)	

4. Survey Data Collection

4.1. Overview of R&D activities

Scientific research at the University is carried out: by the teaching staff of the university in accordance with individual plans for scientific work; by students in the course of completing coursework and projects, final qualifying works (diploma projects), research practices and research work, other research work provided for by educational programs; doctoral students in accordance with individual



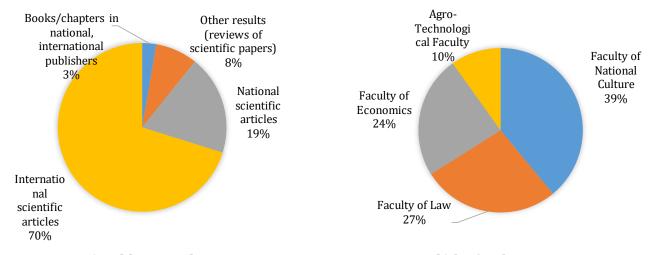








plans for their preparation, as well as in their free time from study (work) at departments and scientific departments.



a) publications by type b) by faculties Figure 7. Scientific publications CSU academic staff for 2022

Research confirms the positive impact of international research projects on both the quantity and quality of publications. Internationalization can also stimulate knowledge exchange, scientific participation, which expands horizons and leads to the development of new approaches. An integral part of the internationalization process is academic mobility - the participation of students, teachers and staff in exchange programs and various aspects of the university's international activities. Academic mobility of CSU teachers and students is implemented through cooperation programs with partner universities and international scholarship programs, such as: Erasmus+, DAAD, MEVLANA, etc.

Table 4. Scientific publications CSU academic staff for 2022

Faculty	Number of books/ chapters in national, intern. publishers	Number of scientific articles	Methodical works courses	Other results (reviews of scientific papers)	TOTAL
Faculty of National Culture	Books – 1 Monographs - 1	9 national 102 international	14	19	146
Faculty of Law	Books – 1 Monographs - 1	11 national 86 international	1	1	101
Faculty of Economics	Books – 1 Monographs - 4	23 national 45 international	12	5	90
Agro- Technological Faculty	Monographs - 1	28 international	3	5	37
TOTAL	10	71 national 261 international	30	30	402

The largest number of outgoing short-term and long-term teaching mobility occurred in 2019 - 45 people, and the smallest in 2010-2011 with 7 mobility. Incoming mobility of teaching staff is significantly lower. So, in the period 2018 – 2020 there were 15 people. The experience of expanding











the international activities of a regional university indicates the emergence of a new trend in organizing and ensuring international cooperation. Currently, CSU has signed 66 cooperation agreements with universities in countries such as: Republic of Turkey, Ukraine, France, Poland, Sweden, USA, Russian Federation, etc.

4.2. Summarizing respondents' opinions

The survey of teaching staff on the identified problem was carried out through an anonymous online survey, subsequent processing of personal data, and drawing conclusions on the study. The distribution of the questionnaire and the survey process took place between October 1 and October 10, 2023. Of the 120 full-time employees, 40% responded, of which 23% were male and 77% were female (Figure 7a). The main number of respondents were 35% representatives of the Faculty of National Culture, 33% - Faculty of Economics, 19% - Faculty of Law and 13% - Faculty of Agricultural Technology (Fig. 7b); 50% of respondents have work experience of 21 or more years, 16-20 years - 19% of respondents, 9-15 years - about 17%, the rest have work experience of up to 8 years (Fig. 7c).

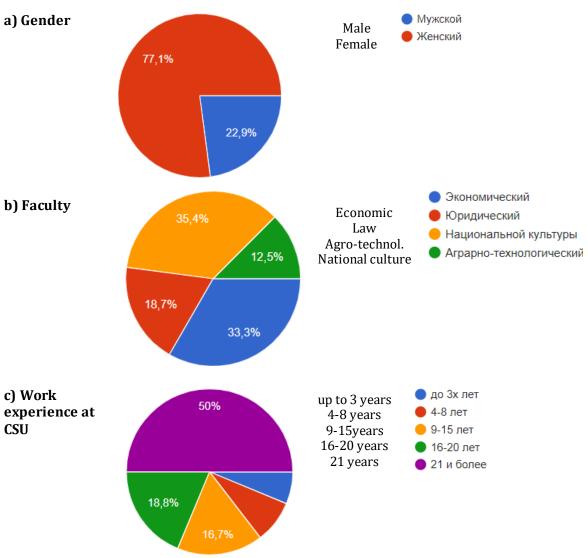


Figure 7. Characteristics by gender, work experience and faculties.











