



GLOBAL CHALLENGES & SCIENCE DIPLOMACY: DEVELOPMENT AND INNOVATION TO BUILD FORWARD AFTER THE PANDEMIC

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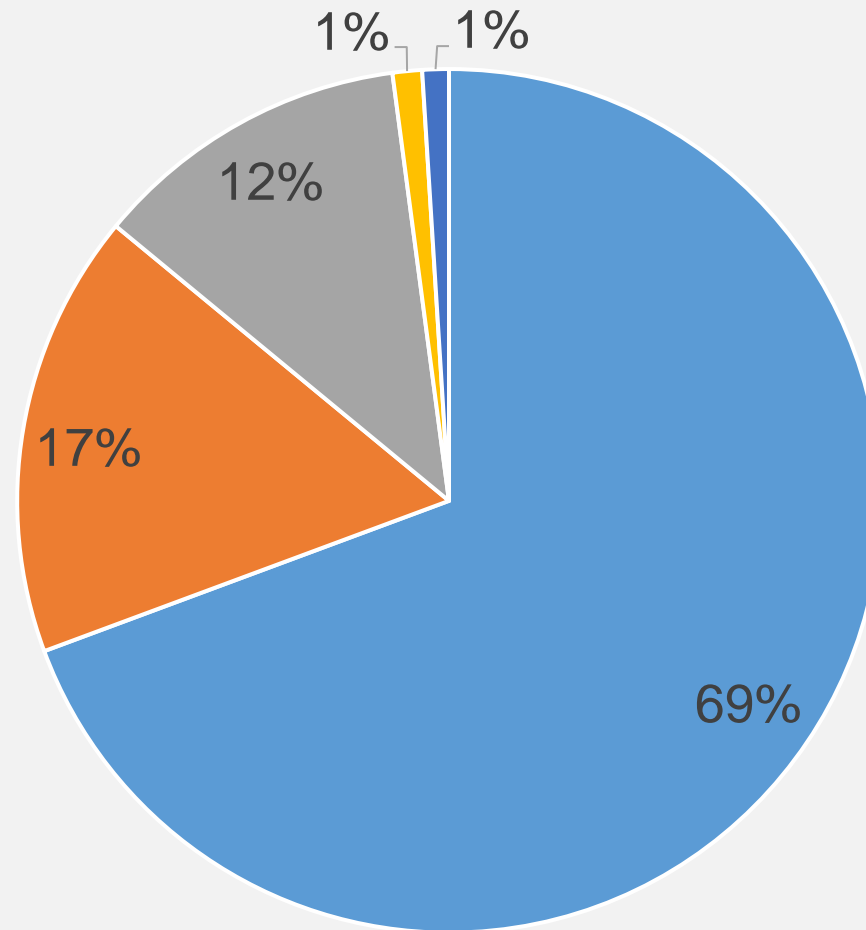
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The global pandemic and international cooperation

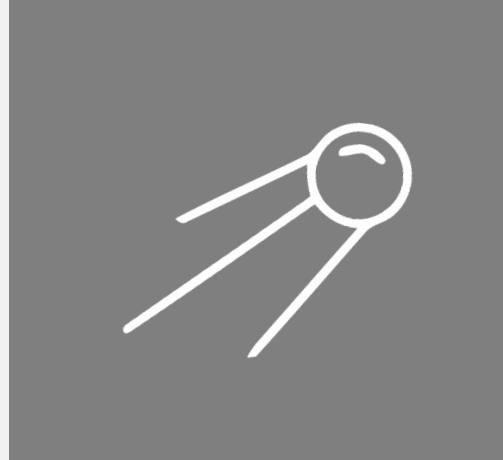


- *Scientists are rapidly expanding global cooperation.*
- *Collaboration between scientific and expert communities intensifies.*
- *Active exchange of information (bioRxiv, medRxiv, ChemRxiv, arXiv).*
- *The global nature of the threat – motivation to overcome any barriers.*
- *Solving a global challenge requires joint efforts.*



■ Academic ■ Medical ■ Government ■ Corporate ■ Other

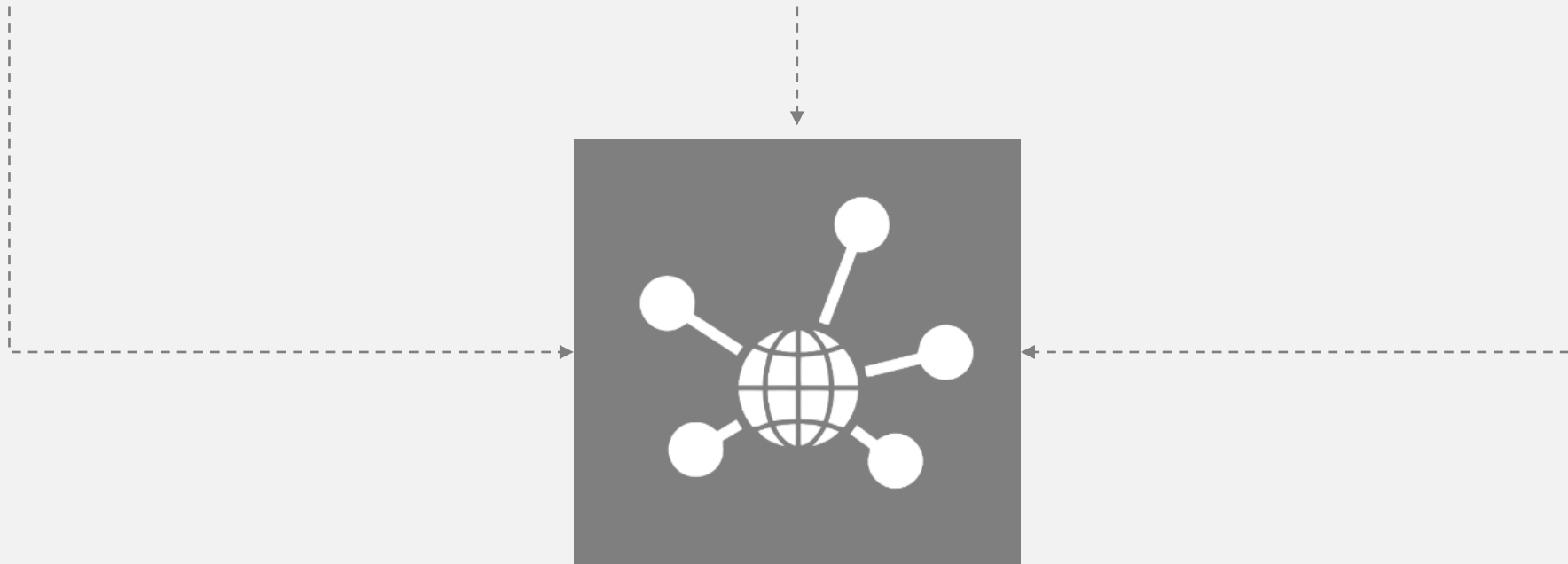
Percentage of scientific publications indexed in the international databases in 2019-2020 (by the authors affiliation).



