

Dear colleagues,

A new double-issue of GEOBIZ newsletter is in front of you in which we provide an overview of past and future activities. Finally, circumstances have allowed us to visit Chisinau. We spent three very successful days, and you will see it from the contributions which we bring.

Further, you can find an overview of four LLL courses held in Tirana, Pristina and Chisinau, Open day in the Faculty of Technical Science in Novi Sad and Dniester Day 2022 in Moldova. As you can see, there have been a handful of project activities in the past months. ... and according to

the Announcement part, the period ahead of us is also exciting.

At the end of this issue, we repeat the contribution 2nd Business-academia workshop in Pristina "Challenges and innovative methods of cooperation in academia-business education for the needs of the labour market" due to a technical error in GEOBIZ newsletter # 14.

In the final part of the issue, read the standard Dissemination corner and Announcement of coming activities.

Vesna Poslončec-Petrić

2ND BUSINESS-ACADEMIA WORKSHOP, CHISINAU 19TH MAY 2022.



*Livia Nistor-Lopatenco
Faculty of Constructions,
Geodesy and Cadastre,
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*Lucia Capatina
Faculty of
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The 2nd BA Workshop was organized on 19th of May 2022 in Chisinau by both partners from the Republic of Moldova: Technical University of Moldova and Tiraspol State University. The event was organized in a hybrid format, mostly with a physical presence. 72 participants attended the event, online participants were connected via Webex – Cisco platform. This

event is the result of the 1st BA Workshop beside other actions that demonstrate future actions sustainability, such as: the signature of Agreements of Cooperation with private entities by both universities – Technical University of Moldova and Tiraspol State University; fruitful collaboration and cooperation with private companies by sharing practical and theoretical knowledge in the field of GIS; one of the business partner – Cart Engineering SRL – being included in the Project Advisory Committee; active participation of private entities in the 2nd BA Workshop.

The focus of the 2nd BA Workshop was not only on the private companies but also on the active involvement of students from bachelor and master degrees and the opportunities offered by the private sector through the business – academia cooperation. The approach of GIS in teaching and research was highlighted in the

most topics of the speakers: (1) the role of stakeholders cooperation in the Geoinformatics field as a key to success and an efficient tool for professional skills development was presented by the Professor PhD, Željko Bačić, Project Coordinator, University of Zagreb, Croatia; (2) how the students can use the open-source software, the advantages of this software, the challenges and opportunities of open source solutions in geographical research and perspectives of teachers from universities how to use and improve their project-based learning and problem-based learning approach during the teaching process was delivered by the associate prof. PhD Tudor Castravet; (3) the BA cooperation and good practices were highlighted in the next presentation where the practical example of "Fundamentals of GIS" LLL course was provided by the assist. prof. MSc Vitalie Dilan and assoc. prof. PhD Gherman Bejenaru; a good experience of sharing best knowledge and experience with theoretical and practical part; (4) another example of business –

academia cooperation was presented by TBL-Group Company from Romania (staff company participated online in the event) represented by the student Ștefănel POZDÎRCĂ, Year IV at the bachelor's degree program "Geodetic Engineering and Cadastre" and at the same time the employee at TBL-Group. The gained experience at the company "Total Business Land" in Romania was shared with the others students as a good example of an active involvement and good results achieved; (4) the role of the public sector and its support in the educational process (esp. In the Geoinformatics field) and vice – versa was highlighted by the Geodetic Engineer Alexandru Mihailov, the representative of "INGEOCAD" State Institute.

In the end, discussions and round table among the participants were organized for the current status of cooperation and future opportunities: common projects, research activities, new technologies, training etc.



PROJECT OFFICE - VISIT TO MOLDAVIA



*Željko Bačić and Vesna Poslončec-Petrić
University of Zagreb
Faculty of Geodesy*

Due to the Covid-19 pandemic, the planned activities in Moldova could not be realized until recently and therefore we were especially pleased to visit our partners in Chisinau. In the four days of the visit, we participated in the very successful 2nd Business-Academia workshop held on 19.05.2022.