 Assess your level of personal involvement in research projects at the Regional, National and International levels.

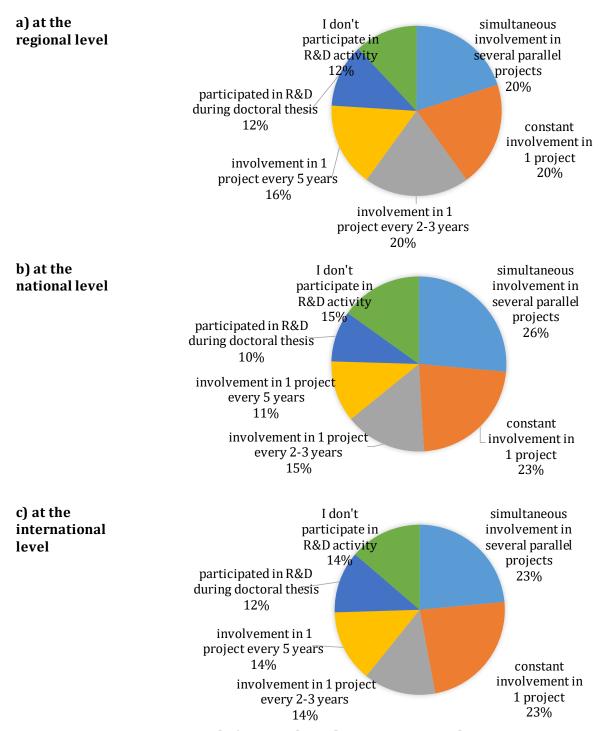


Figure 8. Level of personal involvement in research projects

From 12 to 15% of respondents are not engaged in research activities, 10-12% conducted research during the development and defense of their doctoral work. Thus, a quarter of teaching staff are not engaged in educational activities on a permanent basis. From 20 to 26% of teaching staff are simultaneously involved in several projects at the regional, national and international levels. From 20











to 23% teaching staff permanently included 1 project; from 11 to 16% of teaching staff are involved in at least 1 project every 2-3 years; 11-16% of teaching staff are included in project activities once every 5 years.

• Rate the overall degree of participation of CSU employees in international research projects (1-low level, 10- high level)

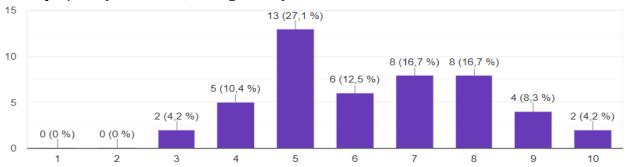


Figure 9. Overall degree of participation of CSU employees in R&D

The level of participation of CSU employees in international research projects is rated at an average of 6.3 points.

What are the limitations to the participation of CSU employees (faculty) in international research activities exist?

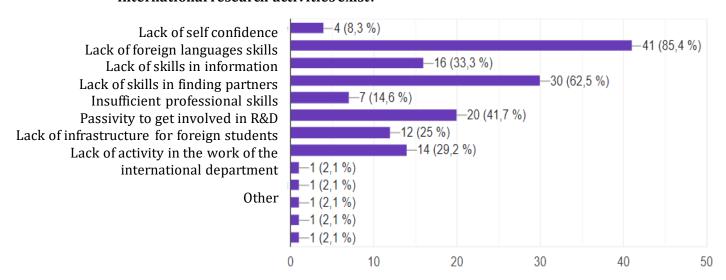


Figure 10. limitations to the participation of CSU employees in R&D

85% of respondents noted a low level of knowledge of foreign languages (here it is necessary to note the specifics of the region, namely that there are officially 3 languages in the region: Gagauz, Romanian and Russian, plus about 20% of the population also know Bulgarian). This fact in itself is a high language load. 62% noted a low level of skills in attracting partners at the international level, 42% noted the passivity of the teaching staff in the area of activity, about 40% noted the passivity of the work of the international department.

