

# Practical example of the infrastructure protection against rock fall

**Daniel Jirásko<sup>1</sup> and Ivan Vaníček<sup>1</sup>**

<sup>1</sup>Czech Technical University in Prague, Faculty of Civil Engineering, Geotechnical Dept. Thákurova 7, 166 29 Prague 6, Czech Republic

E-mail:daniel.jirasko@fsv.cvut.cz

**Abstract.** The protection of transport infrastructures against rock falls represents for the Czech Republic one of the sensitive questions. Rock falls, similarly as other typical geo-hazards for the Czech Republic, as landslides and floods, can have negative impact on safety and security of these infrastructures. One practical example how to reduce risk of rock fall is described in the paper. Great care is devoted to the visual inspection enabling to indicate places with high potential to failure. With the help of numerical modelling the range of rock fall negative impact is estimated. Protection measures are dealing with two basic ways. The first one utilize the results of numerical modelling for the optimal design of protection measures and the second one is focused on the monitoring of the rock blocks with high potential of instability together with wire-less transfer of measured results. After quick evaluation, e.g. comparison with warning values, some protection measures, mostly connected with closure of the potential sector, can be recommended.