

The Boundary Concept Land Management Opportunities for Sustainable Development Provided by the Cadastre 2014 Approach

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- THE BOUNDARY CONCEPT AS A CHANCE FOR SURVEYORS
- OPPORTUNITIES CREATED BY THE BOUNDARY CONCEPT
- CONCLUSION

CADASTRE 2014 AND THE BOUNDARY CONCEPT

BOUNDARIES are used to separate different spheres

They exist in many domains of our lives as:



limits set by
parents and
teachers



rules for
behavior

boundaries
defining
our private
property



walls of our
rooms and
houses



edge of the
swimming pool



state, district and
municipal borders



edges of airstrips, roads, runways

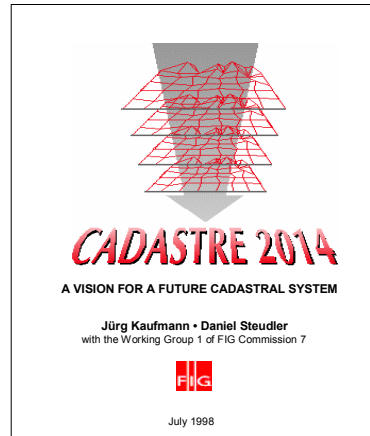
CADASTRE 2014 AND THE BOUNDARY CONCEPT

BOUNDARIES are everywhere.

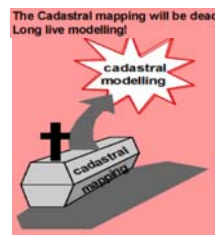
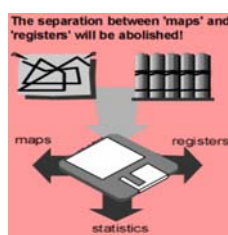
BOUNDARIES are to be respected.

BOUNDARIES are defined by facts, conventions, rules, and laws.

CADASTRE 2014 is about boundaries in particular those defined by laws and regulations.



CADASTRE 2014 AND THE BOUNDARY CONCEPT



CADASTRE 2014 AND THE BOUNDARY CONCEPT

Traditional Definition

Land Parcel

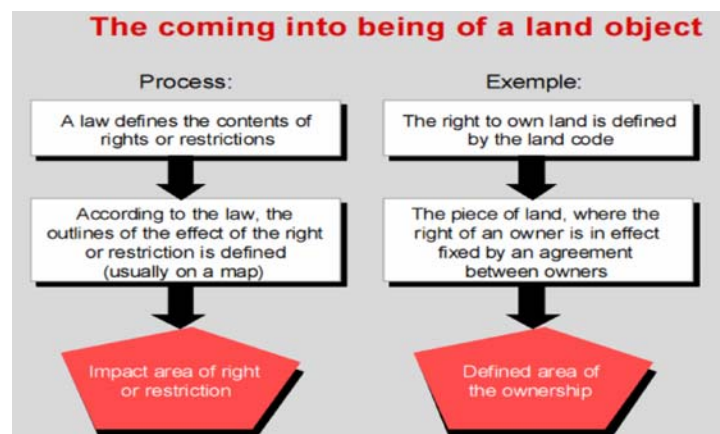
A land parcel is a piece of land with defined boundaries, on which a property right of an individual person or a legal entity applies.

Definition of Cadastre 2014

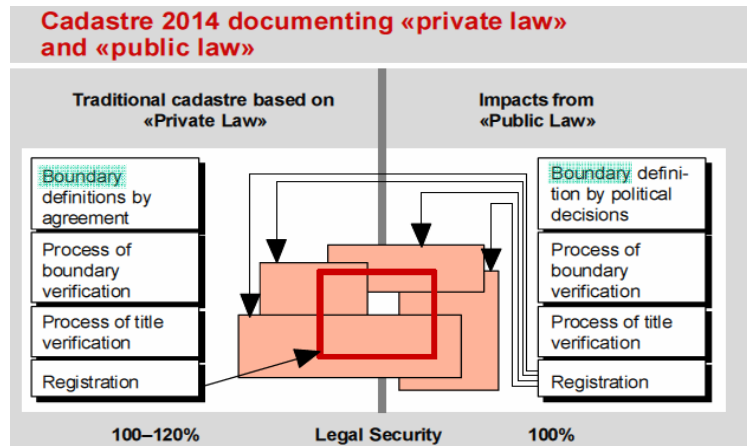
Land Object

A land object is a piece of land in which homogeneous conditions exist within its outlines. The legal land objects are described by the legal content of a right or restriction and the boundaries which demarcate where the right or restriction applies.