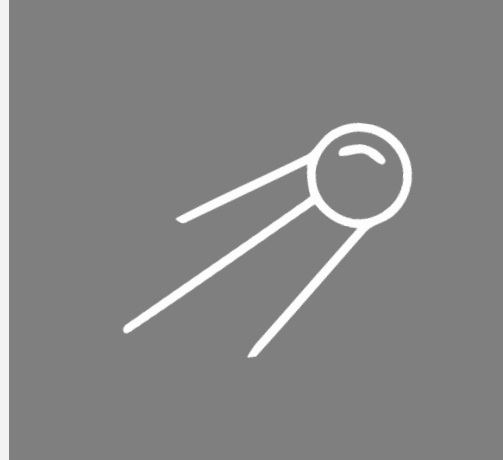
AI

Space

Ocean



Opportunities for cooperation based on scientific diplomacy.



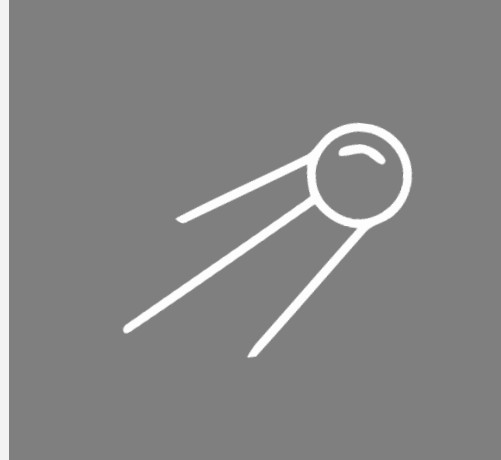
AI

*Digital transformation, artificial intelligence, digital, additive technologies, robotic systems, new materials, biotechnology, personalized medicine, etc.
International digital cooperation.*



Space

- *International cooperation in space (boosting innovation and technological advancement).*
- *Earth Observation (EO) and geolocation in supporting the achievement of the development goals.*
- *Space-based services and technologies are key in understanding climate change, etc.*



Ocean

- *Decade of Ocean Science for Sustainable Development (2021-2030)*
- *Sustainable Development Goal 14: Life Below Water*
- *Ocean exploration, alternative energy, green technologies, blue economy, conservation and efficient use of marine resources, etc.*



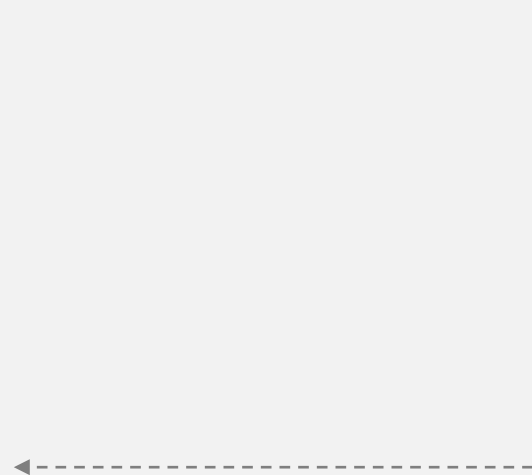
AI



Space

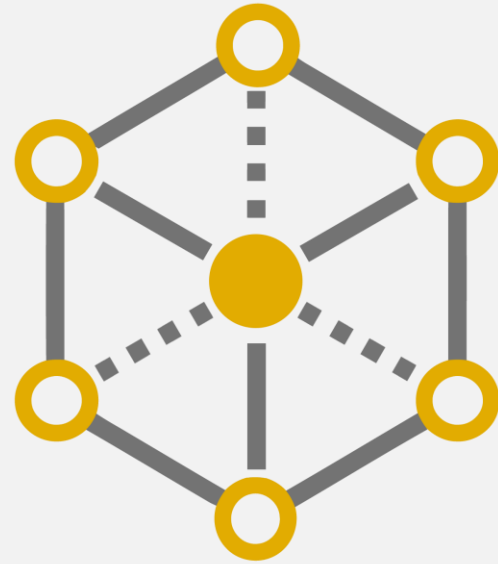


Ocean



17 PARTNERSHIPS FOR THE GOALS





BSAARC

**THE BLACK SEA ACADEMIC AND RESEARCH
COOPERATION FACILITATION ASSOCIATION**

*DIVE INTO DATA-DRIVEN DECISION MAKING FOR
MULTILATERAL SCIENCE, INNOVATION AND EDUCATION COOPERATION*



ABOUT THE **BSAARC** INITIATIVE



The BSAARC FA is a platform for facilitation and promotion of international multilateral cooperation in the field of science, innovation and education. The Association is open for participation of universities, education and research institutes, innovative enterprises and other entities (regardless of their organizational and legal forms), as well as individuals involved in the field of science, innovation and education, willing to contribute to the development of the Black Sea Region.



The BSAARC Association is based on the *quintuple helix* innovation model and focuses on the increasing role of sustainable utilization of human potential and digital technologies, ensuring the balance and the synergy of resources to promote efficient training and learning process, as well as breakthrough research and economic growth in the Black Sea Region in the context of global and regional challenges, inter alia related to the Forth industrial revolution and the achievement of the SDGs.

