



Minutes No. 2 of the Meeting of the Advisory Board of the Kyrgyz National Research Node in GIT (Kyrgyz NRN-GIT)

December 26, 2023, Kyrgyz Cartographic-Geodetic Service (Goscartography), Bishkek

Participants:

1. Mr. Narynbek Isabekov – Deputy Director of the State Cartographic-Geodetic Service (Goscartography), Chairman of the Advisory Board
2. Dr. Akylbek Chymyrov - Razzakov Kyrgyz State Technical University (KSTU), Head of the Geodesy and Geoinformatics Department, Deputy Chairman of the Advisory Board
3. Dr. Dogdurbek Chontoev - Director of the Institute of Water Problems and Hydro Energy, National Academy of Sciences of Kyrgyzstan (online)
4. Dr. Bolotbek Moldobekov – Co-director of the Central Asian Institute of Applied Geosciences (online)
5. Dr. Abdurashit Nizamiev – Osh State University, Dean of Natural Geography Faculty (online)
6. Dr. Ulan Chortombaev - Director of the Kyrgyz Scientific and Research Institute of Irrigation, Ministry of Agriculture (online)
7. Dr. Shairbek Saidamatov – Osh Technological University, Dean of Cybernetics and Information Technology Faculty (online)
8. Mr. Marat Anarbaev – Chief Specialist of the Urban Cadaster and Geoinformatics Department, Municipal Enterprise “Bishkekglavarchitektura”
9. Mr. Zheenbek Mambetov – Director of the “Land and Real Estate” LLC, mambetov60@mail.ru, +996550325705
10. Mr. Nurbek Chymbyldaev – Deputy Director of the “KyrgyzGeoTech” LLC (online)
11. Mr. Kydyr Nazarkulov - Director of GIS pro LLC (online)

Invited persons:

12. Mr. B. Attakurov, Razzakov Kyrgyz State Technical University (KSTU),
13. Ms. A. Tynybekova, Razzakov Kyrgyz State Technical University (KSTU),
14. Mr. K. Koshoev, State Cartographic-Geodetic Service (Goscartography),
15. Mr. K. Dogdorbaev, State Cartographic-Geodetic Service (Goscartography),
16. Mr. A. Nurdinov, State Cartographic-Geodetic Service (Goscartography),
17. Ms. Zh. Solpieva, State Cartographic-Geodetic Service (Goscartography),
18. Ms. T. Golubenko, State Cartographic-Geodetic Service (Goscartography),
19. Ms. G. Ishenova, State Cartographic-Geodetic Service (Goscartography),
20. Mr. U. Asanakunov, State Cartographic-Geodetic Service (Goscartography).

Agenda:

Time	Activity
09:50	Meeting of the meeting participants and invited guests in the Assembly Hall of Goskartografia at the address: Kievskaya str. 207, com. 3-112
10:00	Opening of the Advisory Board Meeting: - Welcome speech of Mr. N. Isabekov., Deputy Director of Goskartography, Chairman of the Advisory Board - Welcoming speech of the Local coordinator of Erasmus+ GeoTAK project, Vice-Rector of KSTU A. Chymyrov, Deputy Chairman of the Advisory Board
10:10	<i>B. Zhakypov., Chief Engineer, T. Golubenko., Head of Goskartography Department.</i> Development of GPS network on the territory of the Kyrgyz Republic
10:30	<i>A. Nurdinov, Head of Department, Zh. Solpieva, Chief Specialist of Goskartography.</i> Automated Information Systems developed and used by Goskartography.
10:50	<i>A. Chymyrov., Head of Department "Geodesy and Geoinformatics", Vice-Rector of KSTU.</i> Development of Education System for the Geodetic Industry of Kyrgyzstan



11:10	Discussion on the development of geodesy, geoinformatics and remote sensing industry in Kyrgyzstan.
11:40	On the activity of the Advisory Council of the National Research Node for the Geoinformation Technologies
12:00	Closing of the Advisory Board Meeting

1. OPENING OF THE MEETING OF ADVISORY BOARD

Speakers:

Mr. Narynbek Isabekov: On behalf of Goskartography and as the Chairman of the Advisory Board I express my gratitude to each of participants in this important event. I am glad to welcome you to today's meeting of the NRN-GIT Advisory Board, where we have gathered to discuss important issues in the field of geospatial information technology.