The following are also listed as reasons limiting the research activities of teachers:











- Teachers are overloaded with lecture hours (800-900 hours per year), lack of payment for scientific activities (except for the hours allocated to work with graduate students).
- For the most part, teachers with an academic degree write articles, monographs, and rarely conduct research due to their workload with other activities.
- More time is devoted to the work of various types of accreditation commissions, which are bureaucratic in nature and do not leave time for research work.
- Also, not everyone can do science; there are people who can do it, but there are practitioners whose contribution may be different. You shouldn't expect everyone to do science.
- Universities cannot provide the same level of scientific development as research institutes (previously subordinate to the Academy of Sciences) do.
- Research staff are engaged only in science, and we also engage in academic lecture activities, hence the low rates of involvement in science.

7. What factors, in your opinion, contribute to the development and promotion of research activities of university staff at the international level?

Collaborative research within international groups
Offering intellectual property results
Mutual exchange, training and internship
Conducting joint international conferences
Improving English language skills
Development of intercultural communication skills
Increase in the number of foreign students
Synchronization of educational programs
Joint publications in scientific publications
Other

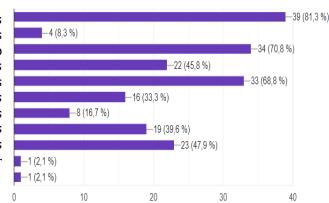


Figure 11. Factors contribute to the development of research activities at the international level

The main factors that contribute to the development and promotion of research activities of university staff at the international level: 82% - collaborative research within international groups; 71% - mutual exchange, training and internship; 69% - Improving English language skills

- Briefly describe your proposals for developing the process of involving university staff and students in research activities at the international level.
- ✓ conducting free English language courses for employees, printing research with an emphasis on English, systematically conducting training and information seminars on the possibilities of updating research, intensifying the activities of the international department
- ✓ Participation in joint research projects. Opening of a Doctoral School in a Consortium with foreign universities
- ✓ Publicity
- ✓ Comrat State University needs to establish a center together with foreign universities or scientific institutes, where teachers and students will have the opportunity to participate in international scientific projects
- ✓ Awareness of the possibility of participating in potential projects











- ✓ Necessary. Try to speak English, be more active and look for partners to participate in projects at various levels. And most importantly, the administration must look for techniques and ways to motivate CSU employees.
- ✓ First, CSU employees must be involved, and then students
- ✓ Involve more teachers in international projects. Conduct seminars to teach how to search for available projects and partners
- ✓ Connecting to the Horizon program
- ✓ Joint research and development of projects as part of international research groups I agree with this proposal, holding events at various levels for young researchers.
- ✓ teach how to find the necessary information about research projects/opportunities for participation in such projects; conduct an information seminar to help understand the importance of participating in scientific activities at the international level, indicating all the advantages of this activity.
- ✓ Implement mini-grant programs within the university for research
- ✓ Studying foreign languages, communication skills, active work within the framework of CSU.
- ✓ Conducting courses on the methodology of competent writing of projects, available to students and teachers.
- ✓ It is necessary to develop the university infrastructure in the field of science and innovation, research centers and laboratories, and stimulate the participation of students and masters in scientific research.
- ✓ Trainings at the national level with the involvement of teachers
- ✓ Need information and support from the administration
- ✓ Inform all CSU employees about all opportunities for participation in project activities (and at the international level in particular). As a motivation for inclusion, distribute finances in proportion to the real contribution of each participant in a specific project.
- ✓ More internships.
- ✓ Create and subsequently develop a system for advanced training and professional training of employees in international organizations and educational institutions abroad
- ✓ Opening of scientific laboratories; development of applied research to solve regional and national problems in education, economics and other areas of life.
- ✓ Creation of a special center for developing the process of teaching staff involvement
- ✓ Conducting seminars on publishing articles in Scopus. 2. Inclusion in projects of an item on publishing articles in Scopus. 3. Search for partners who have experience in writing such articles for joint cooperation. 4. Establishment of partnerships that would allow CSU to be invited to other projects. 5. Recommend to students and profs. members to subscribe to Facebook groups where they are looking for partners. 6. Fill out your orcid profiles, Google Scholar for visibility, as partners analyze publications, the possibility of joint research.
- ✓ Possible general meetings at CSU and discussion of plans and opportunities, exchange of experience and ideas, conducting research at the department level with other universities
- ✓ Of the four international projects in which I participated, only one was offered at the university, and then, at the final stage, without travel.
- ✓ When participating in international projects, I am not involved in national and regional projects.