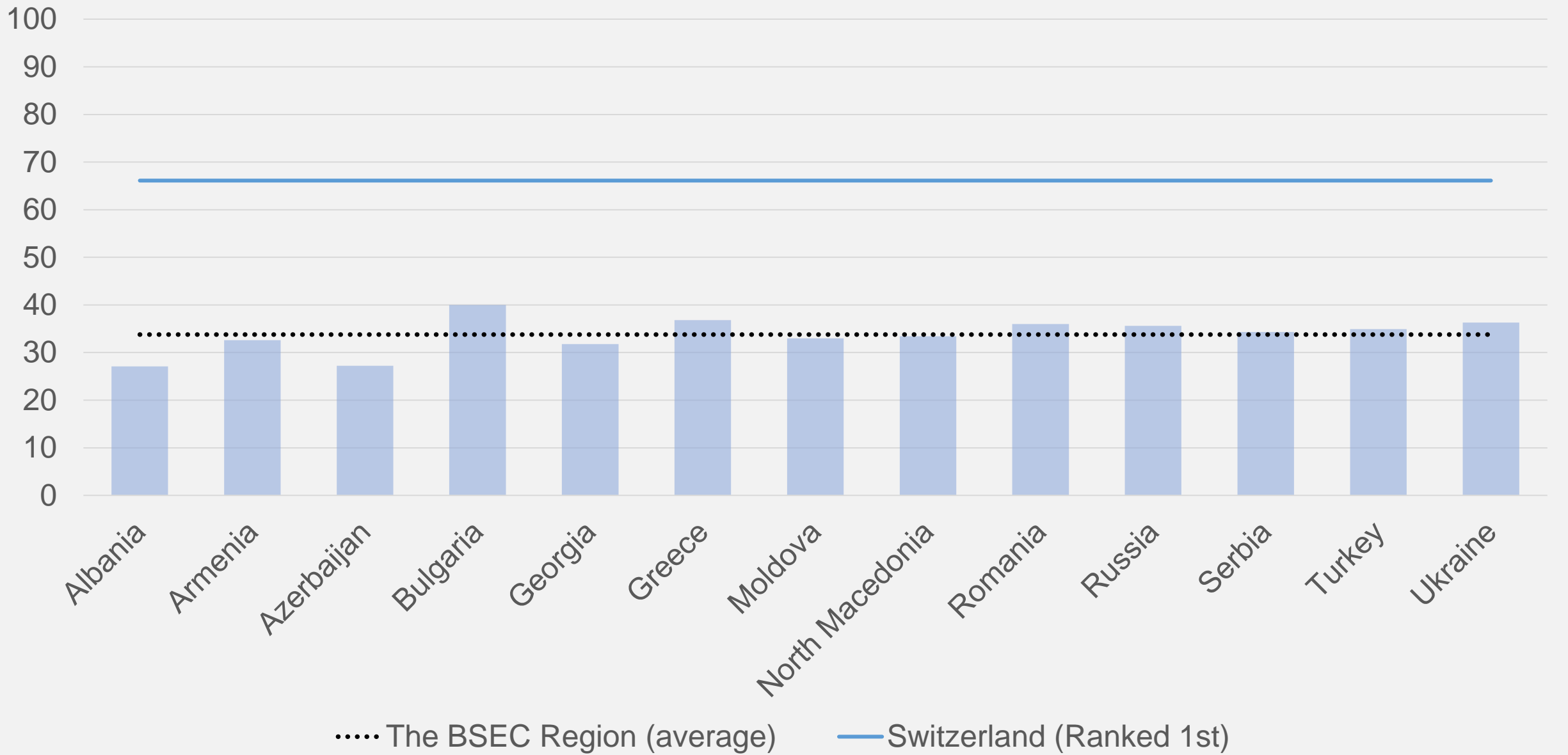


The BSAARC Digital platform provides information on the priorities of the stakeholders in the BSEC Region in the field of education, science and innovation and allows members of the BSAARC FA to find common areas of cooperation, facilitating data-driven decision-making and implementation of STI projects and educational initiatives.

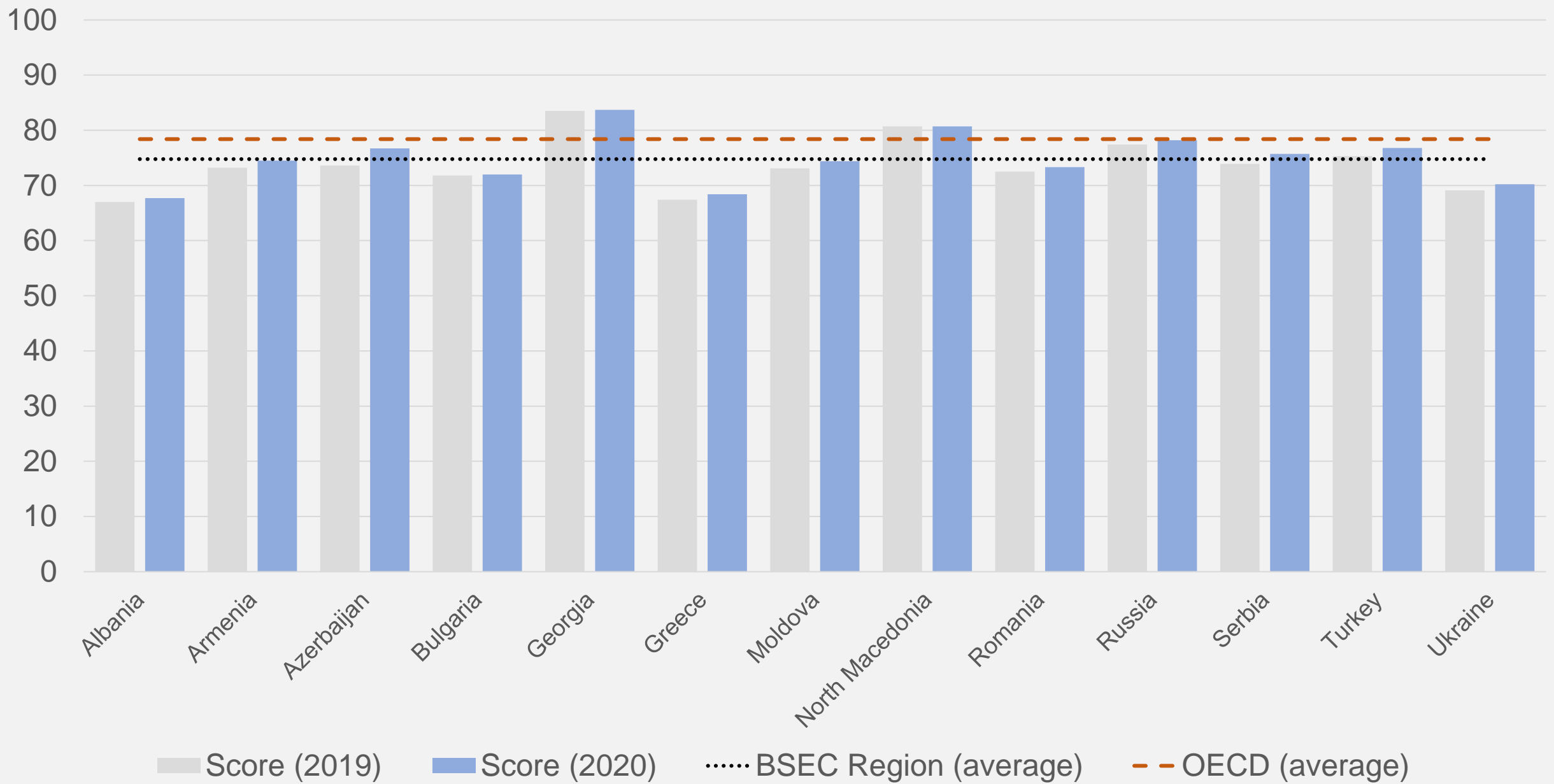
**DIVE INTO DATA-DRIVEN DECISION MAKING FOR
MULTILATERAL SCIENCE, INNOVATION AND EDUCATION COOPERATION**