Further series of meetings has been organized. We visited and spoke with the prof., Dr. Viorel BOSTAN, rectors of the Technical University of Moldova and prof. Dr. Eduard COROPCEANU, rector of State University of Tiraspol. We met with the project teams of both universities and discussed a number of aspects of the GLOBIZ project implementation as well as future cooperation. We have also visited project established Geoinformatics laboratories.



*Meeting with prof. Dr. Eduard COROPCEAN, rector of
State University of Tiraspol*



Meeting with prof., Dr. Viorel BOSTAN, TUM rector

In addition to our visit to the Land Relations Agency and Cadastre (LRAC) of the Republic of Moldova, we also met with the National Erasmus Office team. Both meetings were very useful because they gave us guidance on future cooperation.



NEO Moldova and GLOBIZ team

At the end of this brief review of visits to Moldova, the hospitality of our hosts should be highlighted. They didn't let us out of their hands and regardless of numerous activities, they found time to show us Chisinau and the sights in the surrounding of the town.

MEETING IN AGENCY FOR LAND RELATIONS AND CADASTRE, MOLDOVA



*Livia Nistor-Lopatenco
Faculty of Constructions, Geodesy and Cadastre,
Technical University of Moldova*

On May 20, 2022, the Land Relations Agency and Cadastre (LRAC) of the Republic of Moldova, hosted a meeting with representatives from the University of Zagreb (Professor PhD, Željko BAČIĆ and Professor Vesna POSLONČEC-PETRIĆ), the Technical University of Moldova (Associate Professor, Ph. Dr. Eng. Livia NISTOR-LOPATENCO, Dean of the Faculty of Constructions, Geodesy and Cadastre) and the State University of Tiraspol (lecturer Vitalie DILAN and lecturer, Ph. Dr. Lucia CAPATINA).



The purpose of the visit was to exchange experiences between academia and the business environment in the field of Geoinformatics in the Republic of Moldova (<https://arfc.gov.md/>).

Starting with 2019, the mentioned academic institutions implement the *Business-driven problem-based learning for academic excellence in geoinformatics* - GEOBIZ project, financed by

the European Union, Erasmus+ KA2 programme, the main objective of which is to strengthen the capacities of the academic institutions to respond to the needs of the geoinformatics field.



With a word of welcome, the interim general manager Mr. Crigan Stefan from the Land Relations and Cadastre Agency came. Mr. Crigan mentioned that LRCA is always ready to support the universities of the Republic of Moldova in the field of Geoinformatics, especially TUM and TSU, because these 2 universities prepare graduates very well. The good collaboration between LRCA and the Technical University of Moldova began in 1995, with the launch of the specialty "Geodesy, Topography and Cartography", currently with a new name „Geodetic Engineering and Cadastre”.

Dr. Maria Ovdii, GCG Chief Executive Officer, Land Relations and Cadastre Agency, made a presentation about the activities of the Land Relations and Cadastre Agency. Due to the fact that, in one of the components of the Twinning Project "Development of network services in accordance with the EU INSPIRE Directives", which benefits ARFC, collaborative activities were carried out with the academic sector, the GEOBIZ project coordinator and partners requested the establishment of a subsequent

collaboration, based on the findings, identified by the representatives of the University of Zagreb, following the examination of the university curricula and by colleagues regarding the Spatial Data Infrastructure.



Mr. Ivan DANII - Deputy Chief, Department of Geodesy, Cartography and Geoinformatics Land Relations and Cadastre Agency, mentioned about the serious involvement of teachers from the 2 universities in the elaboration and development of normative acts in the field of Geodesy, Photogrammetry, Cadastre, GIS, etc from the Republic of Moldova, adjustment with European INSPIRE directives.

Sainsus Vitalia, Consultant, Department of Geodesy, Mapping and NSDI Agency for Land Relations and Cadastre Agency of the Republic of Moldova, responsible for the certification commissions of the specialists in the field of Geodesy, topography, photogrammetry, GIS etc.

remarked about the certification procedure and without the professors from universities, members of these commissions, the activity would have been impossible.