4.3. SWOT analysis

Based on a survey of opinions of KSU teachers, analyses is tools were used: SWOT analysis and Force Field analysis. The purpose of SWOT analysis is to formulate the main directions of development of a university through systematization of available information about the strengths and weaknesses of the university, as well as potential opportunities and threats.

Table 5. SWOT analysis of opportunities for the development of internationalization of education at the university

STRENGTHS	WEAKNESSES
 Experience of university participation in the implementation of academic mobility projects and within the framework of cooperation agreements Implementation of the academic mobility program for teachers and students University experience in implementing international projects Training at the university for foreign students Availability of educational programs that are implemented in English Availability of international accreditation for the specialty "Law" Active involvement of students in the process of university management and decision-making. Increasing the recognition of KSU at the national and international levels. Linguistic closeness with Turkic-speaking 	 ✓ Small proportion of university staff who speak English ✓ Lack of joint educational programs, double-diploma education programs, programs taught in English with the involvement of foreign specialists ✓ Low number of foreign students ✓ Limited financial capabilities of the university when implementing academic mobility and international projects ✓ Lack of a system for recording participation in scientific events, publication activity of teaching staff abroad ✓ Weak cooperation in the field of research activities with foreign universities ✓ Weak use of social networking channels to shape the image of the university, especially in English and Romanian languages ✓ Weak motivation of teaching staff to participate in international projects
 Status of a candidate country for accession to the EU Development of cross-border cooperation programs with universities in Romania and Ukraine Possibility of flexible formation and updating of educational programs Financial accessibility of educational programs at KSU for foreign citizens Increasing image and status through updating content on the KSU website, active activity in social networks 	Lack of an established system for adapting academic mobility programs Globalization of education and increased competition between universities at the national and international levels Declining birth rate and increasing outflow of young people Demotivation to study among young people due to the deterioration of the economic and political situation in the region and in the Republic of Moldova in general Outflow of qualified teachers and specialists outside the RM











4.4. Force Field analysis

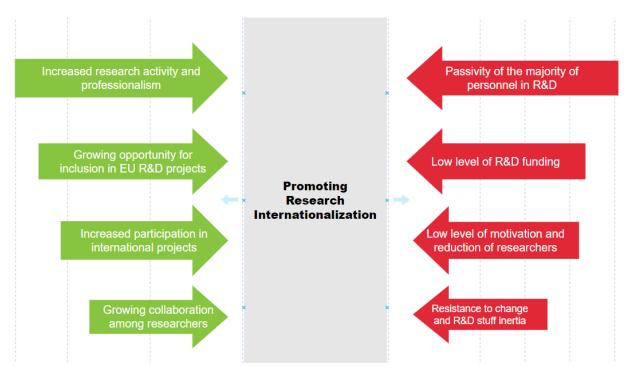


Figure 11. Helping and hindering forces.

5. Priorities and actions

SWOT analysis allows us to identify four priority areas for promoting the internationalization of CSU:

PRIORITY 1. Formation of a friendly and open environment for the development and promotion of internationalization

(open exchange of information on international cooperation, development of personnel and infrastructure for accepting foreign students, increasing the number of exchanges of foreign students and teachers)

PRIORITY 2. Development of transferable skills and research ethics of academic staff

(stimulating teachers and students to learn English, developing communication skills and intercultural communication, conducting advanced training courses, hiring and promoting staff taking into account experience in international projects, increasing the number of publications in cited publications, etc.)

PRIORITY 3. Development of cooperation and networking

(synchronization of curricula, development of double and joint degree programs, active participation in events of the national office of Horizon Europe, SMM, etc.) increasing the recognition of the university at the national level - as a resource and connection to interaction at the international level).











Conclusions & Recommendations

Conclusions

It is necessary to apply an integrated approach to the development of internationalization of research: at the systemic, institutional and local levels, which involves two directions:

- √ "internationalization at home"
- √ "internationalization abroad".

