Hungary-Slovakia
Cross-border Co-operation
Programme 2007-2013

European Union
European Regional Development Fund

Lead Partner:	**Národné lesnícke centrum**
Project name:	**Inovatívne metódy inventarizácie a monitoringu lužných lesov Dunaja s využitím 3-D technológií dialkového prieskumu Zeme/** Innovatív módszerek a Dunamenti ártéri erdők leltározására és monitorozására korszerű 3-D-s távérzékelési technológiák segítségével
Project code:	**HUSK/1101/1.2.1/0141**
Activities:	**1, 2, 3**

Workshop on forest stand parameter extraction reference data, terrestrial and airborne Laser Scanning

Final Schedule

Date: 29th of January, 2014.

Place: University of West Hungary, Dept. of Surveying and Remote Sensing, 'Geodéziai Gyakorló'

Detailed map:

https://maps.google.com/maps/ms?msid=210990093980821847357.0004b31cfc2cf3a1d59fb&msa=0&ll=47.681483,16.581545&spn=0.008726,0.021136

9:30 – 10:00	**Arrival, registration**	
10:00 – 11:00	**Field surveys and reference data**	
10:00 – 10:10	Welcome by the LP and by the host	T. Bucha, K. Czimber
10:10 – 10:30	Actual state of Field survey in Project INMEIN	Ivan Sackov
10:30 – 10:50	Field survey and its experiences on the Hungarian side	Gábor Illés
10:50 – 11:00	Other reference data, NFI, etc. (…)	…
11:00 – 11:20	**Coffee break**	
11:20 – 12:00	**Terrestrial Laser Scanning (TLS)**	
11:20 – 11:40	Methodology of the TLS on the Slovakian side	Milan Koren
11:40 – 12:00	Methodology of the TLS on the Hungarian side	G. Király, G. Brolly
12:00 – 13:00	**Lunch**	
13:00 – 14:00	**Airborne Laser Scanning (ALS)**	
13:00 – 13:30	ALS data processing methodology, Current status of data processing	Géza Király
13:30 – 14:00	The concept of utilization of a ALS data in forest management	Ivan Sackov
14:00 – 14:20	**Coffee break**	
14:20 – 15:30	**Image processing**	
14:20 – 14:50	Improved method of classification of multispectral aerial photographs – results and further research.	Tomas Bucha
14:50 – 15:00	Image processing plans (e.g. GEOBIA2014)	Géza Király
15:00 – 15:30	**Continuation of our cooperation**	
15:00 – 15:30	Planned activities, possibilities, open calls, etc.	Tomas Bucha, Géza Király, Gábor Illés
15:30 – 15:45	**Farewell**	

Minutes of the workshop

Kornél Czimber opened the meeting and welcomed all the participants.

Tomas Bucha also welcomed the participants, thanked for the organisation, and excused that Mr. Halvon couldn't come. He expressed the followings:

- reprojected ALS data
- Full Waveform data
- Camera calibration data

will be available on the ftp server till 27 February 2014.

Ivan Sackov presented the status of field survey on the Slovakian side. The measurements are in the following sections:

- reference measurements;
- control measurements;
- forest mensuration.

There are 61 plots planned as reference measurements, from which 34 have been surveyed. A detailed methodology in English is needed for the harmonisation. Ivan Sackov will provide it till 10 February 2014. The methodology on the control measurements is also required.

Gábor Illés presented the current status on the Hungarian side, where the field-measurements haven't been started yet. The Slovakian methodology can serve as a basis. For the economic efficiency of the measurements, a draft methodology would be spread by Gábor Illés till 20 February 2014, and the partners involved will reflect on it.

Milan Koren presented their TLS (Terrestrial Laser Scanning) activities in his nicely illustrated presentation. Their first sample plots are already available on the department' open website (http://tls.tuzvo.sk Gabcikovo AA43). The data will be available on a site tls.tuzvo.sk till 7 February 2014.

Delicious lunch at Nyugat Étterem

Géza Király and Gábor Brolly presented their TLS activities, and demonstrated some TLS based gap analysis.

Ivan Sackov presented their software development reFLex (remote FOREST LAND explorer) which contains some analysis and tools. A harmonised methodology would be welcomed. The exchange of our reference measurements and discussion of our achievements are necessary.

Géza Király presented their proposed methodology on ALS (Airborne Laser Scanning) data-processing.

Tomas Bucha reviewed his work on OBIA in the region, their paper is available from here (http://ffp.ibles.pl/content/archiwe-issues/2013/vol-55-2). He also emphasised the possibilities to improve their methods. A short discussion on the possible GEOBIA2014 (http://geobia2014.web.auth.gr/) abstract was carried out.

The possibilities on further cooperation have been discussed in the last block. The methodology development, the importance of the reference measurements have been emphasised in the current project. The importance of the V4 (Nitra meeting, 13/02/2014) was emphasised. Further ideas have been raised were the followings:

- site condition and forest stands: the relationship between the different sites (mainly hydrologic aspect) and forest stand growth;
- extension of the agro-climate project;
- time-series analysis;
- flood-modelling;
- Danube strategy;
- Ecology of Riparian Forests, green and blue infrastructure in Copernicus (GMES).

Farewell

Minutes drafted by Géza Király.

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INMEIN MEETING

29/01/2014 SOPRON

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