bsaarc@sfedu.ru | bsaarc.sfedu.ru (coming soon)

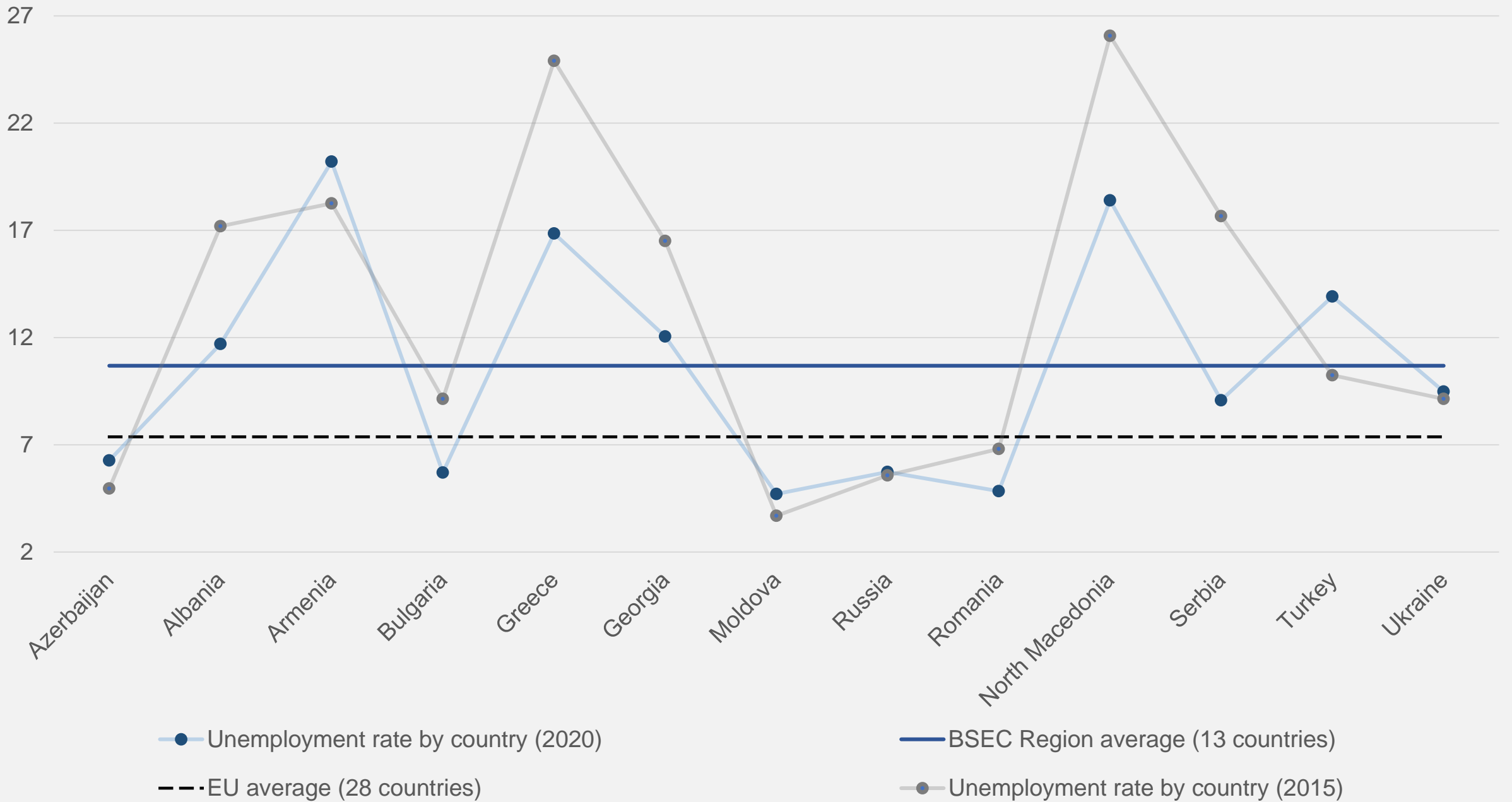




Ranking of the BSEC Member States in the Global Innovation Index (GII, 2020).



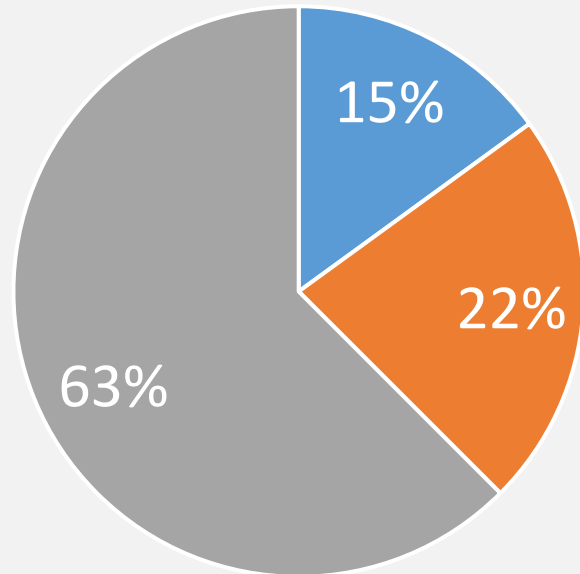
The BSEC Region economies according to the Doing Business Index (out of 190 countries), Doing Business 2020.