Tamara Rudenco, main specialist at National Geospatial Data Fund from LRCA, said that she is available to both teachers and students and can always help them with the geospatial data needed in the educational process (<http://www.geoportal.md/>).



Finally, a new project application is to be initiated, which would support the academic sector in the Republic of Moldova, by involving the public and private sectors in the process of training future specialists in the field.

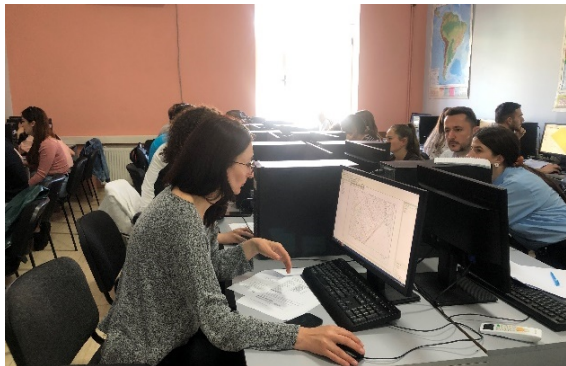
LLL COURSES AT FACULTY OF HISTORY AND PHILOLOGY, UNIVERSITY OF TIRANA

CREATING THEMATIC SPATIAL DATA BY DIGITISING SCANNED SOURCE MAPS



*Sabri Laçi and Sonila Papathimiu
Faculty of History and Philology
University of Tirana*

The Department of Geography, Faculty of History and Philology, organized on April 27th-28th, 2022, the second LLL course in SIG, in the framework of the GEOBIZ project and co-financed by the Erasmus + Program of the EU.



The LLL course: "Creating thematic spatial data by digitising scanned source maps", which was attended by 25 participants, was led by Dr. Adelajda Halili with the help of Prof. assoc. Dr. Sonila Papathimiu.

In this training, participants received theoretical information for the creation of spatial data from the digitization of detailed plans for urban planning and practised a case study for the territorial development of the Municipality of Tirana. The training focused on the basic concepts and techniques of data processing from different formats (raster, vector, table).



The purpose of the case study used for the training is related to the use of data from various institutions such as AKSHI (National Agency of ICT) and the Municipality of Tirana. The case study was focused on:

- a) *Georeferencing of scanned plans using the coordinates of identified points.*
- b) *Conversion of scanned raster images to a vector data set.*
- c) *Adding data from other layers or tables.*

ANALYSING SPATIAL PATTERNS OF NOISE IN URBAN AREAS BY MAPPING



The third LLL course in GIS, in the framework of the GEOBIZ project was organized on May 27th-28th, 2022. The LLL course: "Analysing spatial patterns of noise in urban areas by mapping", which was attended by 24 participants, was led by Prof. assoc. Dr. Sonila Papathimiu.



In this training, participants received theoretical information and practised noise mapping and

analyses with ready-to-use data collected in the urban areas of Tirana. Participants also practised collecting and processing noise measurements with their own mobile devices. The purpose of the two case studies used for training was to identify ways to collect noise data in urban areas and analyze them through maps created in ArcGIS or QGIS. This training enhances the professional skills of participants, which they can apply in their workplaces and future studies.

All participants were provided with certificates, which were handed to them at the ceremony held at the end of the training.

2ND BUSINESS-ACADEMIA PRACTICE AS NEVER STOP LEARNING PRACTICAL IMPLEMENTATION OF GEOINFORMATION IN EMERGENCY MANAGEMENT



*Murat Meha
Faculty of Civil Engineering
University of Pristine*

According to the 2nd cycle of the GEOBIZ Project, University of Pristina, Project Partner number P14, held a practice workshop - LLL focusing Business-Academia. The gathering took place at the Emergency Management Agency (EMA) premises. In the second round of B-A, in cooperation with EMA, we organized a joint study practice as never stop learning (LLL), with the topic: "Practical implementation of geoinformation in emergency management".