Our today's discussion is aimed at developing geospatial technologies in our country and promoting sustainable development. We will look at various aspects of introducing new technologies, sharing experiences and improving collaboration among industry participants. With your experience and expertise, we will be able to work together to move forward and improve the effectiveness of geospatial solutions in our projects.

I wish you all fruitful discussions, constructive proposals and successful solutions that will help us improve our cooperation and advance geospatial technologies to the next level.

Mr. Akylbek Chymyrov: He has expressed his thanks to the GeoTAK Project team and note the relevance and importance of this project. He briefly outlined the goal and objectives of the project, the development of postgraduate programs in the field of Geoinformation Technologies (GIT) and the strengthening of research and innovation ties between higher education institutions, industry and administrative bodies of Armenia and Kyrgyzstan. Although we are all from different fields, from universities and the industrial sector, we are all united by geoinformation technology and the opportunities for its development in Kyrgyzstan and Armenia.

He has presented the main results of Erasmus+ GeoTAK Project which is funded by the European Union ERASMUS+ program in 2021-2024. He welcomes all colleagues to today's meeting of the NRN-GIT Advisory Board consisted of 18 Consortium members in 2021. Unfortunately Dr. Zheenbek Kulenbekov from the American University of Central Asia (AUCA) is passed away in 2022 and excluded from the Kyrgyz NRN-GIT Advisory Board.

Presentation by T.A. Golubenko, Head of Department Goskartography. Development of GPS network on the territory of the Kyrgyz Republic:

My name is T.A. Golubenko and I represent the State Agency of Geodesy, Cartography and Cadastre of the Kyrgyz Republic. I am speaking to you today in the role of the Head of Department, and I would like to share with you information about an important direction of our activities - the development of GPS network on the territory of the Kyrgyz Republic. Today, when geospatial technologies become an integral part of our daily life, the development of GPS network plays a key role in ensuring the accuracy and availability of geospatial data. We in Goskartography attach great importance to the development and improvement of this network on the territory of our republic. Our priorities in this direction include increasing the number of GPS stations, improving their technical efficiency and accuracy of measurements. We are also actively working on expanding the network coverage to ensure data availability in any regions of Kyrgyzstan. As part of our plans to develop the GPS network, we also cooperate with international partners and organizations, share experience and apply advanced technologies. This direction of development is directly related to our goal of ensuring the accuracy and reliability of geospatial data for various industries, including geodesy, cartography, construction, agriculture and others.



Presentation by A. Nurdinov, Head of Department, Zh. Solpieva, Chief Specialist of Goskartography: Automated information systems developed and applied by Goskartography:

Good afternoon! My name is Nurdinov A. and I am the Head of Department and next to me is Solpieva J., Chief Specialist of the State Agency of Geodesy, Cartography and Cadastre of the Kyrgyz Republic. Today we want to share with you information about what automated information systems are developed and successfully used in our organization. In the light of rapid technological changes, we are actively implementing automated systems to optimize our work processes and ensure more effective interaction with our clients and partners. Our information systems cover various aspects of Goskartography's operations. In particular, we have developed and successfully apply systems in the following areas:

- ✓ Geodetic planning and control: Our automated systems enable accurate planning and control of geodetic work, including surveying, processing and analysis of geodetic data.
- ✓ Cartographic design: We use systems to develop and edit cartographic materials, ensuring a high standard of quality and accuracy.
- ✓ Cadastral operations: Our information systems help manage cadastral information, including land registration and transparency in cadastral processes.
- ✓ Public Engagement: We have also developed systems to provide feedback to the public, which promotes openness and accessibility of geospatial information to a wide range of users.
- ✓ Data management systems: We are implementing state-of-the-art data management systems to efficiently organize and store geospatial data.

These systems not only increase the efficiency of our processes, but also help improve the quality of our services. We are proud that our developments are actively implemented and successfully utilized in our daily operations. Thank you for your attention and we are ready to share additional information or answer your questions.