Unemployment, total (% of total labor force), World Bank, modeled ILO estimate.

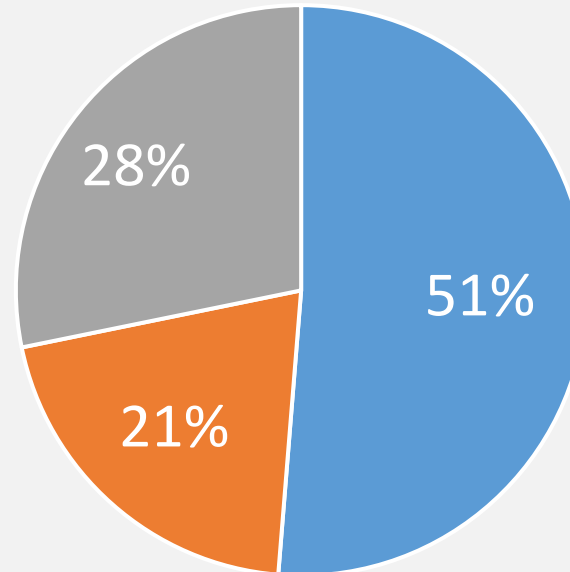
Survey results*

During the COVID-19 pandemic, your work / learning environment:



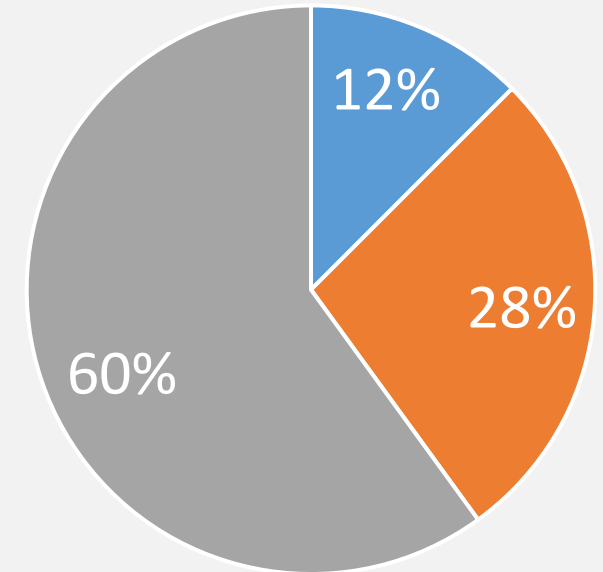
■ Improved ■ Worsened ■ No change

Your attitude towards remote work / learning during the pandemic:



■ Positive ■ Negative ■ Neutral

Your work / learning in remote format is:

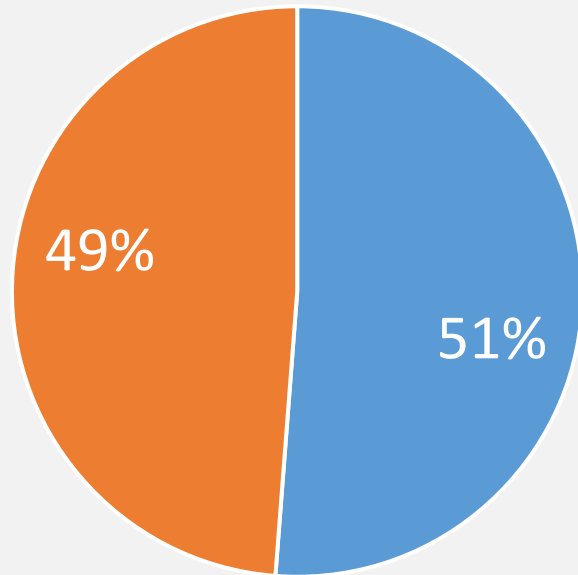


■ More efficient ■ Less efficient ■ No change

** based on the responses of the academic community from the wider Black Sea Region (more than 150 participants from 13 countries) during the international conference "The role of higher education in the development of the society, economy and culture in the Black Sea Region in the context of the global pandemic", March 2021*

Survey results

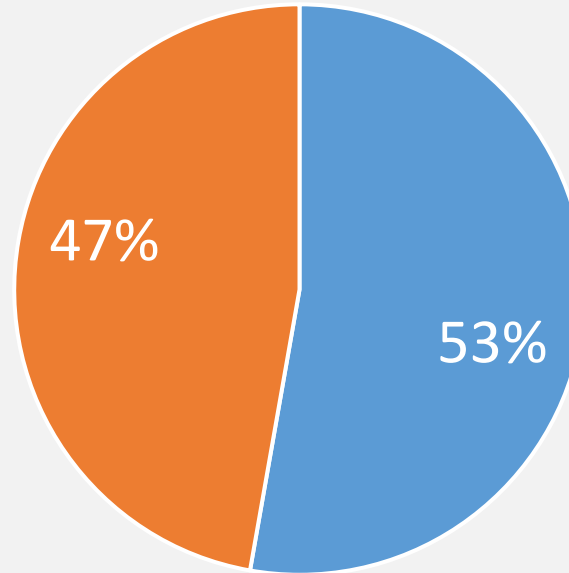
Do you think that the remote work is convenient and comfortable for most of teachers / researchers?



■ Yes

■ No

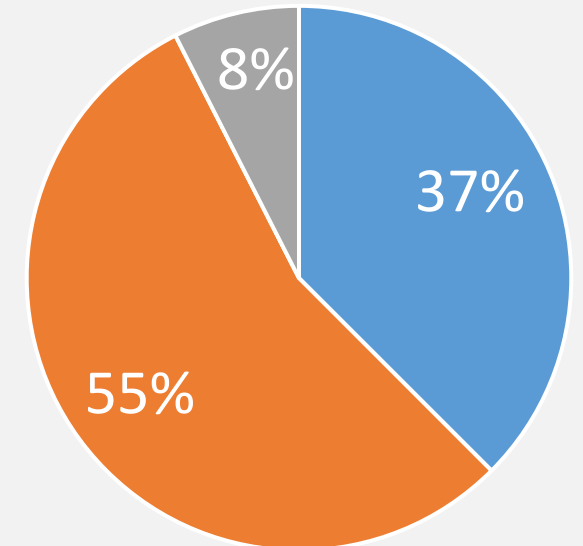
Do you think that the remote learning is convenient and comfortable for most of students?



