

Dear colleagues,

Numerous activities of the GEOBIZ project partners do not give us a break and after only two weeks we are coming out with a new issue of our newsletter.

Although, we start this issue with an overview of the activities of GEOBIZ PMB and PAC meetings which held at the summer school in Dubrovnik, and the report of the project manager prof. Željko Bačić on the submitted Mid-Term report. Nevertheless, the main topic is the 8th GEOBIZ Progress Meeting held in November 2021 in

Pristina and the signing of the first six Business-Academia Memorandum of Understanding.

In the final part of the newsletter, don't miss the Dissemination diary section with an overview of dissemination activities of project partners, review of The Space / Geoinformation Sector Skills Strategy published within the EO4GEO project and news about the admission of our colleague Goran Barović to Doclean Academy of Sciences and Arts. We congratulate Prof. Barović on this achievement, and we invite you to let us know about your activities.

Vesna Poslončec-Petrić

4TH GEOBIZ PROJECT ADVISORY COMMITTEE MEETING



Željko Bačić
University of Zagreb, Faculty of Geodesy

During the 2nd Summer school (training for teachers) in Dubrovnik, on September 14th, the 4th Project Advisory Committee (PAC) meeting has been organized. The PAC role is to provide external view on the project and results achieved from the major stakeholder side. Therefore, members of PAC are representatives of national mapping and cadastre or geospatial authorities of Albania, Federation of Bosnia and

Herzegovina, Kosovo, Moldova and Montenegro. At the 4th PAC meeting the Committee members and GEOBIZ partners discussed two major issues: curricula developed in frame of GEOBIZ project and business-academia cooperation.

The PAC members expressed satisfaction with the developed curricula and planned implementation of new and modernized courses at the partner universities emphasising need to provide developed curricula also to the present professionals by delivering LLL courses to them. Also, they gave support to the business-academia cooperation efforts expressing importance of cooperation of all stakeholders in geodesy, geoinformatics and geospatial sector.

Next PAC meeting is scheduled for January 2022.

GEOBIZ MID-TERM REPORT



Željko Bačić
University of Zagreb, Faculty of Geodesy

In accordance with the Erasmus+ Capacity Building in Higher Education project rules GEOBIZ project was obliged at the project mid-term to provide information about the project

progress by submitting Technical report and Financial statement. The due date was July 15th, but due to the full program related to the 1st Summer school in Belgrade extension was requested and granted. The report and statement have been submitted at the beginning of October and evaluated by the Executive agency evaluators. The Technical report has been approved without any major annotation or recommendation. Additionally, since the project has spent more than 70% of 1st Grant instalment, we have requested 2nd Grant instalment and received it at the beginning of December and transferred it to the project partners.

GEOBIZ PROGRESS MEETING IN PRISTINA, NOVEMBER 11-12, 2021



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

GEOBIZ Progress Meeting in Pristina held at the Faculty of Civil Engineering University of Pristina, had a very professional audience including 15 International Universities, with academic staff from the EU-HEI, Western Balkans, Moldova, etc. The representatives of business, governmental and academic society emphasized the importance for raising the quality of curricula through cooperation between Higher Education Institutions and public and private businesses.



In this meeting of the GEOBIZ project were presented and discussed the future requirements, technological developments and labour market requirements, as listed below:

- Modernization and development of a new geoinformatics / geodesy curricula, based on EU models,
- Coordination on technological development for Academic Education for institutions and businesses
- Addressing and implementing good practices in geoinformatics / geoinformatics with private and public business partners.

