

A Knowledge Organization System for the Development of an ISO 19152:2012 LADM Valuation Module

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SUMMARY

The challenge to develop interactive information services for new domains is supported by Knowledge Organization Systems and Services (KOS), which model the underlying semantic structure of a domain through classification systems, thesauri, gazetteers, or ontologies. The ISO 19152:2012 Land Administration Domain Model (LADM) is an international standard regarding the management of information about ownership, value and use of land. The current version of LADM addresses legal and administrative aspects; a next version is foreseen in 2017, according to ISO's periodic maintenance procedure. A group of researchers have initiated the development of a valuation and taxation component of LADM in terms of a draft extension module. It concerns the fiscal parties involved in the valuation and taxation practices and fiscal real property units that are the objects of valuation and taxation (see Çağdaş et al., 2016). The present paper aims at supporting this initiative by providing a vocabulary which may assist for the identification of candidate classes, class attributes and relationships for the proposed LADM Valuation Module. The vocabulary is presented as a new term collection of the Cadastre and Land Administration Thesaurus (CaLAtHe) which was encoded through the Simple Knowledge Organization Systems (SKOS) specifications developed by World Wide Web Consortium (W3C) for standardized representation of structured vocabularies. CaLAtHe which presently covers terms regarding real property, cadastre, and further land administration terms is supplemented with terms mainly derived from international valuation standards, such as European Valuation Standards (TEGoVA, 2012), International Valuation Standard (IVSC, 2013), Standard on Mass Appraisal of Real Property (IAAO, 2013a), Standard on Automated Valuation Models, Standard on Ratio Studies (IAAO, 2013b), as well as the Uniform Appraisal Dataset (UAD), which is an XML schema that standardizes information content of appraisal reports developed by United States Federal Housing Finance Agency. The paper presents the main structure of the new term collection, as well as the parts of the collection which are addressed in the Discussion section. □ Title of the Paper (e.g. The

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