Table 4.1. Instruments of "internationalization at home"

Teaching and learning	Research	Engagement	Other services/activities
Internationalisation of the curriculum (integration of international perspectives, international relevance)	International recruitment of researchers	Support for the engagement of international students in the community/society	Encouraging the acquisition of language skills
Study abroad opportunities and study visits	Organisation of international research events/conferences	Collaboration in international partnerships/networks	Provision of specialist or tailored support for international students
Development of courses attractive to international students	Collaboration of international researchers in the research activities/projects developed in the institution		Improvement of current provision of international student facilities
English-language teaching			Encouragement of international students to participate fully in the social and cultural life of the university
International foundation programmes			Compliance with national and European legislation
Exchange of curriculum resources and learning materials			Commitment to equality and diversity
Distance and e-learning programmes			Implementation of the Lisbon convention for the recognition of foreign qualifications
International recruitment of staff (teaching and research) and of students			Study skills for international students
Embracing different pedagogical cultures to ensure that teaching is sensitive to students' educational contexts			
Staff development on intercultural understanding			











Table 4.2. Instruments of "internationalization abroad"

Teaching and learning	Research	Engagement	Other services/activities
Recruitment of international students	Research co-operations and partnerships	Partnerships with business	Establishment of branch centres abroad
Staff and student exchange programmes	Participation in EU research projects	Development of international companies	Establishment of branch campuses abroad
Joint programmes	Publications with international partners	Overseas consultancy and development	Establishment of new institutions in collaboration with local providers
Joint faculty appointments		Strategic alliances and partnerships with overseas institutions	Development of regional offices (for market intelligence and permanent presence of the university abroad)
Development of alumni networks			
Opportunities for international volunteering, work or study placements			
Exchange of curriculum resources and learning materials			
Distance and e-learning programmes			

Source: Adapted from Middlehurst, R. (2008), "Developing institutional internationalization policies and strategies: An overview of key issues", in M. Gaebel et al. (eds.), Internationalization of European Higher Education: An EUA/ACA Handbook, RAABE, Berlin, pp.1-24.

Recommendations

Proposed document structure "Incentives policies for promoting Research Internationalization at CSU (guidelines towards operationalization of activities related to research internationalization) based on document: "*Responsible internationalisation: Guidelines for reflection on international academic collaboration experience*" and contains the following steps ⁸.

REASON FOR PARTNERSHIP INTERACTION AT THE INTERNATIONAL LEVEL

- ✓ Why does the collaboration take place and which effects are expected in the short and long term?
- ✓ Is the exchange balanced (e.g. regarding access to funding or level or knowledge)?
- ✓ Is there a plan or objective for further development of the collaboration over time?
- ✓ How is the project funded, and what are the chances of completing the project?
- ✓ Does the way the project is funded entails risks regarding independence, integrity, ethics, or academic freedom?

⁸ Shih, T., Gaunt, A. & Östlund, S. (2020). Responsible internationalization: Guidelines for reflection on international academic collaboration. Stockholm: STINT, 2020. URL: https://www.stint.se/wp-content/uploads/2020/02/STINT_Responsible_Internationalisation.pdf











- ✓ Was the collaboration preceded by informed discussions between all parties on its opportunities and risks?
- ✓ Has the responsible head at a level appropriate to the project's ambitions been consulted (e.g. dean, department head, or departmental research director)?

⇒ IDENTIFICATION OF KEY ACTORS AT LOCAL, REGIONAL AND NATIONAL LEVELS

- ✓ Between which institutions and at which level does the collaboration take place?
- ✓ Has the collaboration been approved and established at the right levels at the HEI?
- ✓ Is there experience of similar collaborations and how these have been managed?
- ✓ Should a formal agreement be signed?

⇒ POLITICAL, SOCIAL AND CULTURAL ASPECT OF INTERACTION

- ✓ Do researchers and HEIs have overall and relevant knowledge of the political, social and cultural conditions in the partner country?
- ✓ What type of support is offered to researchers at institutional level to help them understand and navigate the context of the partner country?

⇒ LEGAL CONTEXT

- ✓ Are there direct risks or possibility for dual use of research results?
- ✓ Is there a need to consider the protection of intellectual property rights?
- ✓ What is the data protection and security situation in the partner country?
- ✓ Can a teaching collaboration be reconciled with the current legal framework for managing students and awarding degrees?

○ INSTITUTIONAL AUTONOMY

- ✓ Is there a risk that stakeholders involved will influence the research topic, content or data collection beyond the scope of what is deemed acceptable in the field?
- ✓ Could collaboration with a partner involve a reputational risk (for the researcher, department, or HEI)?
- ✓ Could a collaboration affect the independence of one's own HEI in relation to other parties?
- ✓ Does the HEI have a system for effectively motivating teaching staff to participate in projects?

