Cadastre definitions

Glossary

Version 1.1

Intergovernmental Committee on Surveying and Mapping (ICSM)

Cadastre Working Group (CWG)

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Document History

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March 2020	1.0	Original document as approved by ICSM Executive Committee March 2020
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Preface

This glossary of terms and definitions is provided to establish consistency in communications and documentation from and within ICSM. It sets out the most common terms used in the cadastral reform environment and supports Cadastre 2034.

ICSM members and working groups are encouraged to use the terms in this glossary for all relevant communications and documentation in both national, international and jurisdictional contexts.

The Cadastre Working Group will maintain the glossary for relevance, accuracy and completeness, and welcome feedback from other ICSM members as to other terms to be considered for inclusion.

Glossary of terms and definitions

Agreed term	Definition
3D Cadastre[*]	A system that accommodates 3D digital cadastral information in all aspects of the cadastral lifecycle. A digital model of cadastral boundaries and properties that includes data relating to the height and depth of those boundaries and properties above and below the surface of the earth.
Cadastral lifecycle	The process by which cadastral boundary information is searched, aggregated, augmented through the addition of new survey data, certified, deposited, recorded, approved, retired and made available for searching and consumption.
Cadastral System[#]	The system of land parcels and land boundaries. The cadastral system defines, records and delivers land parcel information in support of tenure (ownership), land use and land value. The cadastral system defines and records the location and extent of property rights, restrictions and responsibilities. It includes a geometric description of land and real property boundaries linked to other records describing the nature of the interests, the ownership or control of those interests, and often the value of the parcel and its improvements.
Cadastre	The Cadastre is a methodically arranged public inventory of parcel-based information and data concerning all legal land and real property objects within a jurisdiction. It will contain and show the nature, size, value and legal rights, restrictions and responsibilities associated with each land and real property object. 'Cadastre' can give the answers to the questions of where and how much and who and how. It represents a comprehensive land recording system. 'Cadastre' can be an alternative term to 'cadastral system'. 'Cadastre' is sometimes used incorrectly to refer to the 'spatial cadastre'.
De jure and de facto rights[#]	Rights concerning law and concerning fact, respectively.
Digital cadastre[#]	Is used throughout Cadastre 2034 and has been used in some jurisdictions to refer to the spatial cadastre. The preferred term is now spatial cadastre[^].
Interoperability[#]	Ability to exchange and use information.
Land[#]	In the context of land ownership, the term 'land' applies not only to dry land. It may extend over water (marine cadastre), underground, in the airspace and water column.
Land boundary system	A term for referring to the cadastral system in contexts where the term 'cadastral' may not be understood.
Real Property[#]	Property that includes land and buildings, and anything affixed to the land[#]. That is, property that is fixed and immovable as opposed to personal property, such as 'goods and chattels', that can be moved.
Spatial Cadastre[^]	The official jurisdictional spatial representation of cadastral parcels and their boundary points and lines.

	Descriptors for the range of accuracy levels of the spatial cadastre are given in the table below.
Survey Accurate[#]	Is used within Cadastre 2034 and sometimes used to refer to a level of accuracy of the spatial cadastre. Due to the varied interpretations of the term, the use of the relevant descriptor for Spatial Cadastre Accuracy Cadastral Levels is preferred (see below).
Tenure	Land tenure can be defined as the mode of holding or occupying land[$]. In Australia and New Zealand, land that was once proclaimed as a British colony: Continues to be held by the Crown, now represented by a government (i.e. Crown Land or State Land), or Has been transferred to and held by private persons or entities (i.e. Freehold land), and May also have legally recognised traditional owners (i.e. Native Title or Maori Land) Certain laws allow either Crown or Freehold land holder to permit others to: occupy their land (via leases), and/or conduct activities on their land (via licences, easements and covenants)"
Tenure System[#]	A tenure system is a legal system for recording and transferring rights, restrictions and responsibilities in land.

Spatial Cadastre Accuracy Levels[^]

Graphical Paper Map Level 0	Original paper cadastral index maps
Digitised Spatial Cadastre Level 1	Spatial database generated by digitisation of the Graphical Paper Maps. New cadastral survey boundaries are added to the unchanged digitised boundaries. This replicates the paper map maintenance process.
Survey-maintained Spatial Cadastre – Fitted Level 2a	New cadastral surveys are integrated by generating a best fit of the new boundaries to the parent parcel which is adjusted in-situ to receive the new survey information.
Survey-maintained Spatial Cadastre -Rubber-sheeted Level 2b	New cadastral surveys are integrated by fitting the new boundaries and rubber-sheeting abutting and nearby parcels in the vicinity to reduce distortion and to improve the parcel location within the map grid.
Spatially-aligned Cadastre Level 3	Spatial Cadastre systematically upgraded through alignment with other spatial datasets (including a focus on sufficient geodetic survey connections to boundaries) that are indicative of boundary location.
Survey-improved Spatial Cadastre Level 4	Spatial Cadastre upgraded by systematic back-capture and adjustment of sufficient survey measurements and all boundary dimensions from historical surveys plus new survey connections to geodetic control. At this level survey-compliance is not achieved.

Survey-compliant Spatial Cadastre Level 5	Cadastral coordinates derived from adjustment of survey measurements and boundary dimensions satisfy relative, survey, and positional uncertainty standards in the survey regulations. This differs only from the previous level in respect of compliance with survey regulations.
Survey Coordinate Cadastre Level 6	Designated coordinates of cadastral boundaries are expressly assigned a status in the hierarchy of evidence for survey definition but are not definitive.
Legal Coordinate Cadastre Level 7	Designated coordinates are given primary legal status as conclusive evidence for survey definition (in the absence of a proven error).

[#]Defined in Cadastre2034

[*]Adopted by ICSM (through PCC/CWG)

[^]Adopted by ICSM (through PCC/CWG), based on Grant et al

[$]Burke, J 1976, Osborn's Concise Law Dictionary, Sweet and Maxwell London.

[%]Donnelly, G 2012, Fundamentals of land ownership, land boundaries and surveying, ICSM