The Land Administration Domain Model (LADM) as the Reference Model for the Cyprus Land Information System (CLIS)

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ABSTRACT

In this paper the enhancement of the data model of the Cyprus Land Information System (CLIS), with the adoption of the Land Administration Domain Model (LADM) is examined. The Cyprus Land Information System (CLIS), was established in 1999, within the Department of Lands and Surveys (DLS), to support the operation of the Cyprus cadastral system and has met the majority of its initial set goals. It is however now broadly accepted that the CLIS should be improved and upgraded, and a new data model should be introduced to facilitate the manipulation and provision of data to internal and external users/customers in a more effective way.

The need to enhance the CLIS coincides with the development of the LADM, which has been published by the Technical Committee 211 of the International Organization for Standardization as a Draft International Standard (DIS), identified as ISO 19152. This DIS is subject of voting for acceptance by participating members of the TC 211.

After analyzing the characteristics of LADM, it is concluded that this is compatible with CLIS, and can be used as a data model framework for CLIS’s upgrade. The Cyprus country profile is proposed. The adoption of the LADM is a great opportunity for DLS to introduce an ISO standard model, and to gain all the benefits derived from such a movement. Such benefits include the improvement of the effectiveness and the efficiency of the current system and the expansion of the services provided by CLIS to the broader Land Administration System and to the Cyprus community. The new functionality includes: better structuring of the rights, responsibilities, and restrictions (and related source documents), better fitting in the information infrastructure both national (e.g. valuation, taxation, building, address and person registrations) international (e.g. INSPIRE cadastral parcels), and future capabilities for representing 3D spatial units (e.g. legal spaces related to apartment or utility infrastructure).