

IAEG Commission 19
3D terrestrial laser scanning technology
in the geosciences

International Association for Engineering Geology and the Environment

Secretary

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To

To whom it may concern

Date

15-Jun-05

Subject

Minutes Commission meeting 1

Your reference

Our reference

Commission meeting 1

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

Date: 23-05-05
Time 15:30-17:00
Location: Lyon, France, Geoline conference venue
Present: Röshoff, Feng, Slob, Keaton, De Sloovere, Deffouvaines, Roux, Gibson, Magnor, Potherat, Kaperski

Agenda

1. Opening
2. Presenting the board of the commission
3. Technical presentations by Feng and Slob
4. Objectives of the commission
5. Suggested working program
6. Schedule and milestones
7. Results
8. Other issues and closing

1. Opening

Dr Kennert Röshoff, chairman of the Commission opens the first meeting of the Commission and welcomes all present.

2. Presenting the board of the Commission

The members of the Commission present themselves:

- Chairman: Dr. Kennert Röshoff, from Berg Bygg Konsult AB (BKK), a consulting company based in Solna, Sweden.
- Secretary: Ir Siefko Slob MSc, from ITC, Enschede, The Netherlands
- Technical adviser of this meeting: Dr. Quanhong Feng, from Berg Bygg Konsult AB (BKK).

Also all other persons in this meeting present themselves briefly.

3. Technical Presentations of Feng and Slob

Feng delivers a presentation on the overview of the applications of 3D laser scanning in the Geosciences and gives also an overview of the current state of the different laser scanning techniques.

Slob delivers a presentation of a specific application of 3D laser scanning for rock mass characterisation

4. Objectives of the Commission

Röshoff explains 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 for measurement
- Requirements for Hardware and Software tools for measurement, processing, analysis and visualisation

5. Suggested working program

The main activities of the Commission consist of the following:

- Set up Working Groups (WG)
- Organise meetings at IAEG events
- Organise other meetings with WGs and organise workshops

Concretely, the following steps are envisioned:

- Step 1. Status of today
Identification of different working areas
Set up contact network for WG's
- Step 2. Establishing of several WG
Program for each WG
- Step 3. WG in working process
- Step 4. Presentation of results

6. Schedule and milestones

Below you will find the expected time frame of the activities and milestones of the Commission:

2005-2006

- Step 1. Status of today
 - Investigation of working areas
 - Set up contact network for WG's
- Step 2. Establishing of several WG
 - Program for each WG

2006-2008

- Step 3. WG in working process
- Step 4. Presentation of results

7. Result of Commission meeting-1 at Geoline2005, Lyon

Work to be done before the next Commission meeting 2006 (During the IAEG2006 international conference in Nottingham, UK):

A) The first action to be taken is to establish WG-1 and define WG 1's Terms of Reference (action by Röshoff)

The task of this 1st working group will be:

- Inventory of today's status
- Inventory of working areas in the Geosciences

B) Suggest other WG's (action by Röshoff/Feng)

Suggested working groups:

- 3D laser scanning hardware and data quality
- 3D laser scanning software and data handling
- Rock mass documentation and characterization
- Monitoring and survey
- 3D Geo-database and management system

C) Establish contact network of persons (action by Slob)

D) Setting up a commission web-site (action by Slob):

- Establish forum for discussions, suggestions, presentation of results.
- Presentation of publications

E) Planning for Commission meeting-2 in Nottingham, during the IAEG 2006 Int. Conference (action by Slob):

- Half day session of presentation of papers on 3D laser scanning is possible, provided enough papers are submitted.
- Remark by Slob: the conference still accepts abstracts, although the deadline has expired (pers. Comm. Martin Culshaw). The paper deadline (31 December 2005) will remain fixed! All interested should still consider submitting a paper. Only with sufficient number of papers on 3D laserscanning, the half day session can be organized

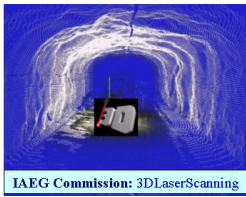
8. Other issues and closing

The persons present were asked about their specific experience and/or interest:

- Potherat: Has a student working on slow deformation of moving slopes.
Gibson: Working on 18 test sites for slope movement and slope erosion using a long-range laser scanner.
Keaton: Has done for AMEC two commercial ventures with 3D laser scanning on heave detection of a highway and on evaluation of fault activity. Keaton presented during Geoline conference a poster on the heave detection project. Keaton has a broad interest in the technique, but his main interest is on rock mass characterization.

A list was circulated during the meeting where everyone could fill out his/her contact details as well indicate his/her willingness to participate in one of the working groups and his/her field of interest. The filled out list is given on the next page. An additional list of interested persons at the Geoline conference who were not able to attend the commission meeting but like to be involved, is appended here.

Röshoff thanks all participants for their attendance and closes the meeting.



List of interest:

Name	Organization	Contact Information	Interest	
			In WG	In which area
Jeff Keaton	AMEC	E-mail: jeff.keaton@amec.com Tel.: +1 7147742591	Yes	Broad interest
Pierre de Sloovere	ME2i	E-mail: pds@me2i.fr Tel.: +33-149842323	Maybe	Tunnels, gallery
Benoit Deffouvaines	UMLV	E-mail: benoit.deffouvaines@univ-mfr.fr Tel.: +33 623768366	Maybe	
Ludovic Roux	WSP	E-mail: ludovic.roux@wspgroup.se Tel.: +46 8 6886000	Maybe	Underground structures
Andy Gibson	British Geological Survey	E-mail: agibson@bgs.ac.uk Tel.: +44 1159363007	Yes	Modelling, equipment, appl. To eng. Geology
Bjorn Magnor	SKB	E-mail: bjorn.magnor@skb.se Tel.: +46 491 768086	Maybe	Underground surveying systems
Pierre Potherat	CETE de Lyon	E-mail: pierre.potherat@equipement.gov.fr Tel.: +33 472143277	Yes	Landslide surveying
Johan Kasperski	CETE de Lyon	E-mail: johan.kasperski@equipement.gov.fr Tel.: +33 472143277	Yes	Landslide surveying
Jean-Pierre Asté	GIPEA	E-mail: gipea@gipea.fr Tel.: +33 437401751	Unknown	
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Huang Runqiu	Cheng Du University of Technology	E-mail: hrq@cdut.edu.cn Tel.: +86 28 84078953; +86 13908037005	Unknown	Slope and Tunnel
Shi Bin	Dept. of Earth Sciences, Nanjing University	E-mail: shibin@nju.edu.cn Tel.: +86 25 83596220; +86 13770506866	Unknown	Monitoring
He Keqiang	Qingdao Technical University	E-mail: keqianghe@163.com Tel.: +86 532 5071717; +86 13606429626	Unknown	Land slide
Wang Sijing	Institute of Geology and Geophysics, China Academy of Science	E-mail: wangsijing@mail.tsinghua.edu.cn Tel.: +86 10 62008066	Unknown	Slope, Tunnel, Dam, Underground constructure

- WG: Working Group in IAEG Commission: 3D Laser Scanning
- In which area: write down in which area you are working on