

Date of Submission	
--------------------	--

IPL Project Annual Report Form 2017

1 January 2016 to 31 December 2016

1. Project Title: **Low frequency, high damaging potential landslide events in “low risk” regions – challenges for hazard and risk management**

2. Main Project Fields

Select the suitable topics. If no suitable one, you may add new field.

(1) Technology Development

A. Monitoring and Early Warning, **B. Hazard Mapping, Vulnerability and Risk**

Assessment

(2) Targeted Landslides: Mechanisms and Impacts

A. Catastrophic Landslides, B. Landslides Threatening Heritage Sites

(3) Capacity Building

A. Enhancing Human and Institutional Capacities

B. Collating and Disseminating Information/ Knowledge

(4) Mitigation, Preparedness and Recovery

A. Preparedness, B. Mitigation, C. Recovery

3. Name of Project leader: Jan Klimeš, Ph.D.

Affiliation: Institute of Rock Structure and Mechanics Czech Academy of Sciences (IRSM CAS), researcher

Contact: IRSM CAS, V Holesovickach 41, 18209 Prague, Czech Republic, phones: +420266009111, +420266009330, klimes@irsm.cas.cz

Core members of the Project:

Filip Hartvich, Ph.D. (IRSM CAS)

Tomáš Marek, MSc. (IRSM CAS)

Ing. Jan Balek (IRSM CAS)

Petr Tábořík, Ph.D. (IRSM CAS)

4. Objectives: (5 lines maximum)

The main objective is to collect new data showing that it is important to manage landslide hazard and risk even in countries, which are not recognized as those suffering from frequent and catastrophic slope processes such as countries in high mountains or seismically active areas. We will specify the most effective hazard and risk management approaches to provide “best practice” instructions for decision makers and potentially affected population.

5. Study Area: (2 lines maximum)

Most of the field works will be done in the Czech Republic and Spitsbergen Islands, but published landslide research from similar “low risk” countries and regions will be reviewed and considered.

6. Project Duration (1 line maximum)

2015 – 2017

7. Report

1) Progress in the project: (30 lines maximum)

We published an article in the Landslides journal (ICL/IPL Activities) which described the basic results of the project gained up to now (Klimeš et al., 2017). The article was prepared together with experts from the Czech Geological Survey. Some of the presented results will also be published on a web page (www.sesuvy.cz) which aims on public audience in the Czech Republic. We hope that the presented information (e.g. up-to dated overview of landslide occurrences, expenditures of the state budget with respect to the landslide mitigation works) will increasing public awareness of the landslide risk. Another article was published for a broad public audience (Klimeš 2017) to illustrate difficulties in applying landslide mitigation measures on a local level. The difficulties arise from different interests of the involved stakeholders and miss-conceptions about landslide occurrence dynamics.

2) Planned future activities or Statement of completion of the Project (15 lines maximum)

We plan to continue in research focusing on landslide risk assessment and damage description in the Czech Republic. This research will be carried out in collaboration with the Czech Geological Survey, Transport Research Center as well as lawyers and economists who will bring together different expertise to properly address landslide risk, which as an interdisciplinary topic. It will be submitted to the Landslides journal. The web site www.sesuvy.cz will be continuously updated with respect to landslide occurrences and landslide deformation monitoring from selected landslide sites in the

Czech Republic.

3) Beneficiaries of Project for Science, Education and/or Society (15 lines maximum)

Project beneficiaries during 2017 will be the landslide scientists in the Czech Republic. Through sharing the landslide monitoring data, experts of the Czech Hydrometeorological Institute will also benefit from the project. Teachers of geography at elementary and high schools will benefit from the other planned article. Through the web page www.sesuvy.cz also the broad public audience will benefit from the gained results.

4) Results: (15 line maximum, e.g. publications)

Klimeš J, Stemberk J, Blahut J, Krejčí V, Krejčí O, Hartvich F, Kycl P (2017) Challenges for landslide hazard and risk management in ‘low-risk’ regions, Czech Republic—landslide occurrences and related costs (IPL project no. 197). *Landslides*, 14, 771 – 780.

Klimeš J (2017) Landslides – easy research but difficult mitigation? (in Czech). *Vesmír*, 96, 94-95.

Klimeš J (under review) Landslide monitoring in California – tool for public awareness (in Czech). *Geografické rozhledy*.

Note:

- 1) If you will change items 1)-6) from the proposal, please write the revised content **in Red**.
- 2) Please fill and submit this form by **30 March 2017** to **ICL Network** <icl-network@iclhq.org>