■ Yes

■ No

Do you think that the remote format is effective for international cooperation?



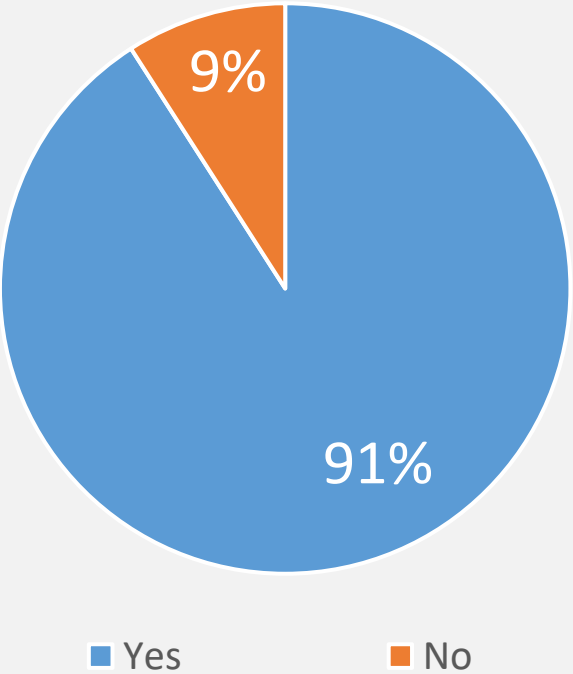
■ Yes

■ Yes, but only when a real human contact is impossible.

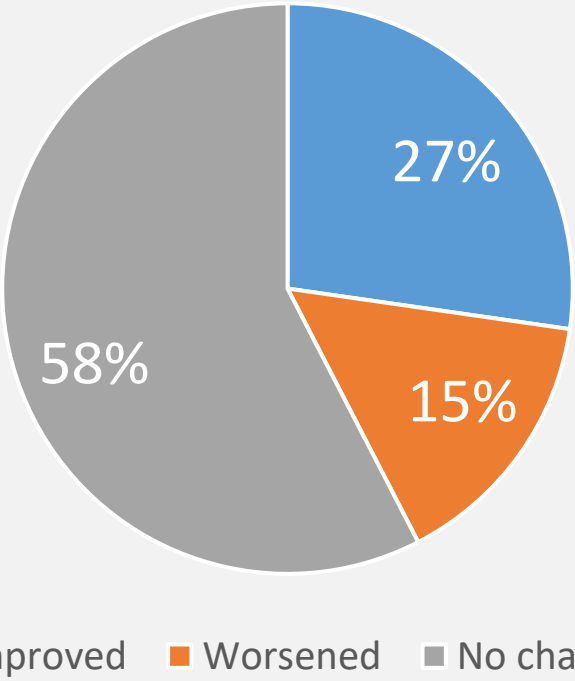
■ No, it is imperative to have personal interaction.

Survey results

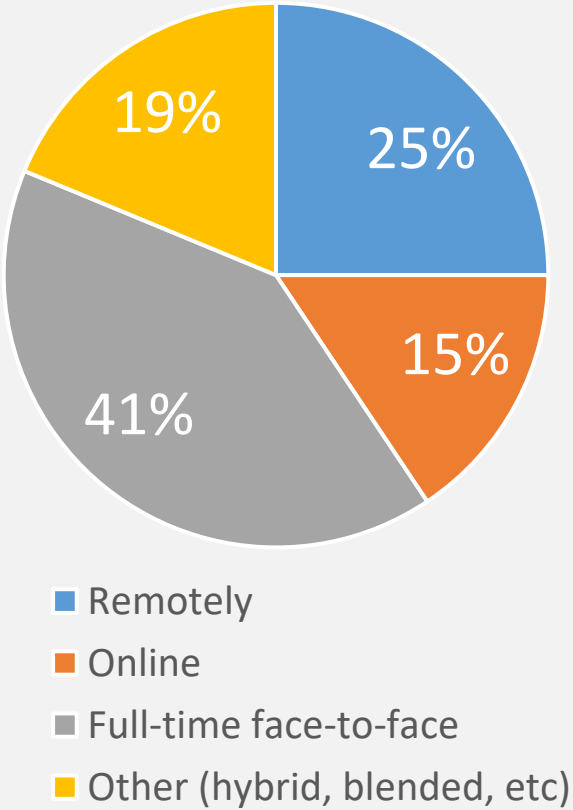
Have you acquired new digital skills during the pandemic?



While working / learning remotely your communication skills:

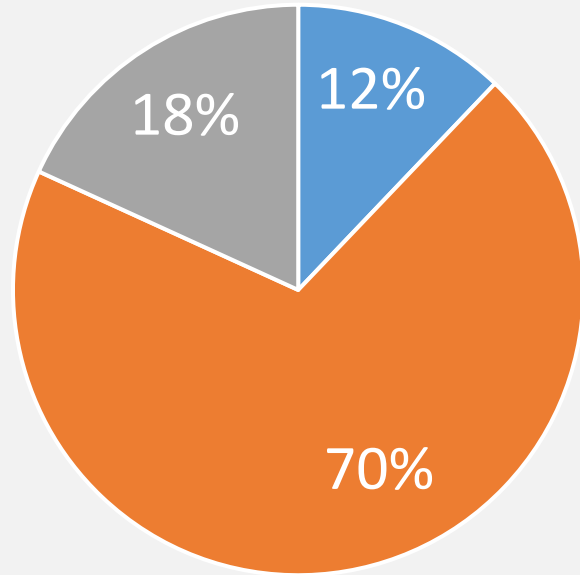


After the global pandemic, how'd you prefer to learn in master's programs / training courses:



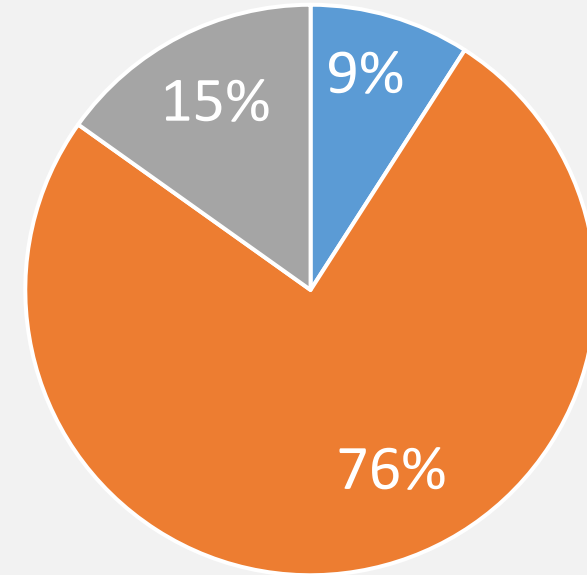
Survey results

How do you feel about keeping remote learning in schools after the pandemic?



