The land administration domain spans a number of scientific disciplines, including geodesy, law, spatial planning, public administration, and information technology; the corresponding governmental bodies have a noted administrative and judicial component, and are often supplemented with private practising, licensed surveyors.   
  
Standards within this domain are the ISO 19152:2012 Land Administration Domain Model (LADM) and the OGC Land and Infrastructure Conceptual Model Standard (LandInfra). Both include a number of code lists, which are not defined or structured semantically, because their role is to supplement the basic classes and relations of the standards. Scientific discourse has established an overall interest of making code list values easily available. For example, in the OGC standard, the code lists with their values are presently rendered as part of an image file. Moreover, while code list values are normally not defined, in the context of establishing national profiles of LADM, it would be beneficial to establish a shared understanding and/or definition of at least a part of the code list values of the mentioned standards.  
  
The mentioned standards are likely to be implemented through provisions provided by national land administration (cadastre, land registry) agencies, e.g. in the context of recurrent overhaul of existing information systems or establishment of new. The establishment of national profiles of LADM or other implementation issues may be supported by regional associations like the Intergovernmental Committee on Surveying and Mapping (ICSM), which is a Standing Committee of ANZLIC – the Australian and New Zealand Spatial Information Council, as well as the Permanent Committee on Cadastre in the European Union, PCC. For Latin America, the Comité Permanente sobre el Catastro en Iberoamérica, similarly might stimulate cooperation in this issue. Moreover, large countries with federal governmental structure, like Brazil, Canada, China, Germany, India, Russia and the USA could pave the way for others in demonstrating the beneﬁts of a joint unit for standards implementation. Generally, their states have a mandate to implement standards at their discretion, while economy of scale suggest shared and interoperable solutions. Thus, a ‘standardization and code list management body’, staffed with standardization and domain expertise, may be established at international and/or at regional level, and support agencies - and surveying and information technology companies and NGOs - with an overview of available code list options and related information.   
  
Whether the implementation of standards is conceived as an individual or joint engagement, a relevant semantic resource, CaLAThe, may assist agencies in such overhaul processes.   
  
The Cadastre and Land Administration Thesaurus (CaLAThe), issued 2011, was initially built from the then draft ISO LADM. Later, it was supplemented with terms from the OGC LandInfra. CaLAThe concepts from the outset were related to existing reference thesauri, primarily the GEMET thesaurus, the AGROVOC thesaurus, and the STW Thesaurus for Economics. From 2019, CaLAThe also includes three code lists from LADM, as proof of concept, and code lists of the Survey and LandDivision parts of LandInfra/InfraGML. CaLAThe and the code lists are rendered in the W3C SKOS format. The code lists are presently rendered in a separate concept scheme, and related to the domain concepts with semantic relationships. This makes CaLAThe a mediating platform between the mentioned domain standards, but also relative to the mentioned reference thesauri.

A student or researcher having intermediate-level knowledge about the domain could use CaLAThe as a gateway for discovering core cadastral concepts, as well as for accessing concepts within the land and geospatial domains covered by the international standards and reference thesauri. Moreover, a database engineer working in a national cadastral organization may use to CaLAThe to identify code list values provided by international standards and to discover concepts related to these code lists.  
  
A use case for standards implementation within the domain of cadastre and land administration may include the following steps:

1. Establishment of the organizational setting (individual or joint regional/federal)
2. Drafting of a national profile with encodings and code lists, drawing on CaLAThe
3. Negotiation of definitions and code list values, in dialogue with CaLAThe editors and others.
4. Specification of national profile, etc. and implementation of the standards-based overhaul.

In order to implement such use case, the definitions and code lists of OGC LandInfra needs to be available on the web in SKOS format. A proposal for the SKOS encoding is developed. Moreover, a corresponding information set, representing LADM definitions and codelists, needs be developed and hosting issues settled. This activity has to be aligned with the ongoing ISOrevision of LADM.