

Proposal of Adriatic-Balkan ICL Network

1. Name of Network

Adriatic-Balkan ICL Network

2. Name of Proposer

Dr. Snježana Mihalić and Prof. Željko Arbanas

Affiliation: position

Dr. Snježana Mihalić

Assistant Professor, University of Zagreb (Faculty of Mining, Geology and Petroleum Engineering)

Prof. Željko Arbanas

Associate Professor, University of Rijeka (Vice Dean for postgraduate studies of the Faculty of Civil Engineering)

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Core members of the activities

Prof. Matjaž Mikoš

Dr. Biljana Abolmasov

Names/Affiliations

Prof. Matjaž Mikoš, Full Professor, University of Ljubljana (Dean of the Faculty of Civil and Geodetic Engineering)

Dr. Biljana Abolmasov, Assistant Professor, University of Belgrade (Faculty of Mining and Geology)

3. ICL member organizations (representatives) involved in the Network.

- Croatian Landslide Group (UNIRI GF - University of Rijeka, Faculty of Civil Engineering and UNIZG RGNF - University of Zagreb, Faculty of Mining, Geology and Petroleum Engineering)
- UL FGG - University of Ljubljana, Faculty of Civil and Geodetic Engineering (WCoEs)
- UNIBG RGF - University of Belgrade, Faculty of Mining and Geology
- GeoZS - Slovenian Geological Survey, Ljubljana
- Albanian Geological Survey, Tirana

Write those organizations (representatives) if further ICL members are expected to join the planned network.

(One of 15 WCoEs at least is better to be involved in the planned network)

- The City of Zagreb, OEM - City Office of emergency management, Zagreb, Croatia
- The Highway Institute, Belgrade, Serbia
- Landslide Group from Bosnia and Herzegovina (University of Tuzla, Faculty of Mining, Geology and Civil Engineering; Federal Geological Survey, Sarajevo; Technical Institute, Bijeljina); Geological Survey of Republic of Srpska, Zvornik

4. Objectives for the initial 3 years: (5 lines maximum; what you expect to accomplish?)

The general objective of the 'Adriatic-Balkan Network on Landslides' is advancing landslide science and its practical application in the region for the benefit of society and the environment. Specific objectives are: (1) to set up scientific and legislative background for regional cooperation; (2) regional unification of information about landslides and landslide research at national levels; and (3) development of landslide science by capacity building at regional level and practical applications of outcomes to societies in the region.

5. Background Justification: (10 lines maximum)

In the region, there are well established scientific institutions for landslide study at national levels. UL FGG is ICLs' WCoE and it is involved in European project PARAMount (in 2012) and IPL-151 project '*Soil matrix suction in active landslides in flysch - the Slano Blato landslide case*'. Two Croatian universities (UNIRI GF and UNIZG RGNF), members of ICL, are strongly involved in bi-lateral partnerships with Japanese universities through joint research project '*Risk Identification and Land-Use Planning for Disaster Mitigation of Landslides and Floods in Croatia*' in which Croatian researchers have been developing specific and important experience in some key areas such as landslide monitoring. Slovenian and Albanian geological surveys have scientific potential for regional leadership in development of national landslide inventories. The well established regional network for landslide research could provide a significant platform for the initiation of new bilateral and multilateral scientific projects, capacity building and for promotion of landslide science and scientific institutions in society. In most Adriatic-Balkan countries scientific institutions are not mainstreamed into development policies and programs related to disaster risk reduction. Review of legal frameworks for governing landslide prevention and mitigation in regional countries, as well as review of potential and needs of regional institutions, together with current status of scientific landslide research, is the necessary background for analysis of coordinated cooperative actions.

6. Resources available for Network activities (Personnel, Facilities, Budgets, and Contribution to ICL/IPL)

Personnel available for Network activities

ICL member	Personnel
Croatian Landslide Group (UNIRI-GF and UNIZG-RGNF)	3 senior researchers, 8 young researchers, 1 external young researcher
University of Ljubljana, Faculty of Civil and Geodetic Engineering	5 senior researchers, 2 young researchers
University of Belgrade, Faculty of Mining and Geology	3 senior researchers, 6 young researchers, 3 external senior researchers, 3 external young researchers

Data for personnel available in Slovenian Geological Survey Albanian Geological Survey will be added subsequently.

Facilities available for Network activities

ICL member	Facilities
Croatian Landslide Group (UNIRI-GF and UNIZG-RGNF)	conference rooms in Rijeka and in Zagreb, geotechnical laboratory, 2 field sites with comprehensive automated monitoring system (in Rijeka; Zagreb is planed to be finished in 2012), GIS and remote sensing lab
University of Ljubljana, Faculty of Civil and Geodetic Engineering	conference room, geotechnical laboratory, field installation on the Slano Blato landslide
University of Belgrade, Faculty of Mining and Geology	conference room, geotechnical laboratory, field site with GNSS automated monitoring system, GIS and remote sensing lab

Data for facilities available in Slovenian Geological Survey Albanian Geological Survey will be added subsequently.

