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Progress Report on ICL Network

1. **Title of Network: ICL Adriatic Balkan Network (ICL ABN)**

2. **Name of Coordinator (Affiliation and email)**

Coordinator (2024 -)
Prof. Biljana Abolmasov
University of Belgrade, Faculty of Mining and Geology
biljana.abolmasov@rgf.bg.ac.rs
Co- Coordinator (2024 -)
Prof. Igor Peshevski
St. Cyril and Methodius University, Faculty for Civil Engineering, Skopje, North Macedonia
pesevski@gf.ukim.edu.mk
Co- Coordinator (2024 -)
Prof. Timotej Verbovšek
University of Ljubljana, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia
timotej.verbovsek@ntf.uni-lj.si

3. **List of member organizations (Full members and Associates)**

1. Croatian Landslide Group (University of Rijeka, Faculty of Civil Engineering, Rijeka, Croatia; University of Zagreb, Faculty of Mining, Geology and Petroleum Engineering, Zagreb, Croatia)
2. University of Ljubljana, Faculty of Civil and Geodetic Engineering, Ljubljana, Slovenia
3. University of Belgrade, Faculty Mining and Geology, Belgrade, Serbia
4. Geological Survey of Slovenia, Ljubljana, Slovenia
5. The Geotechnical Society of Bosnia and Herzegovina, Tuzla, Bosnia and Herzegovina
6. University of Ljubljana, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia (Associate members)
7. The Macedonian Association for Geotechnics, Skopje, North Macedonia (Associate members)

8. **Progress report on activities (2024)**

ICL Adriatic Balkan network and their members were active in the organization of 6th Regional Symposiums in the Adriatic Balkan Region (ReSyLAB) and publishing in 2024.

The 6th Regional Symposium on Landslides in the Adriatic-Balkan Region (ReSyLAB) was held in Belgrade, Serbia, from 15-18 May 2024. Opening ceremony was started with welcome notes from ICL President Prof. Željko Arbanas from University of Rijeka (Croatia) and ICL Vice President for Europe and a Dean of Faculty of Mining and Geology Prof. Biljana Abolmasov (Serbia). The ice break party was organized in Botanical Garden "Jevremovac" on the May 15, 2024, in the evening hours (University of Belgrade, Faculty for Biology). Parallel scientific sessions continued from May 16 to May 17, 2024. The closing plenary session took place on May 17, 2024 in the afternoon. The field trip was held on May 18, 2024. A total number of 84 participants from 15 countries attended the Symposium. In total 49 reviewed papers were published in Symposium Proceedings (Marjanović and Đurić, 2024). Open access digital copy of Symposium Proceedings in .pdf is available on https://resylab.rgf.bg.ac.rs, as well as Book of 64 abstract. The Symposium topics were concentrated on the five themes: Landslide monitoring and early warning, Landslide susceptibility, hazard and risk assessment, Climate change and landslides, Testing, modeling and mitigation of landslides and Landslides in practice – mining and infrastructure. Each conference session was opened by the keynote lecturer. Also, specialized topics within the conference were presented by invited lecturers. The two Workshops were organized during the 6th ReSyLAB, before official opening. Both workshops were held in-house of the Faculty of Mining and Geology. A round table discussion was organized in May 17, 2024 afternoon and participants were involved in three topics: (i) Landslides in legislation, (ii) Landslides in emergencies and (iii) Landslides and artificial intelligence revolution. Field trip was organized on 18 May 2024 with aims to introduce Symposium participants with Podunavlje Region and Frontiers of the Roman Empire – The Danube Limes in Serbia.

Also, members of ICL ABN were active in organization, chairing sessions and presentations of papers/posters on of ICL meeting in Kyoto 2024. Contributions to KLC2020 were supported by several papers within PLR-T Book series, including new Volumes (Vol 3-Vol 4), as well as scientific papers and research published in the Landslides Journal.

