



METADATA

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Abstract

In recent years, the international scientific community has shown particular interest in three-dimensional cadastral surveys to visualize the complexity of contemporary urban landscapes, mainly concerning overlapping constructions and complex property rights. The shift towards the third dimension is significantly supported by current technological advancements in modeling, while lately, temporal and scale dimensions have been incorporated into cadastral planning. Despite dynamic technological progress, the international experience lacks a fully functional 3D cadastre and is confined to experiments and basic applications. Research in 3D cadastral systems is delimited by the legal,

technical, and administrative framework of each country, which entails specific needs, constraints, and possibilities for 3D cadastral records. Within this context, the proposal aims to document and assess developments in 3D/nD models and database management systems and cadastral surveys through a review of international experiences. Simultaneously, it presents the situation in Greece, focusing on the peculiarities and needs of recording, managing, and visualizing 3D space, with reference to the progress and characteristics of the National Cadastre compilation project, the current cadastral model, and the prospects for its adaptation to international standards and requirements.