- Active teaching and learning with interactive lectures, laboratory exercises, and fieldwork with students,
- Evaluating mixed methods for effective implementation of learning to prepare our students - prospective experts as excellent contributors - in the fields of geomatics / geoinformation / geodesy.
- Cooperation and coordination between the Academy and Businesses, and with the private and public sector



The real-time geospatial data collection component is becoming a small part of a surveyor's role, while data management is key, especially for interpretation and communication. The need for more concentrated higher education, including Business-Academy cooperation, definitely requires modernized content of high education curricula, especially in the field of geoinformatics / geoinformations. Major contributors to the collection and interpretation of geoinformation are geodesy, photogrammetry, GIS, surveys, remote sensors, satellite navigation, GPS / GNSS, LiDAR, cartography. While the basic fields of geoinformatics are mentioned: mathematics, computer science and engineering.

The two-day meeting "GEOBIZ Progress Meeting in Pristina" held on 11-12 November 2021, had a good start, in which occasional speeches were given by the leaders of 2 universities (University of Pristina and University of Business and

Technology), the Dean of Faculty of Civil Engineering Prof. Ass. Dr. Florim Grajcevc, representative from the Erasmus+ Office in Pristina, Mrs. Jehona Lushaku, Central Coordinator of the GEOBIZ Project Prof. Dr. Zeljko Bacic and the national leader of the GEOBIZ project for UP, Prof. Dr. Murat Meha.



Academia-Business - Memorandum of Understanding

Achievements on PMB Pristina: the 2-day meeting was organized in the hybrid format: physically at the Faculty of Civil Engineering Hall, and with online participation, the total number of participants was 115 for two days. 12 presentations were held. By the end of the first session, on 11th November 2021, a visit was organized to the laboratory of the Department of geodesy; 6 Memorandums of Understanding (MoU) have been signed between Businesses and UP, as well as 4 MoU's between UBT and businesses.

The agreements signed between University of Pristine, Faculty of Civil Engineering and the University for Business and Technology in Pristina with Business Sector had the following profiles:

- 6 Geodetic Companies
- 1 Architecture Companies,
- 1 Construction Companies and
- 2 Public-Governmental Agencies.



Academia-Business cooperation; moment of signing the MoU between University of Pristine and Business Sector

Content of Business-Academy MoU

Based on the agenda of the “GEOBIZ Progress Meeting in Pristina” six companies signed the MoUs with the University of Pristina – Faculty of Civil Engineering. Public and private companies are willing to enter into an agreement of cooperation with the University and to establish a program of business-academia collaboration in areas of interest that benefits both partners. The purposes of the business-academia cooperation between UNIVERSITY and COMPANY are as follows:

- Promote interest in teaching and research activities of the respective institutions,
- Contribute to modernization of study programs and courses in the field of technology in geoinformatics based on business-driven problem, and contribute to company development
- Contribute to modernization of Curricula at FCE - UNIVERSITY Pristina
- Deliver training (LLL courses) to COMPANY related to geoinformation
- Jointly conduct research in the field of Geodesy, geoinformatics and related fields as in Civil Engineering, Architecture, Statistics authority, Geology, Mining, Managed of emergency. etc.
- Any activity undertaken based on this agreement must preliminarily receive the approval of the certain institutional officials of the relevant institution.
- Exchange information pertaining to developments in teaching, student development and research at each institution and in both interests.
- Start of the meeting at 9:00 on 11 November 2021

Coopetation Memorandum

Between:

• “NEWS” Sh.P.K.;



• Data GISconsulting L.L.C.



Between:

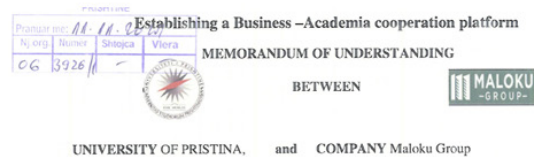
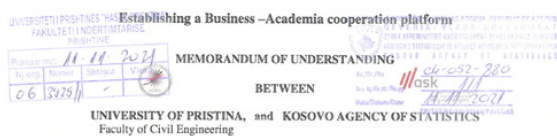
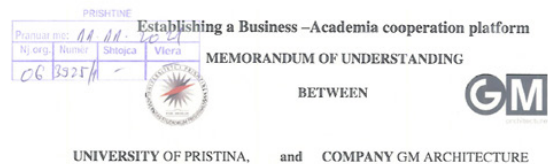
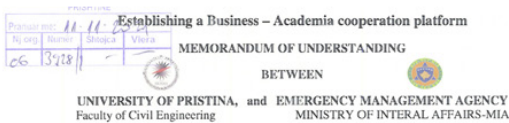
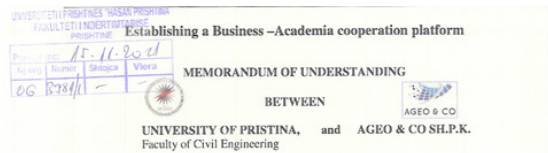
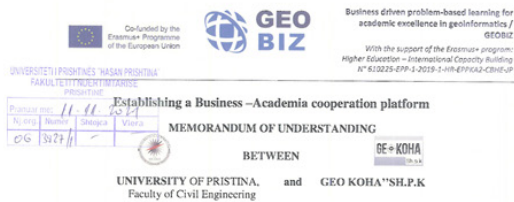
• GeoCAD Sh.p.k.;



• GeoCODE Sh.P.K



Memorandum of Understandings between University of Business and Technology (UBT) and Business sector



Memorandum of Understandings between University of Pristine and Business sector



*Participants of GEOBIZ Progress meeting in Pristina
(in front of Faculty of Civil Engineering)*

NEW DRONE AND 3D LASER SCANNING EQUIPMENT FROM GEOBIZ PROJECT - DEMONSTRATION FOR STUDENTS / FIELD EXERCISE



*Murat Meha and Fitore Bajrami
University of Pristine*

In the frame of GEOBIZ project new equipment for modernized and new courses has been purchased. The key parts of the purchase are new drone and terrestrial laser scanner.



Students and Professor demonstration new equipment and thanking EU support



Collecting data with Drone, implementation and comparison with cadastral vector data on the left photo.

Received equipment was presented to the students listening new or modernized courses in frame of GEOBIZ projects as a first step in them introduction into the teaching process.

The presentation focused on:

- how to use these instruments and
- range of their use.



Purchased terrestrial laser scanner

These instruments, directly or indirectly, will be addressed and used in lectures and especially exercises which have been modernized according to the GEOBIZ project as well as for other courses at the faculty and for the research enabling students and faculty staff to become familiar and well trained in use of this modern geospatial technology.

CHALLENGES IN THE FINANCIAL MANAGEMENT OF ERASMUS+ CBHE PROJECTS IN KOSOVO



Murat Meha, University of Pristine

Thematic Cluster Meeting organized by Kosovo Erasmus+ Office took place on December 10, 2021, in the Swiss Diamond Hotel in Pristina.

Since our Erasmus+ GEOBIZ project has made good progress in the field of geoinformatics, we were pleased to present achievements on modernisation of curricula and financial progress management. All participants gave their contributions related to financial management in this cluster meeting. As contributors were representatives from the Ministry of Education and Technology, and representatives from the UP and other Kosovo Universities.



We were invited to deliver a short PowerPoint presentation covering the budget of the project and other topics.

During the discussion on the cluster meeting, we listed the following related GEOBIZ project:

- Tangible results and achievements,
- Impact and sustainability of the project.
- Challenges on development the project during the COVID-19,
- High challenges that EU does not allow free movement for Kosovo citizens; this has a very negative impact on the cooperation between HEI in different EU countries.



Head of the GEOBIZ team of the Faculty of Philosophy, University of Montenegro, prof. Goran Barović, PhD., on December 24, 2021. was elected a member Doclean Academy of Sciences and Arts.

We congratulate to prof. Barović and wish him a lot of success in further work!