■ Positive ■ Negative ■ Neutral

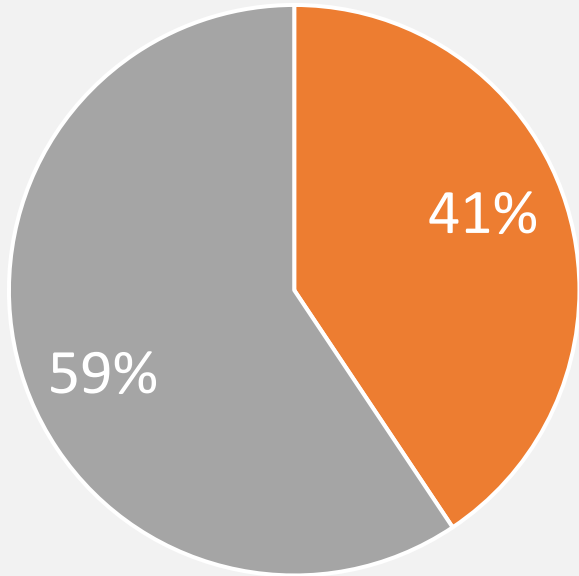
How do you feel about keeping remote learning in universities after the pandemic?



■ Positive ■ Negative ■ Neutral

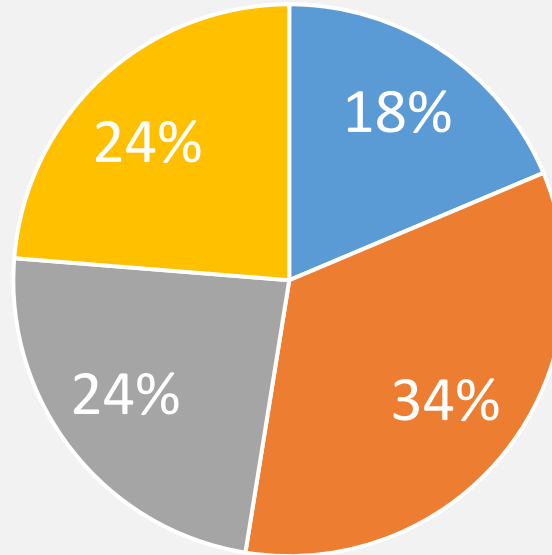
Survey results

Do you consider international cooperation in the Black Sea Region in the field of education sufficient?



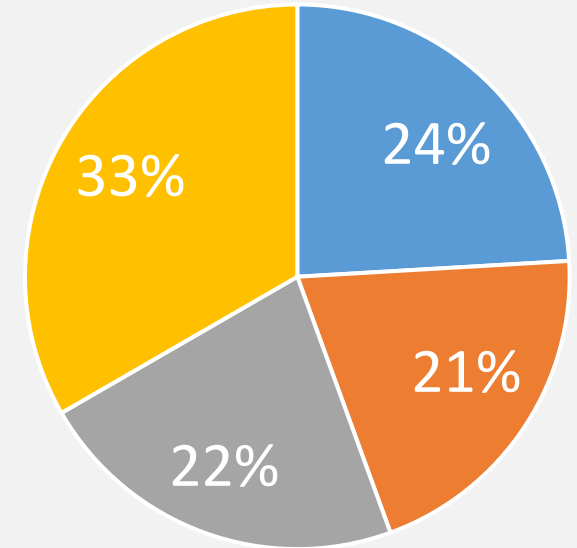
■ Yes ■ No ■ Not sure

What is the main obstacle to the implementation of joint international educational and scientific programs?



■ A language barrier
■ No financial support
■ Insufficient international interaction
■ Lack of information about foreign partners

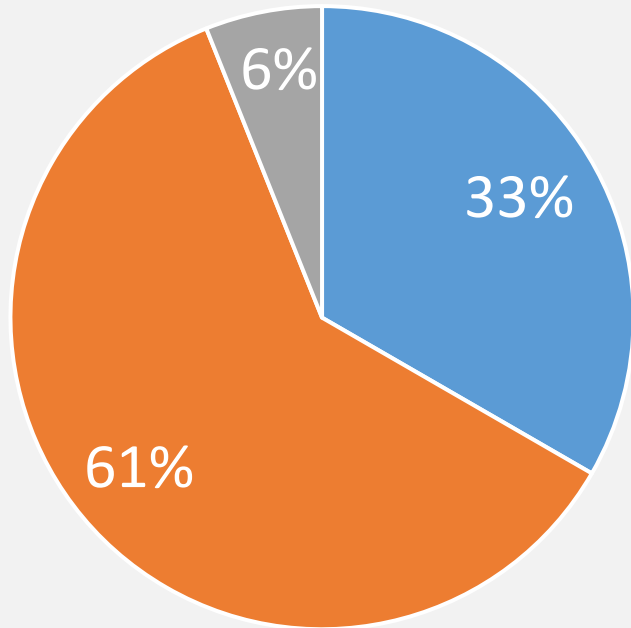
What is the main advantage in the implementation of joint international programs and projects?