In this workshop, the participants, a group of students from the study program Geodesy, Master's level, received practical information on how EMA uses geoinformation and its practical implementation in emergencies. Representing EMA, co-organizer Dr. Nehat Koçinaj, explained in detail many emergency interventions inside and outside the territory of R. of Kosovo, what to do and how important geoinformation is in these cases. EMA use the geoinformation as a primary tool to identify a location for intervention, and the way of approaching the main point of intervention. Based on these EMA data, Mr. Kocinaj and his colleagues explained the use of adequate machinery to intervene. EMA is ready to save people's lives in cases of fire, flood, snow slide-avalanche, landslides, earthquakes, volcanic eruptions etc.

The Department of Geodesy, Faculty of Civil Engineering within the University of Pristina will continue to develop new cooperation with the

Private and Public businesses. This cooperation is useful for our future experts to gain new experiences and get ready for a new professional market.

The LLL course "Practical implementation of geoinformation in emergency management" was led by Dr. sc. Nehat Koçinaj with the support from Prof. Dr.sc. Murat Meha, Dr. sc. Fitore Bajrami and MSc. Fisnik Loshi



Photos from LLL workshop at Emergency Management Agency 25.05.2022

LLL COURSES AT FACULTY OF GEOGRAPHY, TIRASPOL STATE UNIVERSITY



*Vitalie Dilan and Lucia Capatina
Faculty of Geography
Tiraspol State University*

FUNDAMENTALS OF GEOGRAPHICAL INFORMATION SYSTEM

The lifelong learning course entitled *Fundamentals of Geographical Information System* was held as part of the Erasmus+ GEOBIZ project at the Faculty of Geography, Tiraspol State University.

The LLL course was organized in Chisinau, between April 19 – April 22 (Module I, hybrid format) and May 10- 13, 2022 (Module II,

physical presence). The course was structured in two modules with the total contact hours of 75, or equivalent to 10 ECTS credits:

- Module I: Basics of Geographical Information System (37 hours)
- Module II: Advanced of Geographical Information System (38 hours)

The course was taught by the teachers from the Faculty of Geography: the 1st Module was provided by the Gherman BEJENARU assoc. prof., PhD, the 2nd one - provided by the Tudor CASTRAVEȚ assoc. prof., PhD. At the end of the course all participants received the Certificates of Attendance.

The LLL course participants gained some theoretical and practical knowledge how to use the Geographic Information Systems (GIS), especially with a focus on QGIS software. Topics included issues of data accuracy, map projections, scale, data collection, metadata, and data storage/management. GIS analysis techniques, data processing, new projects development based on the collected data, all these topics were integrated in the study use cases PCD05, PCD11, PCD20 based on PBL approach. The equipment purchased with the support of the GEOBIZ Project was used at the practical part of the course – Drone DJI Phantom 4 multispectral, Spectra Geospatial SP85 GNSS receiver, server, computers etc.



The course was attended by 25 participants from different public institutions - Ministry of Environment, "Apele Moldovei" Agency, State Hydrometeorological Service, General Inspectorate on Emergency Situations of the Ministry of Internal Affairs, National Bureau of

Statistics, Public Property Agency, State Enterprise "State Road Administration" etc. and some private ones, such as Telfumin Agro SRL.

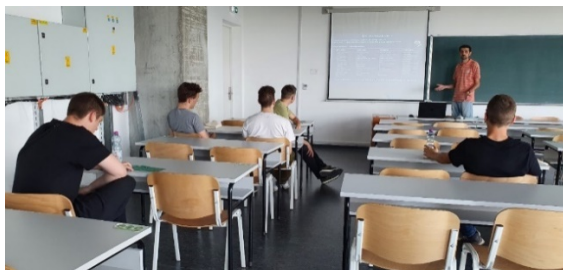
The role of this course was to increase the staff qualification in the field of GIS.

