

APPLICATION OF MODERN TECHNOLOGIES IN SPATIAL PLANNING

Agnieszka Bieda, Ph.D.

*Department of Geomatics
AGH University of Science and Technology
Krakow, Poland
e-mail: agnieszka.bieda@agh.edu.pl – contact person*

Jarosław Bydłowski, Ph.D.

*Department of Geomatics
AGH University of Science and Technology
Krakow, Poland
e-mail: jaroslaw.bydlosz@agh.edu.pl*

Katarína Pukanská, assoc. prof., Ph.D.

*Institute of Geodesy, Cartography and GIS
Technical University of Košice
Košice, Slovakia
e-mail: katarina.pukanska@tuke.sk*

Abstract

The subject of the paper is to present the application of modern technologies in spatial planning. The research was performed in the city of Cracow. The outlines of the spatial planning system in Poland, including planning activities in Cracow are described in the paper. The laser scanning data for Cracow are briefly characterized, as well. The possibility of using these data for high-rise buildings location in terms of protection of Cracow panorama is thoroughly analysed. It has been made basing on two projects "IT system of the Country's Protection Against Extreme Hazards" and "Integrated spatial data monitoring system for air quality improvement in Cracow". The main result of the research is assessment of studies and measurements that may be used to meet particular spatial planning necessities.

Key words: spatial planning, urban planning, Cracow, Laser Scanning, Light Detection And Ranging