Speech by the geoTAK Project Contact Dr. Akylbek Chymyrov, KSTU, Head of Department of Geodesy and Geoinformatics,:

Mr. Akylbek Chymyrov told about the Department of "Geodesy and Geoinformatics", about the implemented projects of the department, about the staff of the department and spoke in more detail about the project "Development of interdisciplinary postgraduate programs and strengthening of research networks in the field of geoinformation technologies in Armenia and Kyrgyzstan". He noted that the project is very important for both universities and industry, which will allow harmonizing and establishing cooperation between them. The analysis showed that most of the institutions are in dire need of improving geoinformation education.

Mr. Akylbek Chymyrov informed participants with the software available in universities and in the industrial sectors. He noted the main barriers identified within the GeoTAK Project survey: lack of specialists in the field, lack of educational programs at different levels, high cost of hardware and software, and lack of geospatial data, which is also important. He was also pleased to invite the employees of the organization to enroll in the Industrial PhD doctoral programs, which are realized in the framework of the GeoTAK project. He thanked the Industry and partner institutes for getting practical skills.

The invited guests got acquainted with the presentations reflecting the achievements and successes of the organizations and the university in the field of training of highly qualified specialists in geoinformation technologies.

2. DISCUSSIONS

Mr. A. Chymyrov: The National Research Node in Geoinformation Technologies (Kyrgyz NRN-GIT) in the Kyrgyz Republic was set up within the GeoTAK project funded by the European Union's ERASMUS+ programme to promote and harmonize innovative projects and joint research work in the Kyrgyz Republic in the field of geoinformation technologies. The Kyrgyz NRN-GIT operates as an "informal club" and does not enter into legal transactions.



The mission of the Kyrgyz NRN-GIT is focused on promoting research cooperation between Kyrgyz industrial and administrative organizations as well as research institutions and universities whose interest is to conduct basic or applied research or technological development in the field of geoinformation technologies.

The structure of the National Research Node of Geoinformation Technologies (NNRN-GIT) in the Kyrgyz Republic as an informal association of specialists, scientists, organizations and institutions interested in the development of cooperation in the field of geoinformation technologies, remote sensing, geodesy and cadastre was proposed at the Advisory Council meeting.

The Advisory Board of Kyrgyz NRN-GIT was established on March 25, 2022 in the 1st Meeting of the Kyrgyz NRN-GIT members institutions from government bodies, agencies, GIT industry and higher education partner institutions in the country. The Advisory Board of Kyrgyz NRN-GIT was composed of 18 members in the first meeting, but today it needs changes:

Dr. Zheenbek Kulenbekov, a member of the Advisory Board and a Head of Department at the American University in Central Asia is passed away on September 23, 2022, at the age of 56, as a result of a long illness.

Ms. Nurganym Baitukenova, a Secretary of the Advisory Board has left her job at KSTU and leaved the the Advisory Board.

Speakers:

Mr. Marat Anarbaev: Director of the Department of Urban Cadastre and Geoinformatics, MUP "Bishkekglavarhitektura"- He also noted the main problems of geoinformation technologies, that ministries lack qualified personnel who can coordinate technical tasks and successfully fulfill them. He mentioned the importance of teamwork of specialists from different fields such as GIS specialists, remote sensing specialists, geologists etc. Various ministries and organizations do not have a database and specialists who can manage, update and share it with other organizations promptly. In this regard, he mentioned the need to establish a National Research Node for Geoinformation Technologies.

Mr. Akylbek Chymyrov: Graduates of PhD programs will receive diplomas from Kyrgyz universities. PhD status will be recognized in Kyrgyzstan. European partners of the GeoTAK project are ready to support Kyrgyz universities after the completion of the project too.

Mr. Narynbek Isabekov: He noted that generally accepted standards and coordinate systems should be prepared for all ministries and organizations using geo-information technologies. He also noted the need to send specialists from organizations to PhD doctoral studies to improve their skills in the field of geoinformation technologies, as every day programs and technologies are being improved. The Goscartography is ready to sign an Agreement with KSTU on the joint Industrial PhD Training by sending its staff members to KSTU for the PhD study from 2024.

Mr. Zheenbek Mambetov: He suggested Ms. Alina Tynybekova from KSTU to the position of Secretary of the Advisory Board of Kyrgyz NRN-GIT and to have 17 members of the Advisory Board.