■ Networks (type of cooperation)
■ Previous experience of cooperation
■ Personal connections
■ New technologies and digital platforms

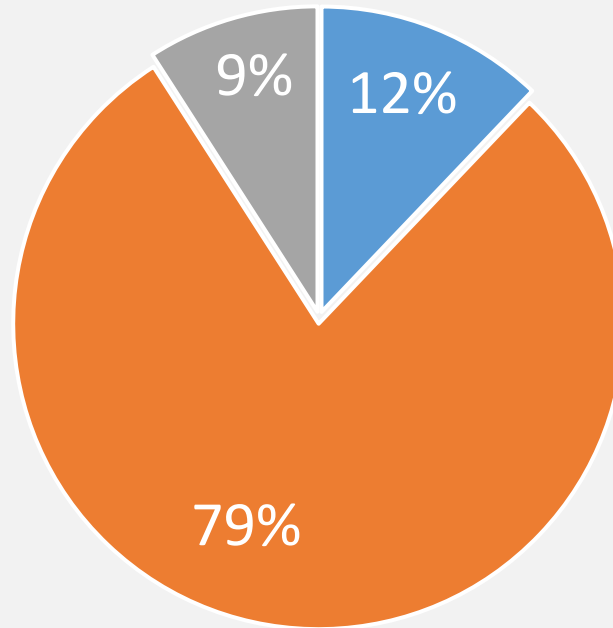
Survey results

Do you consider international cooperation in the Black Sea Region in the field of tourism sufficient?



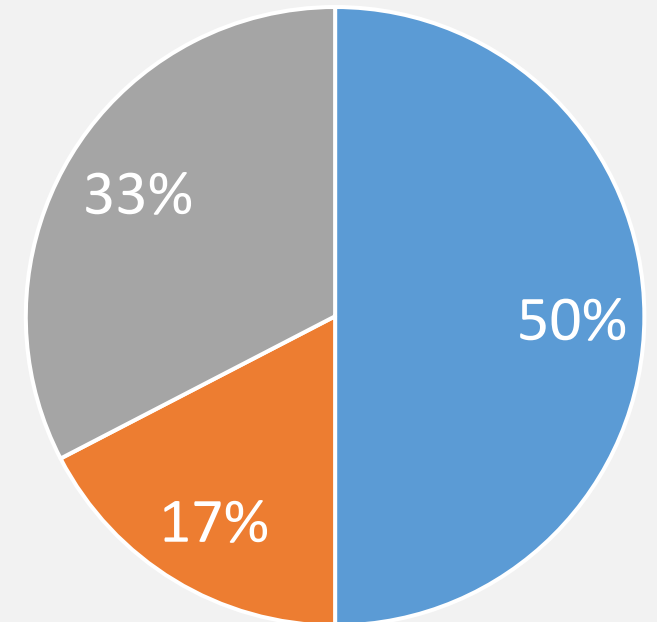
■ Yes ■ No ■ Not sure

Do you think international cooperation in the Black Sea Region in the field of ecology is sufficient?



■ Yes ■ No ■ Not sure

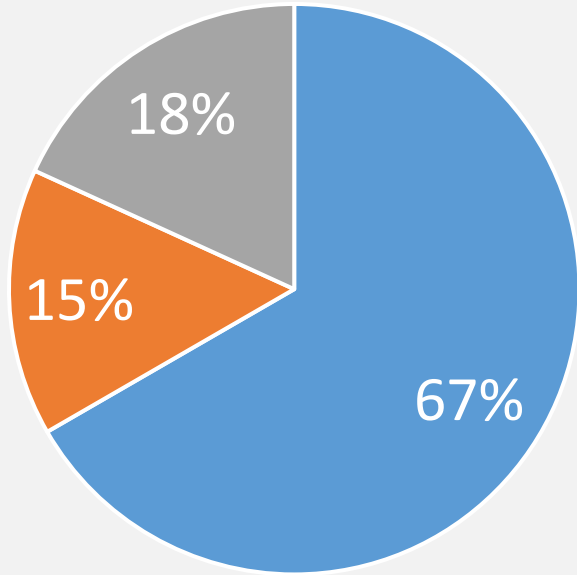
What is in your opinion the main obstacle to the implementation of joint international programs in the field of ecology?



■ Lack of financial support
■ Lack of information
■ Lack of communication

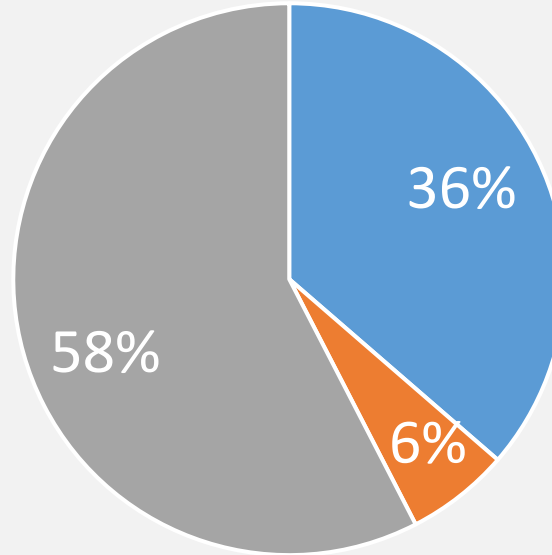
Survey results

How did the global pandemic affect the environment?



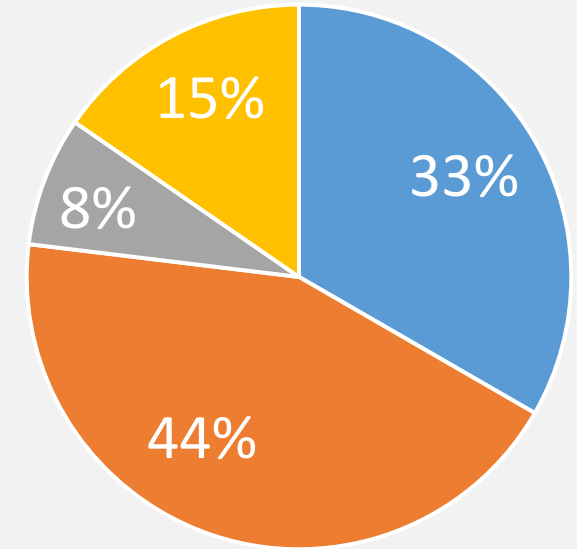
■ Improved ■ Worsened ■ No change

How did the global pandemic affect psychology (behavior) of humans?



■ Improved
■ Worsened
■ Long-term health effects yet to be evaluated

How did the pandemic affect society?



■ United
■ Divided
■ Strengthened faith in science
■ Nothing changed

THE SURVEY



<https://forms.office.com/r/kL44gsv7Gf>



Thank you for your attention!

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