CADASTRE 2014 AND THE BOUNDARY CONCEPT



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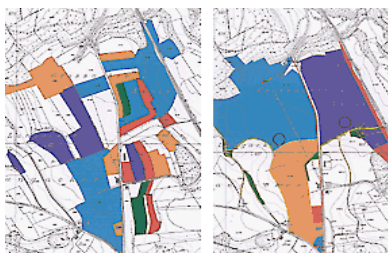
BOUNDARY CONCEPT AS A CHANCE FOR SURVEYORS



Surveyors have the skills, not only to determine and to localize (document) boundaries and to administer land.

Ausgabe vom:	12.03.2003	Kartenbearbeitung erstellt durch:	
Parzelleninformationen			
Gemeinde:	Thun-Brühlengen	Kanton:	Bern
BFS:	942	Blatt:	2
Parzelle Nr.:	1285	Parz. Nr.:	4228
Fläche:	737 m ²		
Eigentümer:	Publico Finance Bühlstrasse 10	Eigentümerform:	Administrations
Bezeichnung:	Bauernbesitz, Platz Umzeichnung	Flurnamen:	Saathofen, Dählweng
Gebäude:	Garage Wohnhaus	Objektnummer:	1285/10

They have the instruments of land management to rearrange boundaries and to implement the land policies.



BOUNDARY CONCEPT AS A CHANCE FOR SURVEYORS

fields of business activities	tasks	space related activities	tools/methods
strategy	visions/goals	space policy	political activities
management	measures and projects for the implementation of the policy	land (space) management	LAND MANAGEMENT land use planning land consolidation land reallocation melioration landscape dev. land recycling monitoring navigation geoinformation land registration cartography surveying geodesy GEOMATICS
administration	active handling of spatial information Data exploitation, visualization, creation of reports	land (space) administration	
documentation	cadastre operation data modelling, data acquisition, data maintenance	land (space) documentation	

BOUNDARY CONCEPT AS A CHANCE FOR SURVEYORS**Federal Act on Geoinformation
Geoinformation Act, GeoIG**

of 5 October 2007

*The Federal Assembly of the Swiss Confederation,
based on Article 60 paragraph 1, 63, 64, 75a and 122 paragraph 1
of the Federal Constitution¹,
and having considered the Report of the Federal Council dated 6 September 2006²,
decrees:*

BOUNDARY CONCEPT AS A CHANCE FOR SURVEYORS**Section 4: Cadastre of Public-Right Restrictions of Landownership****Art. 16 Subject matter and form**

¹The Cadastre of public-right restrictions shall contain public-right restrictions on landownership rights which, in accordance with the provisions of the Civil Code, are not part of the Land Register.

²The Federal Council determines which official geodata relevant to federal legislation are entered in the Cadastre of public-right restrictions.

³The cantons may define additional official geodata of proprietary nature that must be recorded in the Cadastre of public-right restrictions.

⁴The Cadastre of public-right restrictions shall be made available in electronic form either online or by any other method.

⁵The Federal Council shall determine the minimum requirements with regard to the organisation, management, data harmonisation, methods and processes for the Cadastre of public-right restrictions.

Art. 17 Validity

The content of the Cadastre of public-right restrictions is considered to be publicly known.

Art. 18 Liability

Liability for the management of the Cadastre of public-right restrictions is governed by Article 955 of the Civil Code.

