

**Summary of work:**

The issue of the multidimensional cadastre used in various aspects of life took place for the first time in 2001 in Delft as part of a scientific conference organized there. Since then, the topic of the multidimensional cadastre is an important issue raised in Polish literature, and above all in world literature. The issues of the multidimensional and task cadastre returned to Delft in 2011, which indicates a great interest in this topic, as well as a constant need to develop this issue.

The purpose of the work from the scientific point of view is to try to answer the question about the possibility of creating a modern multidimensional real estate cadastre system, which as an interoperable and synergistic spatial database could be used in the aspect of geodetic and cartographic resource assessment, public safety, or environmental protection.

The research method used is the analysis of Polish legislation in the aspect of land and building records. The nomenclature used in legal provisions, definitions and provisions regarding administrative and legal procedures as well as technical procedures are also subject to verification. Particularly noteworthy is the consistency (or divergence) in the meaning of various provisions and registers, which results in the assessment of registration data in the context of their harmonization. Features such as uniformity and timeliness are also subject to verification. The author also noted the occurrence of redundant data in terms of registered building attributes.

Under the current register, there is a legal obligation in Poland to register dates related to real estate, which gives the opportunity to create a 3D cadastre + time. The paper presents how the multidimensional cadastre functions as a synergistic database. The task was carried out using the available GIS tools

**Keywords:** multidimensional cadastre, land registry, synergy