⇒ ETHICAL ASPECTS

- ✓ How will students and doctoral students who are actively involved in the exchangeable supported?
- ✓ Is research conducted in countries and regions where there is a risk that research may contravene human rights?
- ✓ How will the research be conducted in a country that has more permissive research norms? How are differences in incentive structures handled?
- ✓ What should be done when academic freedom is restricted? Where should the line be drawn? How does this research affect the project partner?











References

- 1. Code on Science and Innovation No.259/2004 (republished), https://www.legis.md/cautare/getResults?doc_id=110232&lang=ro
- Common Country Analysis 2020. UN Moldova, https://moldova.un.org/sites/default/files/2021-03/Moldova%20UN%20CCA_ENG_FINAL%2030-3.pdf
- 3. Draft of Moldova 2030 National Development Strategy, https://cancelaria.gov.md/sites/default/files/cu_privire_la_aprobarea_proiectului_de_lege_p entru_aprobarea_strategiei_nationale_de_dezvoltare_moldova_2030.pdf
- 4. Enterprise Surveys. World Bank, www.enterprisesurveys.org
- 5. EU4Digital: supporting digital economy and society in the Eastern Partnership ICT Innovation Ecosystems for start-ups and scale-ups: policy recommendations: Republic of Moldova, https://eufordigital.eu/wpcontent/uploads/2020/07/Policy-recommendations-for-the-Republic-ofMoldova-in-the-area-of-ICT-Innovation-Ecosystems-for-start-ups-and-scaleups.pdf (June 2020)
- 6. Market Assessment for Digital Innovation and Scale-up Initiative in Eastern partner countries/ EU4Digital Facility study (June 2020)
- 7. Decision No. 382 from 01.08.2019 for approving the Methodology of Funding Projects in the Fields of Research and Innovation, https://www.legis.md/cautare/getResults?doc_id=115748&lang=ro
- 8. Decision No. 53 from 05.02.2020 for approving the Methodology of institutional funding of the public law organizations from the R&I fields, https://www.legis.md/cautare/getResults?doc_id=120178&lang=ro
- 9. Decision No. 381 from 01.08.2019 on the approval of the National R&I Program for 2020-2023 period and of the Action Plan for its implementation, Official Gazette. No.256-259/506 from 16 August 2019
- 10. H2020 Success stories of Moldova, https://ancd.gov.md/sites/default/files/document/attachments/Istorii%20de %20succes%20in%20programul%20EU%20H2020%20%282014-2018%29%20%281%29.pdf
- 11. Moldova: Rekindling Economic Dynamism. World Bank (April 2019)
- 12. Middlehurst, R. (2008), "Developing institutional internationalization policies and strategies: An overview of key issues", in M. Gaebel et al. (eds.), Internationalization of European Higher Education: An EUA/ACA Handbook, RAABE, Berlin, pp.1-24.
- 13. Milosavljević, N., Shvarova, O., Cowey, L., Technology Transfer in the Republic of Moldova 2019 2020, Baltar, E., Mosca, J., Rodríguez Martínez, M., Basso, A., (ed.), Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-20420-6, doi:10.2760/553209, JRC126057
- 14. National Bureau of Statistics. R&D activity in 2020, https://statistica.gov.md/newsview.php?l=ro&idc=168&id=6967.
- 15. PSF H2020 Peer Review of the Moldovan Research and Innovation System, https://ec.europa.eu/research-andinnovation/en/statistics/policy-support-facility/peer-review-moldovanresearch-and-innovation-system
- 16. Roadmap for the Integration of the Republic of Moldova into the European Research Area, GD no. 1081/2018/https://www.legis.md/cautare/getResults?doc_id=111352&lang=ro
- 17. Report on the implementation of the National Roadmap towards ERA during 2020/https://mecc.gov.md/sites/default/files/raport_fnp-_2020-final_-_27.04.2021_0.pdf











Annexes

Annex 1. Questionnaire "Expanding opportunities for scientific collaboration internationally"

The purpose of this study is to assess the current level of development of research activities and analyze the need to develop policies to stimulate the processes of internationalization of research

- 1. Faculty
- 2. Gender
- 3. Experience at KSU

4. Assess your level of personal involvement in research projects:

	simultaneous involvement	average	average	participated in	I don't
	in several parallel projects	involvement in	involvement in	research while	participate in
	constant involvement in 1	1 project every	1 project every	defending his	research
	project	2-3 years	5 years	doctoral work	
regional level					
national level					
international					
level					

5. Rate the overall level of participation of KSU employees in international research projects (1-low level, 10-highest level)

 (
1	2	3	4	5	6	7	8	9	10

6. What, in your opinion, prevents greater participation of KSU staff (teaching staff) in international research activities?