Mr. Narynbek Isabekov: He supported suggestion of Mr. Zheenbek Mambetovon electing Ms. Alina Tynybekova to the position of Secretary of the Advisory Board of Kyrgyz NRN-GIT and to have 17 members of the Advisory Board. Ms. Alina Tynybekova was elected as a Secretary and Member of the Advisory Board of Kyrgyz NRN-GIT (all 11 participating members supported his suggestion).

Mr. Akylbek Chymyrov: He informed about the project proposal by KSTU on establishing the Kyrgyz National Space Technology Centre or Kyrgyz Centre of Remote Sensing at Goscartographia. The Student Design and Flight Control Center at KSTU for training Master and PhD students on assembling, launching and controlling Nano Satellites.

Mr. Narynbek Isabekov: He has expressed interest of Goscartographia in the joint establishment of the Kyrgyz National Space Technology Centre or Kyrgyz Centre of Remote



Sensing. Goscartografia will provide its facilities and infrastructure for the education purposes of KSTU.

Mr. Narynbek Isabekov closed the Meeting of the Advisory Board of the Kyrgyz National Research Node in GIT (Kyrgyz NRN-GIT) by announcing its decisions.

Decided:

- ✓ To strengthen the National Research Node in Geoinformation Technologies (Kyrgyz NRN-GIT) in the Kyrgyz Republic by developing joint research and education projects.
- ✓ To support the Industrial PhD Programs of KSTU and OshTU by searching different funding sources as well as by providing production facilities and infrastructure.
- ✓ To apply to the Kyrgyz Government on establishment of the Kyrgyz National Space Technology Centre or Kyrgyz Centre of Remote Sensing at Goscartografia.
- ✓ To support the creation of Student Design and Flight Control Center at KSTU.
- ✓ To approve the composition of the Advisory Board of the National Node for Research on Geoinformation Technologies in the Kyrgyz Republic with 17 members (Attachment 1).
- ✓ To assign Ms. Alina Tynybekova to the position of the Secretary and Member of the Advisory Board of Kyrgyz NRN-GIT.

Chairman of the Advisory Board

Narynbek Isabekov

Secretary of the Advisory Board

Alina Tynybekova



**Advisory Board of the Kyrgyz National Research Node in Geoinformation Technologies
(Kyrgyz NRN-GIT), December 26, 2023**

1. **Mr. Narynbek Isabekov** - Director of the State Cartographic-Geodetic Service at the Kyrgyz State Agency for Land Resources under Government of the Kyrgyz Republic (Goscartography), isabekovn@mail.ru, (Chairman of the Kyrgyz NRN-GIT Advisory Board)
2. **Dr. Akylbek Chymyrov** - Razzakov Kyrgyz State Technical University (KSTU), Head of the Geodesy and Geoinformatics Department, chymyrov@gmail.com (Deputy Chairman of the Kyrgyz NRN-GIT Advisory Board)
3. **Ms. Alina Tynybekova** – Razzakov Kyrgyz State Technical University (KSTU), Teacher of the Geodesy and Geoinformatics Department, alina.tynybekova@kstu.kg (Secretary of the Kyrgyz NRN-GIT Advisory Board)
4. **Dr. Kanatbek Abdrakhmatov** - President of the National Academy of Sciences of Kyrgyzstan, kanab53@yandex.ru
5. **Dr. Dogdurbek Chontoev** - Director of the Institute of Water Problems and Hydro Energy, National Academy of Sciences of Kyrgyzstan, iwp@istc.kg
6. **Dr. Bolotbek Moldobekov** – Co-director of the Central Asian Institute of Applied Geosciences (CAIAG), b.moldobekov@caiag.kg
7. **Dr. Abdurashit Nizamiev** – Osh State University, Dean of Natural Geography Faculty, rashit-eco@mail.ru
8. **Dr. Ulan Chortombaev** - Director of the Kyrgyz Scientific and Research Institute of Irrigation, Ministry of Agriculture, ulan-chortombaev@mail.ru
9. **Dr. Shairbek Saidamatov** – Osh Technological University, Dean of Cybernetics and Information Technology Faculty, saidamatov.sh@gmail.com
10. **Dr. Tolkun Asykulov** - Director of NABU Kyrgyzstan (German nature conservation NGO - Kyrgyzstan office), tolkunbek.asykulov@nabu.de
11. **Mr. Almaz Abdiev** – Director of the State land management institute "Kyrgyzgiprozem" at the Kyrgyz State Agency for Land Resources under Government of the Kyrgyz Republic, al.abdiev@gmail.com
12. **Mr. Marat Anarbaev** – Director of the Urban Cadaster and Geoinformatics Department, Municipal Enterprise “Bishkekglavarchitektura”, anarbaev-71@mail.ru
13. **Mr. Muradil Murzaliev** - Chief Specialist of Osh branch of Kyrgyz Head Engineering Researches Institute, oshgiiz@rambler.ru
14. **Mr. Zheenbek Mambetov** – Director of the “Land and Real Estate” LLC, mambetov60@mail.ru,
15. **Mr. Nurbek Chymbyldaev** – Deputy Director of the “KyrgyzGeoTech” LLC, nurbek_ch@mail.ru,
16. **Mr. Kydyr Nazarkulov** - Director of “GIS Pro” LLC, nazarkulov_k@list.ru
17. **Mr. Zhumashbek Toktosunov** – Head of “Geo-Centre” LLC, geo-centre@bk.ru