9. Plan for future activities

The most important future activities are concentrating on the organization of the next ReSyLAB Symposium. After discussion during Belgrade Symposium, it was decided to propose Slovenia as a hosting ICL ABN country member in 2026, or North Macedonia in 2027. Slovenian ICL ABN members suggested in September 2024 to deliver organization of 7th ReSyLAB to North Macedonia in 2027. Collaboration between ICL ABN members are also available within IPL joined Project IPL-276 "Landslide risk management on the road network in climate changing conditions" (University of Belgrade, Serbia; University of Salerno, Italy; and St. Kiril and Methodius University, North Macedonia). Publishing scientific and review papers of ICL ABN members in PLR-T Book series and Landslides Journal are also planned as a future activity.

10. Publication (ICL Journal Landslides, ICL Book Series, etc.)

- Benac Č., Dugonjić Jovančević S., Vivoda Prodan M., Maglić L. (2024). Rock collapse structure on the Liburnian coast (Rijeka Bay, NE Adriatic). Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 39 (p. 259–263) https://doi.org/10.18485/resylab.2024.6.ch39
- Bernat Gazibara S., Sinčić M., Rossi M., Krkač M., Lukačić H., Jagodnik P., Mihalić Arbanas S. (2024). Large-scale landslide susceptibility models: Examples and conclusions from the modelling of small and shallow landslides in the continental part of Croatia. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 20 (p. 149–155) https://doi.org/10.18485/resylab.2024.6.ch20
- Debevec Jordanova, G., Popović, Z., Yastika, P.E. *et al.* SBAS DInSAR and in situ monitoring of the Šumljak landslide (SW Slovenia) dynamics driven by rainfall and piezometric-level fluctuation. *Landslides* 22, 1397–1411 (2025). https://doi.org/10.1007/s10346-024-02408-4
- Ivanovski I., Nedelkovska N., Petrov G., Jovanovski M., Nikolovski T., Peshevski I. (2024). Detection and monitoring of slope movement by using point cloud derived from the SfM technique. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 16 (p. 127–132) https://doi.org/10.18485/resylab.2024.6.ch16
- Jagodnik P., Bernat Gazibara S., Fiorucci F., Santangelo M. (2024). Interpretation Challenges when Detecting Landslides in Flysch Environment: Examples from Visual Analysis of LiDAR DTM in the City of Buzet Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 12 (p. 99–106) https://doi.org/10.18485/resylab.2024.6.ch12
- Jagodnik V., Marušić D., Arbanas Ž., Čeh N., Peranić J., Vivoda Prodan M. (2024). Fines content influence on the dynamic slope behavior in small-scale physical models. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 32 (p. 219–224) https://doi.org/10.18485/resylab.2024.6.ch32
- Jemec Auflič M., Jež J., Šegina E., Peternel T., Novak A., Kumelj Š., Turk D. (2024). Landslide events in Slovenia 2023: causes and consequences. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 28 (p. 199–202) https://doi.org/10.18485/resylab.2024.6.ch28