OPEN DAY OF THE FACULTY OF TECHNICAL SCIENCES



*Ivana Badnjarević
Faculty of Technical Sciences
University of Novi Sad*

On May 14th 2022, the Faculty of Technical Sciences opened its doors to high school students who are interested in studying at this faculty of the University of Novi Sad. Visitors had the opportunity to hear all about the study programs they can enrol in the 2022/2023 school year.



Additionally, they are informed about the entrance exam, the possibility of applying for several study programs as well as the opportunities for all activities that the Faculty provides. The study program of Geodesy and Geoinformatics was presented to the interested graduates.

During this event, the visitor had the opportunity to "take a sneak peek" at the Laboratory of

Geodesy and Geoinformatics, to gain insight into the practical results achieved by our students, modern equipment used during practical teaching activities, and to hear about the importance of international projects in which the Laboratory for Geoinformatics FTN, University of Novi Sad participates as a partner.



On this occasion, the results of the GEOBIZ project were presented. The main objective of the GEOBIZ project is to strengthen the capacity of academic institutions to better respond to the needs of the emerging geoinformatics industry.

Project goals are referring to the field of geoinformatics, knowledge transfer in business and HEI and excellence in geoinformatics, therefore project team of the Faculty of Technical Sciences consists of a member of the Laboratory for Geoinformatics, Faculty of Technical Sciences. Laboratory for Geoinformatics is in charge of education and support of teaching processes in the field of geoinformatics at the Faculty of Technical Sciences.

In case you are interested in more details, please visit [GEOBIZ](#) and [Laboratory for geoinformatics](#) website.

GEOBIZ at Dniester Day 2022



*Vitalie Dilan and Lucia Capatina
Faculty of Geography
Tiraspol State University*

In the Republic of Moldova, each year, the last Sunday from the May month is celebrating the Dniester Day. This Year, on 28 of May the representatives of the of the Faculty of

Geography from Tiraspol State University, teachers and students, participated in a field trip in Oxentea village (Dubasari district), located on the right part of the Nistru riverbank where some activities took place: field observation, water samples collection, field measurements for water quality and quantity, drone usage etc. The teachers and students have used for some field observations Drone DJI Phantom 4 multispectral and Spectra Geospatial SP85 GNSS receiver purchased in the GEOBIZ Project. Some dissemination materials as Ecobags, leaflets, folders with GEOBIZ logo were shared among the participants.



GEOBIZ at Dniester Day 2022

2ND BUSINESS-ACADEMIA WORKSHOP IN PRISTINA *

** Apologizing to the authors, we are repeating the article due to a technical error in GEOBIZ newsletter # 14.*



*Murat Meha and Fitore Bajrami
University of Pristine
Faculty of Civil Engineering*

The Faculty of Civil Engineering together with the Industrial Board and the GEOBIZ project, has organized a workshop on 28.02.2022. The workshop was held in order to analyze the presentation of the practical effects of the connection between academia and business in the economic development of the country, on the topic "*Challenges and innovative methods of cooperation in academia-business education for the needs of the labour market*" University of Pristina, respectively the Faculty of Civil Engineering has reached an agreement with business partners, for cooperation in joint education for future experts in business and academy. The opening note from the Dean of the Faculty of Civil Engineering, was in the spirit of academic development and cooperation with Business.



Workshop participants (1)

In this workshop, three presentations were held on the topics from business and the Business-

Academia cooperation. The first topic was titled "System, mission, organization, mandate, coordination of emergency operations" where the activities from Emergency Management Agency and requests for geoinformation from various sources were presented.



First presenter. Nihat Koqinaj PhD., AME



Second presenter, Njomza Koraqi, MSc.

The second presentation was by MSc student Njomza Koraqi, titled "Collection and consistency of geoinformation for research in the field of Archeology". The first part of the presentation provided knowledge on the use of geoinformatics in the collection of geoinformation for archaeological sites. While the second part of the presentation was directly related to its practical activity according to the requirements of the archaeological project of a castle in Kosovo. This was the B-A collaboration

for future experts in joint education in the field of geoinformatics and geoinformation.

