

BSHC LIDAR Seminar Hannover 27.-28. Mai 2014

At BSHC18 Germany was tasked to host a seminar on LIDAR bathymetry in 2014. This has been accomplished at the end of May 2014. 25 delegates from BSHC member states as well as from France and Norway (who both contributed with their experience on several projects) participated. On the first day of the seminar 10 delegates from the system manufacturers AHAB, FUGRO (LADS), and RIEGL joined the meeting. They presented the latest developments in LIDAR technology and took actively part in the discussions. The second day covered presentations on the experiences of the hydrographic offices, and of an governmental agency responsible for coastal engineering.

Special thanks go to the Leibniz University of Hannover, where the seminar took place; Prof. Heipke, head of the Institute of Photogrammetry and GeoInformation at the University is, together with his crew, the scientific partner of the BSH for the German Bathymetric LIDAR project.

The presentations are available on the BSHC website: www.bshc.pro/meetings/lidar2014/

The main scientific and practical aspects of the lectures and discussions were the following:

- Technical and scientific issues;
- Workflow and Interfaces - Different systems require different processing software with the problem of transferring data between the different workflow solutions. This leads potentially to the loose of information. Common exchange formats are necessary;
- Workflow pitfalls - Inefficient ways of processing and analysing LIDAR data. We have to improve our knowledge about best practice approaches;
- The knowledge of the users about the technology and procedures of collecting LIDAR data is very limited. This results in difficulties in evaluating and the further processing.
- Object detection. At this stage there are no procedures to detect small objects (maximum 2 m³). The reason is unclear for the clients;
- Administrative and commercial issues;

- Tendering: There is no thorough knowledge on customers side to consider all potential options and side conditions. France announced to provide one of the latest tender. This needs to be updated and translated into English;
- It is a common understanding of all participants, that it is necessary to get common funding and to establish joined tenders in order to get a critical mass of efficient projects. It means that it is necessary to join between adjacent countries, and/or between Hydrographic Offices, coastal engineering and land surveying. This includes in the end a closer cooperation between marine and other SDI initiatives.
- It is necessary either to establish knowledge of processing bathymetric LIDAR data, or to define quality criteria for a sufficient data processing;
- Users issues;

Summary

The exchange of information on the actual developments, projects and plans was very helpful. Furthermore, a number of important strategic issues have been identified and discussed. System providers and users both see the chances for an increasing use of the technique of bathymetric LIDAR. But it was clearly visible that there is quite some room for development. Especially the data processing requests a lot of experience and hydrographic knowledge. Experts who gained this combination of both are still a rare species.

The use of bathymetric LIDAR should be seen in a wider sense of hydrography and not just being benchmarked against S-44 standards.

The Commission is invited to

- take note of the report;
 - take further action as seen appropriate.
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