Консультационный Совет Национального Узла исследований по геоинформационным технологиям в Кыргызской Республике (Kyrgyz NRN-GIT)

1. **Исабеков Нарынбек Дуйшекеевич** - директор Государственного учреждения по геодезии и картографии «Госкартография» при Госагентстве по земельным ресурсам при Правительстве КР, isabekovn@mail.ru, (Председатель Консультационного Совета Kyrgyz NRN-GIT)
2. **Чымыров Акылбек Уркалыевич, к.т.н.** - заведующий кафедрой «Геодезия и геоинформатика» КГТУ им. И.Раззакова, chymurov@gmail.com (Заместитель председателя Консультационного Совета Kyrgyz NRN-GIT)
3. **Тыныбекова Алина Тыныбековна** - преподаватель кафедры «Геодезия и геоинформатика» КГТУ им. И.Раззакова, alina.tynubekova@kstu.kg (Заместитель председателя Консультационного Совета Kyrgyz NRN-GIT)
4. **Абдрахматов Канатбек Ермекович, д.г.-м.н.** - президент НАН КР, kanab53@yandex.ru,
5. **Чонтоев Догдурбек Токтосартович, д.т.н.** - директор Института водных проблем и гидроэнергетики НАН КР, iwp@istc.kg
6. **Молдобеков Болот Дуйшеналиевич, к.г.-м.н.** – содиректор Центрально-Азиатского института прикладных исследований Земли, b.moldobekov@caia.kg
7. **Низамиев Абдурашид Гумарович, д.г.н.** – профессор ОшГУ, rashit-eco@mail.ru
8. **Чортомбаев Улан Тыргоотович, д.э.н.** - директор НИИ Ирригации, Министерство сельского хозяйства, ulan-chortombaev@mail.ru
9. **Сайдамов Шайырбек Мусаевич, к.т.н.** – профессор, декан ФКиТ, ОшТУ, saidamatov.sh@gmail.com
10. **Асыкулов Толкунбек Асыкулович, к.г.н.** - директор филиала Союза охраны природы Германии (NGO NABU - Kyrgyzstan office), tolkunbek.asykulov@nabu.de
11. **Абдиев Алмаз Сапарович** – директор ГПИ "Кыргызгипрозем" при ГАЗР КР, al.abдиеv@gmail.com
12. **Анарбаев Марат Асылбекович** – начальник отдела ГИС и топографии, МП «Бишкекглархитектура», anarbaev-71@mail.ru
13. **Мурзалиев Мурадиль** – главный специалист Ошского филиала ОАО «КыргызГИИЗ» (Кыргызский Головной Институт по инженерным Изысканиям в строительстве), oshgiiz@rambler.ru
14. **Мамбетов Жээнбек Акималиевич** – директор ОсОО "Земля и недвижимое имущество", mambetov60@mail.ru
15. **Чымбылдаев Нурбек Тентимишович** – директор ОсОО «КыргызГеоТех», nurbek_ch@mail.ru
16. **Назаркулов Кыдыр Болотаалыевич** - директор ОсОО «ГИС про», nazarkulov_k@list.ru
17. **Токтосунуев Жумашбек** – директор ОсОО «Гео-Центр», geo-centre@bk.ru





