

## **IAEG Commission 19 - 3D terrestrial laser scanning technology in the Geosciences**

### **Commission Topics**

The main objective of C19 Commission is to provide a framework where codes of practice and working methods of this technology can be worked out. The target group are professionals working within various areas on geoscience-related projects where precise documentation and measurements are needed from the site investigations to the construction stage. The terrestrial laser scanning technique can provide accurate and precise geometry as an input for 3D numerical models and CAD drawings. 3D laser scanning also allows creating very realistic 3D visualisation and animation of objects and scenes, which improves the communication within a project and to the outside world.

The first C19 Commission meeting was held in May 2005 in Lyon, France. During the first Commission meeting, Kennert Röshoff (The First Chairman) proposed the main objectives of IAEG Commission 19, which are the following:

- Investigate the various areas for 3D scanning technology to be used within geosciences
- Be a guide for the development of the technology
- A forum for discussion of ideas and practical use
- Establish quality standards of the method
- Establish methods and standards for calibration, accuracy etc. of measurements
- Requirements for Hardware and Software tools for measurement, processing, analysis and visualisation

The main idea of establishing C 19 IAEG Commissions is to encourage international collaboration and exchange of ideas and information amongst engineering geologists and other experts involved in the field of application 3D terrestrial LIDAR technology.

The objectives established on the first IAEG C 19 meeting are still ongoing, but we could be upgraded by the following:

- To organize occasional articles and papers on application of 3D terrestrial laser scanner technology in engineering geology and other field of applied geosciences, based on findings of the Commission primarily for publication in the Bulletin of the International Association of Engineering Geology and the Environment (IAEG)
- To prepare and to regularly update a list of articles, manuals and text books that can be used by IAEG members who need to inform themselves on the topic of study of the C19 Commission
- To prepare an informative glossary explaining the terminology used in the field of application on 3D terrestrial laser scanner technology
- To prepare lists of technical norms and guidelines for application of 3D terrestrial laser scanner technology that are recommended by the Commission for use by IAEG members and give the sources where they can be accessed
- To communicate progress via IAEG web site and meetings

Prof. Dr Biljana Abolmasov - Chairman