The third presentation according to the agenda was by Prof. Murat Meha PhD, on the topic "Academy-business co-education according to the EU model for problem-based learning". During these presentations and discussions with the participants it was concluded as follows: The aim of this workshop is the B-A cooperation of stakeholders in geodesy, geoinformatics and spatial technology in all areas in Kosovo.



Third presenter Prof. Dr. Murat Meha

Therefore, together the B - A will continue to find solutions to professional problems as follows:

- joint building of professional capacities to future experts,
- to gain professional knowledge and skills, for individuals work and for heterogeneous professional groups.
- focus on the experiences of others,

- finding opportunities to interpret data through software in combination with other forms of problem solving,
- assess the benefits of stakeholder cooperation in joint academic education process that aims to reduce the gap between academic supply and business needs,
- organizing lectures and practical work with businesses, for example groups of 10-12 students, or to send them a day at work, 3-4 students in a business, so that they can see how it works, and how they can gain professional skills and abilities from these organizations.



Workshop participants (2)

The conclusion of the Industrial Board and the GEOBIZ Project, through the Faculty of Civil Engineering, was the continuation of support in B-A education through workshops and internships for the students. B-A workshops will be organized with students in April and May 2022, at business companies. While smaller groups of 2-3 students will be sent for a visit to business companies.



2nd cycle of Bussines-Accademia cooperation events:

- Tirana, June 15 or 17, 2022
- Pristina, July 5, 2022
- Banja Luka, July 8, 2022
- Podgorica, July/September 2022



Announcements



2nd Business-Academia workshop in Banja Luka will be held on June 17, 2022, at the Faculty for Architecture, Civil Engineering and Geodesy of University of Banja Luka. Download the workshop program [here](#).



13th annual Days of BHAAAS & GEOBIZ Business-Academia workshop & 10th GEOBIZ Progress meeting

Sarajevo, 22nd-25th June 2022.

More info [here](#)



2nd Business-Academia workshop in Pristine will be held on July 7, 2022, at the University of Business and technology. Download the workshop program [here](#).



3rd International Conference & Exhibition

Advanced Geospatial Science & Technology (TeanGeo 2022)
18-20 October 2022; Tunis, Tunisia

More at: <http://www.teangeo.org/En/>

ConsGeoCad 2022

SCIENTIFIC SYMPOSIUM
WITH INTERNATIONAL PARTICIPATION
at TECHNICAL UNIVERSITY OF MOLDOVA

Date of the Symposium: **29.09.2022 – 01.10.2022**

Venue: Faculty of Constructions, Geodesy and Cadastre,
Technical University of Moldova
(on-line and live)

ConsGeoCad 2022 - Scientific Symposium with National and International participation at Technical University of Moldova.

More at: www.consgeocad.utm.md

Dissemination corner



On June 9, 2022, we were visited by students and colleagues from Bochum University of Applied Sciences. During the visit, with students, prof. Alfred Mischke and Oliver Schwarzer held a meeting to present Erasmus + projects "Business driven problem-based learning for academic excellence in geoinformatics - GEOBIZ", "Open Spatial Data Infrastructure Education Network - SPIDER" and "Spatial Data Infrastructures and Earth Observation Education and Training for North-Africa - SEED4NA".



The **Science Festival 2022** is already a traditional event promoting science and science projects held in Zagreb from 2 to 7 May 2022. This year's theme of the Festival was LIFE, and we used it to promote project results with an emphasis [„Modernization of geoinformatics curricula based on problem-based learning and developed through the GEOBIZ project“](#) by Željko Bačić, Vesna Poslončec-Petrić, Zvonimir Nevistić and Iva Cibilić.



Foster the growth of the European EO*GI sector ensuring a workforce with the right skills, in the right place, at the right time.

[EO4GEO Newsletter #9](#)

The 9th issue of the EO4GEO Newsletter has been published. Among a handful of interesting contributions, we highlight: Impact of project results and EO4GEO Mobility Program. More about project [here](#).

Impressum

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