Budgets available for Network activities and contributions to ICL/IPL

	Regional network activities and contributions to ICL/IPL	Budget
1 st s phase	overview of status of individual advances within the regional scientific institutions in Croatia, Slovenia, Serbia and Albania	budgets for scientific research at regional institutions (existing)
	overview of publicly available data and sources about scientific and professional work at national level (data bases about landslides, human capacity for scientific development, and national legislative framework for landslide risk prevention/mitigation)	
2 nd phase	development of a multilingual landslide glossary using regional languages	budgets for multiple bilateral projects between regional institutions (planned)
	scientific joint research on specific and important key subjects (e.g. landslide monitoring, landslide hazard assessment and zonation)	budgets for multilateral scientific projects between regional institutions and international partners from European Union (e.g. EU TEMPUS, EU Eureka, EU COST) and abroad (planned); budgets of local and national governmental authorities (planned)
	organization of thematic workshops and conferences	budget for bilateral Japanese-Croatian project will finance 2 workshops (in 2012 and 2013); budgets of international projects, national/international professional associations or local and national governmental authorities (planned)
	improvement and development of university programs by exchange of scientists and professionals between regional institutions (mobility of university staff, development of joint postgraduate programs)	budgets for high education programs development at regional institutions (existing); budgets from international funds for high education system development and mobility of researchers, e.g. EU Erasmus Mundus, TEMPUS (planned)
	enhancing education and training by establishing courses and schools on landslides for professional and non-professionals (public, local administrations)	budgets for mobility at all levels from international funds, e.g. EU LLL Programme (planned); budgets of local and national governmental authorities (planned); budget for IPL project (planned)
	publishing a newsletter of the regional research network	budget for IPL project (planned)
	development of national data bases/archives of landslide data and landslide research	budgets for multilateral projects between regional institutions and international partner, e.g. EU CARDS/PHARE/IPA, COST (planned); budgets of local and national governmental authorities (planned)
	development of virtual data center about landslides and related cooperative activities	
3 rd phase	development of regionally unified strategies for landslide hazard/risk prevention and mitigation	budgets for multilateral projects between regional institutions and international partner, e.g. EU CARDS/PHARE/IPA (planned)

7. Description of past activities related to proposed network (30 lines maximum).

Regional cooperation has been initiated during the 1st Workshop of the Bilateral Japanese-Croatian Project in Dubrovnik (Croatia) in November 2010. The workshop addressed a range of topics in the fields of investigation of the project members and 25 regional guest experts from 8 universities, 2 geological surveys and 4 institutes from Bosnia and Herzegovina, Bulgaria, Macedonia, Serbia and Slovenia. The Ministry of Foreign Affairs of Japan (MOFA) enhanced the regional cooperation on landslides by organizing a workshop for south-eastern European countries on disaster management in December 2010 in Tokyo. The main result of this workshop was an initiative of the invited participants from Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Slovenia to establish a regional 'Adriatic-Balkan Network on Landslides' to increase the capacity in landslide disaster risk reduction through regional collaborative work within the ICL. The IPL-ICL (ICLs' International Programme on Landslides) discussed the establishment of regional consortiums on landslides at the secretarial meeting in Kyoto in January 2011, at the IPL-ICL Session of the Global Platform for Disaster Risk Reduction 2011 in Geneva in May 2011 and at the secretarial meeting in Rome in October 2011 during 2nd World Landslide Forum. The round table discussions in Geneva and in Rome enabled sharing of ideas with other participants and considered an integrated action plan for building the resilience of nations and communities in landslide disaster risk reduction. General concept of organization of regional Adriatic-Balkan Network was discussed within the regional ICL members during the 2nd Workshop of the Bilateral Japanese-Croatian Project in Rijeka (Croatia) in December 2011. Regional ICL meeting was also organized for non-members willing to contribute in advice: the City of Zagreb (local government authority), 4 scientific institutions from Bosnia and Herzegovina (1 university, 2 geological surveys and 1 institute) and representative from Kosovo.

UNIZG RGNF and UNIBG RGF were involved in bilateral project between Serbia and Croatia in the period 1 January 2010 to 31 December 2011 (Project leaders: Dr. Abolmasov and Dr. Mihalic). UL FGG and UNIBG RGF applied for a bilateral project between Serbia and Slovenia for the period 2012-2013 (Project leaders: Dr. Abolmasov and Prof. Mikos).

8. Planned future activities /Expected Results: (20 lines maximum)

The activities related to the first specific objective will result in an overview of status of individual advances within the regional scientific institutions in Croatia, Slovenia, Serbia and Albania, together with an overview of publicly available data and sources about scientific and professional work at the national level (data bases about landslides, human capacity for scientific development, and national legislative framework for landslide risk prevention/mitigation). The identification of the internal and external factors that are supportive or unfavorable will serve as an advanced base for implementation of particular activities at the regional level aimed to fulfill the second specific objective.

The second specific objective encompasses a wide range of activities aimed at exchange of knowledge between regional institutions: development of a multilingual landslide glossary using regional languages; joint research in the frame of bilateral and multilateral projects and IPL projects; organization of thematic workshops and conferences; improvement and development of university programs by the exchange of scientists and professionals between regional institutions (mobility of university staff, development of joint postgraduate programs); enhancing education and training by establishing courses and schools on landslides for professionals and non-professionals (public, local administrations); publishing a newsletter of the regional research network. A simultaneous establishment of the system of organized shared information collected by national ICL members is necessary and it can result in the development of a virtual data center about landslides and related cooperative activities.

Sharing of information and knowledge will be a base for development of regionally unified strategies for landslide hazard/risk prevention and mitigation which is the most challenging part of the third specific objective.

Note: Those who wish joint one or two networks proposed at FAO and written in Page 2 may contact with ICL secretariat. We may inform a group of people proposing the networks.