Design and Determine the Spatio-Temporal Cadastral Data Infrastructure for LADM

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SUMMARY

Recently, the nature of land title and cadastral (LTC) data in the Turkey is dynamic from a temporal perspective which depends on the LTC operations. Temporal Cadastral data is the important part of managing land resources. When viewed from this aspect, land registration and cadastral system together play an important role in a society. Increasing complexity and flexibility of modern land use requires and different demands effect always land registration data and so land registration data is dynamic. On the other hand, temporal aspects of the cadastral data most important components for public and private sectors. Depends on the functional requirements has been investigated based upon interviews of professionals in public and private sectors. These are; Legal authorities, Land Registry and Cadastre offices, Highway departments, Foundations, Ministries of Budget, Transportation, Justice, Public Works and Settlement, Environment and Forestry, Agriculture and Rural Affairs, Culture and Internal Affairs, State Institute of Statistics (SIS), execution offices, tax offices, real estate offices, private sector, local governments and banks. In other respects, spatio-temporal LTC data inevitable component for creating infrastructure of Land Administration Data Model (LADM). For this reason, this paper investigates spatio-temporal aspects of the LTC data for creating data structure of Land Administration Domain Model (LADM, ISO 2012). Finally, in this study aim is to design and determine the spatio-temporal data for LADM temporal infrastructure for Turkey.