Creation of Spatial Plans Package for the Representation of Rrrs Caused by Spatial Plans Within the LADM Standard: a Case Study for Turkey

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SUMMARY

Land management is a versatile, complex discipline that needs a legal framework. Participation and interoperability are important components for successful land management. Land Administration Domain Model (LADM), one of the international standards in which the aland's rights, restrictions, and responsibilities (RRR) are represented, does not yet cover all RRRs. In-country profiles created using the LADM standard, RRRs from land registration and title deed (or agreement) systems are generally used. However, spatial plans, valuation, taxation, legal regulations, and land development decisions create RRRs on the land. In order to realize the holistic, participatory and sustainable land management approach, value, plan, registration, land development etc. data, in different formats and different institutions should be associated with each other in a land management system. In particular, spatial plans have an essential place in the integration of physical city models and legal models with the help of 3D legal RRRs and many RRRs. As the pressure of urbanization increases, the effective use of limited areas is possible with spatial plans. There may be different RRRs at different levels of immovable property (underground or above). In the real-life spaces, we are used to, and in the virtual worlds and metaverses that have recently entered our lives, the owners do not have unlimited rights in the grids they have. In order to create ideal cities in areas where people (or avatars) live together, there must be rules that everyone must follow. Therefore, spatial plans play a key role in providing this order. This study aims to obtain outputs to create a spatial planning package in LADM. Thus, the goal of representing each RRR affecting the land in a standard model is expected to be closer. The spatial planning system of Turkey was taken as a basis for creating the package. Legal documents, sample plans, international standards (INSPIRE LandUse Thema, Plan4All project) and studies in the literature were examined. By examining the legal documents, the hierarchy of the planning system, authorized institutions, the scope of the plans and the relationship between them were determined. With the help of this relationship, the classes of the spatial planning package were created. Codelists were created from the information obtained by

examining the sample plans and official documents. It was concluded that the spatial plans that create RRR on the land could be presented in a standard model by defining the relationship of the created package with the LADM core classes.