

Progress Report of ICL Network

1. Title of Network

ICL Landslide Monitoring and Warning Network (LaMaWa TheN)

2. Name of Coordinator (Affiliation and email)

Prof. Željko Arbanas, Coordinator

Croatian Landslide Group, Faculty of Civil Engineering, University of Rijeka, Radmile Matejčić 3, HR-51000 Rijeka, Croatia, zeljko.arbanas@gradri.uniri.hr

Prof. Matjaž Mikoš, Deputy Coordinator

University of Ljubljana, Faculty of Civil and Geodetic Engineering, Jamova c. 2, SI-1000 Ljubljana, Slovenia, matjaz.mikos@fgg.uni-lj.si

Prof. Teuku Faisal Fathani, Deputy Coordinator

Universitas Gadjah Mada, Jl. Grafika No 2 Kampus UGM Yogyakarta 55281, Indonesia, tfathani@gmail.com

3. List of member organizations

Charles University, Faculty of Science, Department of Physical Geography and Geoecology, Czech Republic

Comenius University, Faculty of Natural Sciences, Department of Engineering Geology, Bratislava, Slovakia

Croatian Landslide Group from Faculty of Civil Engineering, University of Rijeka, Croatia & Faculty of Mining, Geology and Petroleum Engineering, University of Zagreb, Croatia

Forestry and Forest Product Research Institute, Tsukuba, Japan

Gadjah Mada University, Faculty of Engineering, Department of Civil and Environmental Engineering, Yogyakarta, Indonesia

Geological Survey of Slovenia, Ljubljana, Slovenia

Geo-Tools, NGO, Zdiby, Czech Republic

Kokusai Kogyo Co., Ltd., Tokyo, Japan

Public Works Department of Malaysia, Slope Engineering Branch, Kuala Lumpur, Malaysia

University of Florence, Department of Earth Sciences, Italy

University of Ljubljana, Faculty of Civil and Geodetic Engineering, Ljubljana, Slovenia

University of Niigata, Research Center for Natural Hazards & Disaster Recovery, Niigata, Japan

4. Progress report of activities

The numerous cooperation within the Landslide Monitoring and Warning Network were established but no overall Network activity such as thematic conference, workshop or meeting was accomplished in 2015. The high number of the Network members at the same time represents strength and the weakness of the Network:

a strength in high number of scientists involved in landslide monitoring technics and early warning methods; a weakness in differences in wide range of landslide monitoring techniques and different research interest of the Network members. The members of the Network were very active in presentation of their activities at scientific conferences, congresses and workshops around the world where the topics of the Network had an important role in landslide science.

The Landslide Monitoring and Warning Network Coordinators prepared the action plan to intense the activity and to establish real network cooperation in the frame of ICL. The main activities encompassed in action plan were the following:

1.Preparation the Questionnaire that will be sent to all ICL member organizations (not only to Network members organizations) related to the monitoring and early warning of landslides. The Questionnaire contents the following questions: landslide(s) with established monitoring and/or early warning system, position of landslide(s), monitoring technique (geotechnical, geodetical, remote sensing), used monitoring equipment, web site (if exists), project (if it part of a project), related papers and reports.

2.Establishing the Landslide Monitoring Database. The Landslide Monitoring Database will be established based on results Questionnaire. The Landslide Monitoring Database will be uploaded to the ICL IPL web and will be consisted of i) Landslide Monitoring web map; ii) Landslide monitoring descriptions and iii) Landslide monitoring related documents (reports, description of equipment, etc.). Landslide Monitoring web map will be linked to landslide monitoring system descriptions; web sites of particular monitoring systems (if they exist); web sites of the project related to landslide monitoring systems (if they exist) and to landslide monitoring related documents. Landslide monitoring descriptions will be linked to web sites of particular monitoring systems (if they exist); web sites of the project related to landslide monitoring systems (if they exist), to landslide monitoring related documents and to the web sites of monitoring equipment industry.

3.Establishing the Landslide Monitoring related papers database. The Landslide Monitoring related papers database will collect all papers related to existing Landslides Monitoring systems in the Database in the form of full text papers from Landslides Journal and WLF1 to WLF36, and link to the other journals, conference proceedings, websites and books.

4.Preparation of Landslide Monitoring brochure with presentation of proposed Landslide Monitoring Database.

5.Invitations of scientists and researcher from ICL and non-ICL organizations to contribute to the WLF with manuscripts in the field of landslide monitoring and early warning system sections.

The action plan was presented to the Landslide Monitoring and Warning Network members but it was never begun to live in the praxis. The action plan was too ambitious that would be put in action without activation of larger number of ICL members. In the same time, coordinators took additional obligations in ICL (as President, Vice-Presidents, in GPC, etc), that would complete the action plan. The activity of the Network Therefore, the activity has decreased to individual activites of Network members and others active in landslide monitoring field.

5. Plan of future activities

The activities would follow the extended previously described action plan to intense the activity and to establish real network cooperation in the frame of ICL Landslide Monitoring and Warning Network

1. Distribution of Questionnaire related to the monitoring and early warning of landslides and data collection with invitation to ICL members to join the Network and revive Network activities.

2. Invite younger ICL landslide scientist to include in the Network activities as the new coordinators who will lead the Network in the future.

3. Data processing and preparation for establishing of Establishing the Landslide Monitoring Database and Landslide Monitoring related papers database.

4. Establishing the Landslide Monitoring Database and Landslide Monitoring related papers database

5. Preparation of Landslide Monitoring brochure.

6. Invitations of scientists and researcher from ICL and non ICL organizations to contribute to the WLF7 in Faridabad in India in November 2026 and to open access book series Progress of Landslide Research and Technology.

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

The members of the Network were very active in presentation of their activities in scientific journals (not only Landslides), and at scientific conferences, congresses and workshops around the world. The huge number of manuscripts related to Network topics were published in the last decade.