Compilation of Urban Cadastral Maps: A Proposal for a Cadastral Reform Process

Charalambos IOANNIDIS, Greece

Key words:

SUMMARY

Reforming a traditional cadastral system, with analogue maps, into a modern multipurpose digital cadastre and the necessary compilation of new cartographic data, is a complicated and laborious task. Especially in countries like Greece, where the institution of cadastre is newly introduced as a successor of a deeds registration system, which has been operating for almost 150 years.

The most appropriate approach for the compilation of cadastral maps in urban areas, could be the combination of modern recording methods, including digital photogrammetry and GPS, and the use of isolated existing cartographic data, which in many cases are of high quality and quantity. Thus, both the cost and the compilation time for the cadastral surveys can be significantly decreased, while the public acceptance of the institution of the cadastre increases.

The paper describes a detailed proposal for the collection of digital data derived from various sources and their adjustment for the creation of a basic layer of a cadastral LIS. An application of this procedure is given for a vicinity of Athens. The comparative evaluation of its result, concerning accuracy, completeness and cost-effectiveness, towards a map compilation from the scratch, is derived.

CONTACTS

Charalambos Ioannidis School of Rural and Surveying Engineering, Lab. of Photogrammetry National Technical University of Athens GREECE

Email: cioannid@survey.ntua.gr