More about Doclean Academy of Sciences and Arts at: <https://danu.co.me/>

Dissemination diary

THE XXVIIITH EDITION OF THE GEOGRAPHICAL INFORMATION SYSTEMS INTERNATIONAL SYMPOSIUM, CHISINAU



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

On October 15, 2021, Faculty of Geography, Tiraspol State University organized the XXVIIIth edition of the GIS Symposium, in a hybrid format – the Microsoft Teams platform was used for online participants.



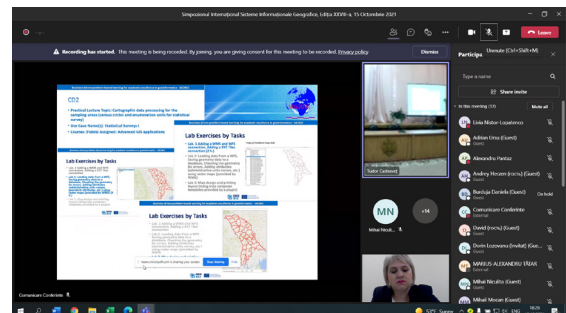
The Symposium was organized in cooperation with some partner universities and research institutions from Republic of Moldova and Romania, with the support of the GEOBIZ Project. The leaflets and other promotional materials of the project were disseminated to the Symposium participants.

The total number of participants reached approx. 80 (online and in person). Two presentations related to the GEOBIZ Project

activities were provided – one by a group of authors from Faculty of Geography, UST:



Modernization of the Master Programme in Geoinformatics through implementing PBL/STEAM with the support of GEOBIZ Project (authors – Lucia Capatina, Vitalie Dilan, Tudor Castravet, Gherman Bejenaru), the second one by Livia Nistor- Lopatenco from Faculty of Construction, Geodesy and Cadastre, TUM – GEOBIZ Project implementation in the Republic of Moldova.



Achievements and perspectives. In general, all presentations were focused on possibilities of using GIS in different research activities with practical examples. Was a one full – day event organized in 4 sections with 36 papers/communications.

GEOINFORMATICS CURRICULA MODERNISATION BASED ON PROBLEM-BASED LEARNING THROUGH THE COOPERATION OF THE BUSINESSES AND THE ACADEMY

From November 4th till 7th in Opatija (Croatia) the 14th Symposia of licensed surveying engineers took place. GEOBIZ project was presented at this



Symposia with the paper written by Željko Bačić, Vesna Poslončec-Petrić, Dušan Jovanović, Almir Karabegović and Mirza Ponjavić named: [Geoinformatics curricula modernisation based on problem-based learning through the cooperation of the businesses and the academy](https://bib.irb.hr/1155864). The paper was presented by Vesna Poslončec-Petrić and is printed in Symposia proceedings: Zbornik radova - 14. simpozij ovlaštenih inženjera geodezije / Racetin, Ivana; Zrinjski, Mladen; Župan, Robert (ur.). Zagreb: Hrvatska komora ovlaštenih inženjera geodezije, 2021. str. 91-96 (<https://bib.irb.hr/1155864>).

BUSINESS-BASED LEARNING FOR ACADEMIC EXCELLENCE IN GEOINFORMATICS

The New Year's issue of the Faculty of Technical Sciences of the University of Novi Sad brings a contribution on the GEOBIZ project. The contribution "Business-based learning for academic excellence in geoinformatics" is available on page 18, and the entire newspaper can be downloaded [here](#).