- ✓ Diffidence
- ✓ Ignorance of foreign languages
- ✓ Lack of skills in searching for information
- ✓ Lack of skills in finding partners
- ✓ Insufficient professional skills
- ✓ Passivity or reluctance to get involved in research activities
- ✓ Lack of proper infrastructure to accommodate foreign students and teachers
- ✓ Lack of activity in the work of the international department

7. What factors, in your opinion, contribute to the development and promotion of research activities of university staff at the international level?

- ✓ Question type
- ✓ Collaborative research and project development within international research groups
- ✓ Offering intellectual property results internationally
- ✓ Mutual exchange, training and internship of scientific personnel
- ✓ Conducting joint international conferences and seminars
- ✓ Improving your English language skills
- ✓ Development of international and intercultural communication skills
- ✓ Increase in the number of foreign students of 2nd cycle and doctoral studies
- ✓ Synchronization of educational programs and development of infrastructure for the admission of foreign scientific personnel and students
- ✓ Joint publications in scientific publications











8. Briefly describe your proposals for developing the process of involving university staff and students in research activities at the international level.

Annex 2. Workshop program

WIDENING OPPORTUNITIES FOR RESEARCH COLLABORATIONS PROJECT

funded by the

SI. Swedish

NATIONAL OFFICE HORIZONT EUROPE

COMRAT STATE UNIVERSITY

ENHANCING RESEARCH INTERNATIONALIZATION IN THE CONTEXT OF GLOBAL R&D LANDSCAPE AND INTERNATIONAL COOPERATION October 10th

ОБЪЯВЛЕНИЕ

В РАМКАХ ПРОЕКТА «РАСШИРЕНИЕ ВОЗМОЖНОСТЕЙ ДЛЯ НАУЧНОГО СОТРУДНИЧЕСТВА»

> НАЦИОНАЛЬНЫЙ ОФИС МОЛДОВЫ HORIZONT EUROPE

и КОМРАТСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ

ПРОВОДЯТ ИНФОРМАЦИОННЫЙ СЕМИНАР «ИНТЕРНАЦИОНАЛИЗАЦИЯ ИССЛЕДОВАНИЙ В КОНТЕКСТЕ ГЛОБАЛЬНОГО R&D ЛАНДШАФТА И МЕЖДУНАРОДНОГО СОТРУДНИЧЕСТВА»

Дата проведения: 10 Октября

Начало регистрации участников в 14:45 Начало семинара в 15.00

Гибридный формат:

Конференц -зал (106)

Connection link: https://uso2web.zoom.us/j/86167212277
Приглашается профессорско- преподавательский состав университета,

руководители подразделений и департаментов.











SI. Swedish

Academic collaboration in the Baltic Sea Region

PROJECT FOLLOW-UP MEETING SESSION 1

COMRAT STATE UNIVERSITY, COMRAT 4 OCTOBER 2023

INHANSING RESEARCH INTERNALIZATION IN THE CONTEXT OF GLOBAL RESEARCH LANDSCAPE AND INTERNATIONAL COOPERATION

УСИЛЕНИЕ ИНТЕРНАЛИЗАЦИИ ИССЛЕДОВАНИИ В КОНТЕКСТЕ ГЛОБАЛЬНОГО ИССЛЕДОВАТЕЛЬСКОГО ЛАНДШАФТА И МЕЖДУНАРОДНОГО СОТРУДНИЧЕСТВА