- Jovanovski M., Janevski B., Peshevski I. (2024). Integral approach in stability analyses for weak anisotropic rocks Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 5 (p. 37–46) https://doi.org/10.18485/resylab.2024.6.ch5
- Lukačić H., Katić J., Bernat Gazibara S., Mihalić Arbanas S., Krkač M. (2024). Rapid 3D rockfall susceptibility assessment of the Orašac rock slope, Croatia. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 31 (p. 213–218) https://doi.org/10.18485/resylab.2024.6.ch31
- Marjanović M., Kitanović O., Todorović S. (2024). Preliminary landslide hazard map of Serbia. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 25 (p. 181–185) https://doi.org/10.18485/resylab.2024.6.ch25
- Marjanović M., Milanović S., Simić N., Kričak l. (2024). Failure estimation of the Majdanpek open pit east face based on inverse velocity model. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 46 (p. 303–307) https://doi.org/10.18485/resylab.2024.6.ch46
- Marjanović M., Stevanović I., Vučković D., Bajović A., Begović N., Hoxha N. (2024). Landslide impact on road infrastructure in the Western Balkans. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 29 (p. 203–206) https://doi.org/10.18485/resylab.2024.6.ch29
- Marjanović, M., Đurić, U. (2024). Proceedings of the 6th Regional Symposium on Landslides In the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15-18th May 2024. University of Belgrade, Faculty of Mining and Geology, 328p. ISBN 978-86-7352-402-3. https://doi.org/10.18485/resylab.2024
- Micić K., Marjanović M., Abolmasov B. (2024). Debris-flow Susceptibility Assessment in Flow-R: Ribnica River Case Study. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 34 (p. 231–237) https://doi.org/10.18485/resylab.2024.6.ch34
- Mikoš, M. *et al.* (2024). Recent UL FGG Contributions to the 2020 Kyoto Commitment. In: Abolmasov, B., *et al.* Progress in Landslide Research and Technology, Volume 3 Issue 1, 2024. Progress in Landslide Research and Technology. Springer, Cham. https://doi.org/10.1007/978-3-031-55120-8_23

- Nedelkovska N., Jovanovski M., Peshevski I., Andreevska N., Gjorgiev G. (2024). Landslide susceptibility assessment using Frequency Ratio model for the Polog region, Macedonia. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 21 (p. 157–162) https://doi.org/10.18485/resylab.2024.6.ch21
- Nikolovski D., Salic Makreska R., Edip K., Bojadjieva J. (2024). Harmonized approach for earthquake - induced landslide susceptibility and risk assessment in Vodno urban area. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 24 (p. 175–179) https://doi.org/10.18485/resylab.2024.6.ch24
- Peranić J., Vivoda Prodan M., Čeh N., Škuflić R., Arbanas Ž. (2024). Determination of the Soil-Water Characteristic Curve of the Soil by Physical Modelling Tests Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 9 (p. 73–80) https://doi.org/10.18485/resylab.2024.6.ch9
- Peshevski I., Jovanovski M., Peduto D., Nedelkovska N., Gjorgiev G. (2024). Landslide Mapping and Zonation at National, Regional and Local Scale — Recent Experiences from Republic of Macedonia Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 7 (p. 55–64) https://doi.org/10.18485/resylab.2024.6.ch7
- Publications of ICL ABN members in 2024
- Reichenbach P., Mihalić Arbanas S., Rossi M., Bernat Gazibara S. (2024). Landslide information for land management and planning: Examples from Italy and Croatia. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 38 (p. 253–258) https://doi.org/10.18485/resylab.2024.6.ch38
- Šegina, E., Jemec Auflič, M., Mikoš, M. *et al.* A preliminary investigation of the small rockfall triggering conditions along a road network in Slovenia. *Landslides* 22, 739–751 (2025). https://doi.org/10.1007/s10346-024-02302-z
- Sinčić M., Bernat Gazibara S., Rossi M., Krkač M., Lukačić H., Mihalić Arbanas S. (2024). Influence of the landslide inventory sampling on the accuracy of the susceptibility modelling using Random Forests: A case study from the NW Croatia. Proceedings of the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 19 (p. 143–148) https://doi.org/10.18485/resylab.2024.6.ch19
- Vivoda Prodan M., Peranić J., Jagodnik V., Setiawan H., Arbanas Ž. (2024). Influence of precipitation and soil conditions on the Krbavčići Landslide reactivation (Istria Peninsula, Croatia). Proceedings of

the 6th Regional Symposium on Landslides in the Adriatic-Balkan Region, ReSyLAB2024, Belgrade, Serbia 15–18th May 2024, Regional Symposium on Landslides in the Adriatic-Balkan Region, Vol. 6 (2024) Article 33 (p. 225–230) https://doi.org/10.18485/resylab.2024.6.ch33