Пројекат ГЕОБИЗ

Учење засновано на пословним проблемима ради академске изврности из геоинформатике



Факултет техничких наука учесник је ГЕОБИЗ пројекта који је финансиран у оквиру програма Еразмус+ кључне активности 2 (КА2) а окупља 23 универзитетска и пословна партнера из: Босне и Херцеговине, Молдавије, Црне Горе, Албаније, Белгије, Хрватске, Немачке и Србије. Пројекат је покренут 15. новембра 2019. и биће реализован током 36 месеци. У сврху јачања капацитета академских институција да боље одговоре на потребе развоја геоинформатичке индустрије у укљученим партнерским земљама, фокус се усмерава на успостављање нових и иновативних облика сарадње између пословних и академских

установа. Упркос изазовима услед неповољне епидемиолошке ситуације, ФТН и Лабораторија за геоинформатику су успешно спровели активности на остварењу овог пројектног циља. Током друге пројектне године, у складу са епидемиолошком ситуацијом и препорученим мерама, уживо и онлајн одржано је 5 бизнис-академских (Б-А) радионица у партнерским земљама, а у организацији Факултета техничких наука. У активности су укључена 22 представника пословног сектора, као и 14 универзитета, јавних установа, агенција и националних пројектних канцеларија, а радионицама је присуствовало више од 150 особа. Активности су спроведене ради оснаживања интеракције у процесима извођења наставе, трансфера и усвајања знања у области геоинформатике, као и успостављање пословно-академске платформе која подржава изврност у геоинформатици. Компаније које послују у области геоинформатике на овај начин унапређују сарадњу са академским сектором и отвара се прилика за сугестије дизајна наставног програма и курикулума високообразовних институција на основу пословних проблема препознатих у

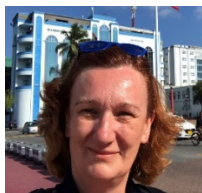
пракси, како би дипломици на најбољи начин одговорили професионалним изазовима који су пред њима. Завршну активност за другу годину пројекта обележило је одржавање радионице у Дубровнику, на којој су представљени досадашњи резултати и договорен план активности за трећу пројектну годину. Више о пројекту можете сазнати на пројектној сајту <http://geobiz.eu/> као и на сајту Лабораторије за геоинформатику, Факултета техничких наука, Универзитета у Новом Саду <http://geoinformatika.uns.ac.rs/>.

Аутор текста: Проф. др Душан Јовановић



Related activities of project partners

THE SPACE / GEOINFORMATION SECTOR SKILLS STRATEGY



*Vesna Poslončec-Petrić,
University of Zagreb, Faculty of Geodesy*

As part of EO4GEO, the biggest EU Erasmus+ educational and training project in the Space Geoinformation sector (www.eo4geo.eu), we are pleased to present you the Sector Skills Strategy report.

The report highlights the Strategy as an actionable mechanism for leadership and developing the capacity on Earth Observation (EO) * Geo-information (GI) skills and workforce by fostering the uptake and integration of Copernicus data and services in end-user applications in market sectors. This ambitious objective cannot be achieved without knowledge and skills, hence the need to implement a Sector Skills Strategy.

Discover the recommendations and objectives set by the document to unleash the potential of Earth observation and Geoinformation data in Europe through skills development at the following link <http://www.eo4geo.eu/sector-skills-strategy-report/> and get engaged with us to be part of the Alliance and contribute to shape future actions for EO*GI skills development.

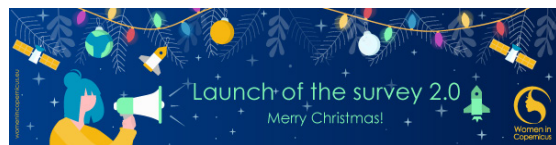


SPACE / GEOINFORMATION SECTOR SKILLS STRATEGY (IN ACTION)



A document prepared by the EO4GEO Alliance

WIC SURVEY 2.0



Shortly before Christmas, voluntarily network [Women in Copernicus](#) launched a new survey. This survey is addressed to all people working or

having worked with Copernicus data or in the Copernicus domain of activities.

The survey includes 7 sections (demographics, background and career, barriers, facilitators, education choices, gender stereotypes and final). It should only take 15 minutes to answer, and we invite you to support it.

Survey 2.0 available [here!](#)

Impressum

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¹ *This project has been funded with support from the European Commission. This e-newsletter reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*