AGENDA

Day 1: 4th of October Conference room 303

Тіте/Время	Topic 1: Research internalization/ Интернационализация	Lead/
	исследований	Ведущий
14:30 - 14:45	Registration/Регистрация	·
14:45 - 15:00	Round presentations and agenda with instructions/	
	Представление участников и программы семинара	
15:00 - 15:15	Welcome address/Приветственное слово	
15:15 - 16:00	PROJECT OVERVIEW:" Widening opportunities for research	Tatiana
	collaboration"/ ОБЗОР ПРОЕКТА: «Расширение возможностей	Racovcena Dr.,
	научного сотрудничества»	Assoc. prof.
	Research Support Division at LiU: developing services for research	•
	funding and project management/Рамочная программа ЕС по	
	исследованиям и инновациям 2021–2027	
16:00 - 16:15	Coffee break	
16:15 - 16.45	• Internationalization Strategy: examples at LiU and CSU/ Стратегия	Nadejda
	интернационализации: примеры в LiU и КГУ	Ianioglo Dr.,
	Responsible internationalization and national platform for	Assoc. prof
	internalization/Ответственная структура за	-
	интернационализацию и национальная платформа	
	интернационализации	
16:45 – 17:15	Europe's approach to international cooperation in research and	Alla Levitskaia
	innovation and funding programmes/Европейский подход к	Dr. Habil., Prof.
	международному сотрудничеству в области исследований и	univ
	инноваций и программам финансирования	
	Horizon Europe: the EU research and innovation framework	
	programme for 2021 – 2027/Рамочная программа ЕС по	
	исследованиям и инновациям 2021–2027	
17:15-17:30	Discussions/Дискуссия	











NATIONAL OFFICE HORIZONT EUROPE

COMRAT STATE UNIVERSITY

ENHANCING RESEARCH INTERNALIZATION IN THE CONTEXT OF GLOBAL R&D LANDSCAPE AND INTERNATIONAL COOPERATION

УСИЛЕНИЕ ИНТЕРНАЛИЗАЦИИ ИССЛЕДОВАНИЙ В КОНТЕКСТЕ ГЛОБАЛЬНОГО R&D ЛАНДШАФТА И МЕЖДУНАРОДНОГО СОТРУДНИЧЕСТВА

AGENDA ПРОГРАММА

Day 2: October 10th Hybrid format:

- Conference room 106 (CSU)
- Connection link: https://us02web.zoom.us/j/86167212277?pwd=WklacjlDc2Y0NUt5ZjN4bUg0VTIIZz09

Time	Topic	Lead
14:45 – 15:00	Registration. Welcome Part 1 (RU/EN)	
15:00 - 15:15	 Project overview: Widening opportunities for research collaboration? Обзор проекта: «Расширение возможностей научного сотрудничества» Horizon Europe: the EU research and innovation framework programmes for 2021 – 2027/Рамочная программа ЕС по исследованиям и инновациям 2021–2027 Research Professional: online database for national and international funding/ онлайн-база данных национального и международного финансирования исследований 	Tatiana Racovcena Dr., Assoc. prof. Nadejda Ianioglo Dr., Assoc. prof. Alla Levitskaia Dr. Habil, Prof. unix
15:15 – 15:30	 Creating effective research dissemination and knowledge exchange plans/Создание эффективных планов обмена знаниями и распространения исследований Monitoring and evaluating the impact of research internationalization activities/Мониторинг и оценка воздействия деятельности по интернационализации исследований 	









	Part 2 (RO/EN)	
15.30 –16.00	Greeting words/Приветственное слово • National contact point network Moldova/Национальная сеть контактных пунктов Молдовы • Regulation on organization and operation of the "Horizon Europe" national office in Moldova/Положение об организации и деятельности национального офиса «Horizon Europe» в Молдове	Vadim Latchevici. Director ANCD Vitalie Moraru. Head of the National Office Horizont Europe
16:00 – 16:30	 Discovering Marie Skłodowska-Curie Actions (MSCA): Challenges and Opportunities. Funding opportunities within the Marie Curie Skłodowska programmes/ Возможности финансирования в рамках программы Марии Кюри Склодовской 	Alex Rosca, National, Contact Point for Marie Sklodowska- Curie actions on skills, training and career development
16:30 – 17:00	Successful stories within MSCA projects presented by staff and researchers/ Успешные истории проектов, представленные сотрудниками и исследователями • Experience in Marie Sklodowska-Curie academic exchange projects Nutril ab and EuinDepth • Regarding practical experience in Staff Exchanges MSCA project — HESPRI (Elevating Higher Education public policies: an empowering SPRIngboard) • MSCA & Citizens	Iulia Latco Axornic Gheorghe Rodica Cuiba
17:00 – 17.20	Tips for successful proposal within Marie Curie Actions/ Рекомендации для успешного предложения в рамках действий Марии Кюри	Elena Railean, Dr. Habil., Assoc. prof., Thematic coordinator for Pillar 1
17:20 - 18:00	Discussions	