BOUNDARY CONCEPT AS A CHANCE FOR SURVEYORS

c2014 - Auszug

Auszug vom: 12.03.2003

Katastersauszug erstellt durch:
Muster & Muster
Helmweg 4
3000 Bern
Tel. +41 (0)31 40 11 81
Email info@muster.ch

Parzelleninformationen

Gemeinde: Thun-Strättligen
Kanton: Bern
BFS: 942
Kreis:
Parzelle Nr.: 1995
Plan Nr.:
Fläche: 757 m²
Eigentümer: Muster Hansa
Eigent.
Musterplatz 20
3000 Haslebach
Beschreibung: Bootsanbindeplatz, Platz Umschwung,
Gewässer
Gebäude: Wohnhaus Libellenweg 5b
Flurnr.:

c2014 - Plan

Gemeinde Thun-Strättligen 1:500
Parzelle Nr. 1995 Plan Nr. 4228

Legende:

- BR, Art. 27, Uferschutzgebiet
- BR, Art. 14, Grenzabstand

Fluzug vom: 13. März 2003

Katasterauszug enthält Daten:
Fläche & Lage
Eigentümer
Flurnr. & Flurstück
Datum 12.03.2003 um 11:01 am
Datei: 120303_1995_01.mxd

The map shows parcel 1995 in red, surrounded by other parcels (1321, 1816) and a blue water body. A north arrow is present.

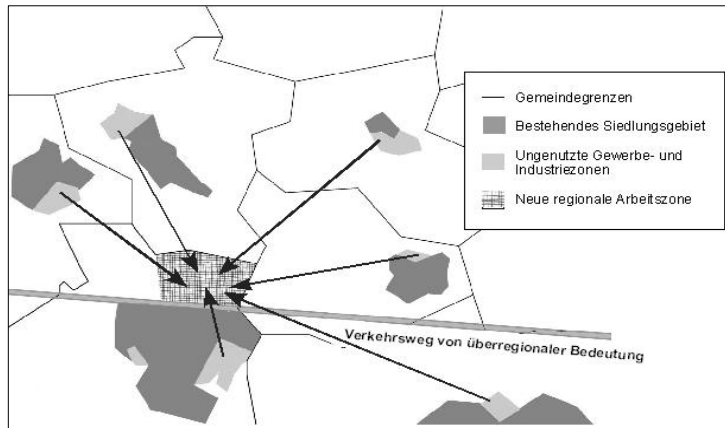
LAND MANAGEMENT OPPORTUNITIES CREATED BY THE BOUNDARY CONCEPT

Land consolidation



LAND MANAGEMENT OPPORTUNITIES CREATED BY THE BOUNDARY CONCEPT

Land-use planning



LAND MANAGEMENT OPPORTUNITIES CREATED BY THE BOUNDARY CONCEPT

Land management in rural and urban areas



LAND MANAGEMENT OPPORTUNITIES CREATED BY THE BOUNDARY CONCEPT

Traditional Land Right Management

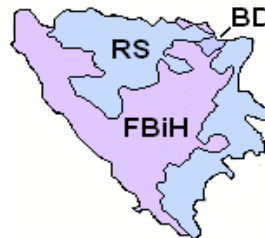
Indigenous land use agreements
Native Title Act, under 2:3
negotiation protocol 1:121-124
Walgalu and Wiradjuri people, Tumut
Brungle Local Aboriginal Land Council and
Adelong Consolidated Gold Mines 1:121-
124



The Indian Land Consolidation Act (ILCA)
As most people familiar with Indian affairs know, the
problem of fractionated interests

LAND MANAGEMENT OPPORTUNITIES CREATED BY THE BOUNDARY CONCEPT

Ethnic Conflict Management

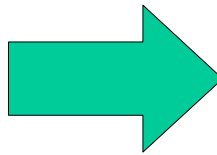


CONCLUSION



Legal Topics:	Legal Object Boundaries:	Rightful Claimants:
Resource exploitation		Chartered company
Collective land rights		Corporation
Water protection		Society
Traditional rights		Tribes, Clan
Environmental protection		Society
Land use planning		Society
Land property		Private Land Owners
Topography		Society
Natural resources		Society
Natural land objects		Society

Land resources are used for a variety of purposes which interact and may compete with one another; therefore, it is desirable to plan and manage all uses in an integrated manner.



Based on a reliable and complete 'cadastral' documentation, land management tools and methods be used to find sustainable solutions by rightful new boundary and property configurations.

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THANK YOU FOR YOUR ATTENTION

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