Ingenieur-Geometer Schweiz (IGS) Ingénieurs-Géomètres Suisses (IGS) Ingegneri-Geometri Svizzeri (IGS)



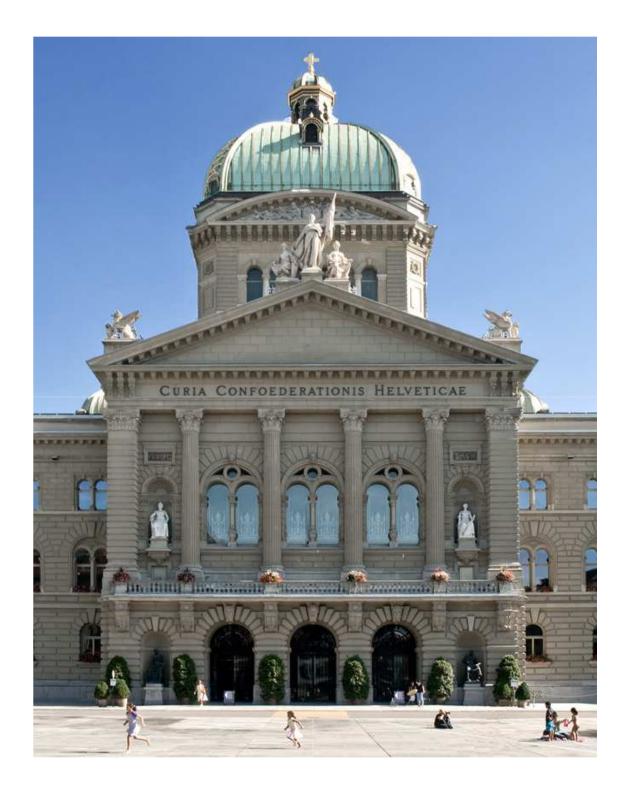
#### The cadastral situation in Switzerland

Ownership protection in Europe, a comparison Hannover, October 11<sup>th</sup> 2012

Maurice Barbieri

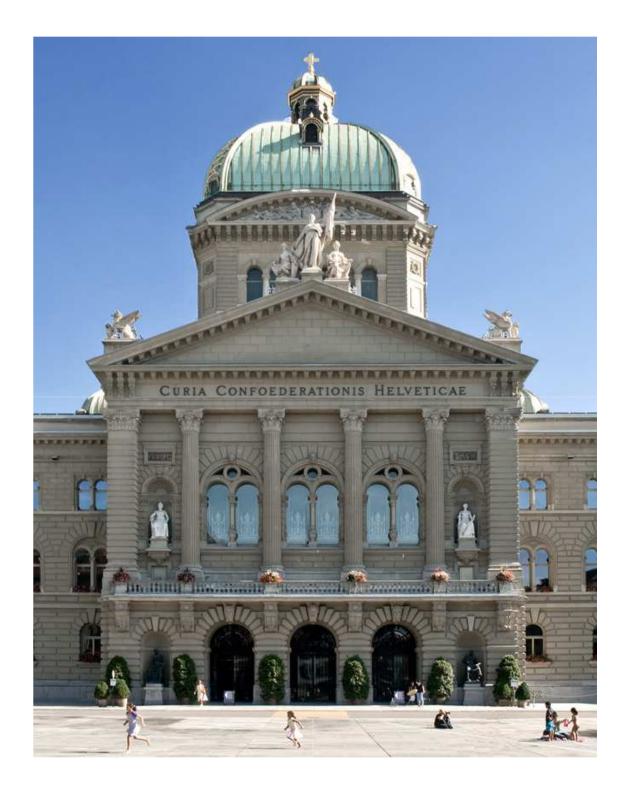
Chairman IGS and IG-PARLS Maurice.barbieri@igs-ch.ch

Thanks to: Daniel Steudler, swisstopo



### Content

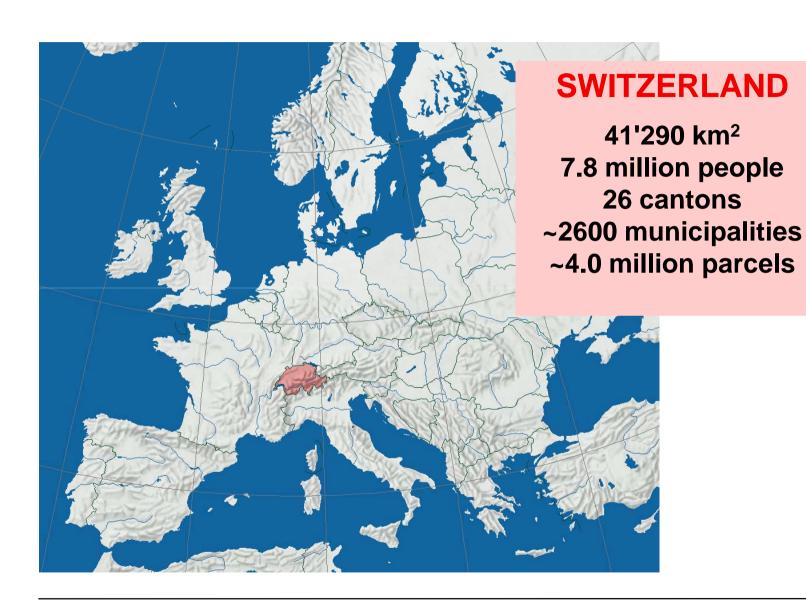
- Background
- Legal Basis,
   Organisation,
   Technical
   Elements
- Profession
- Further information



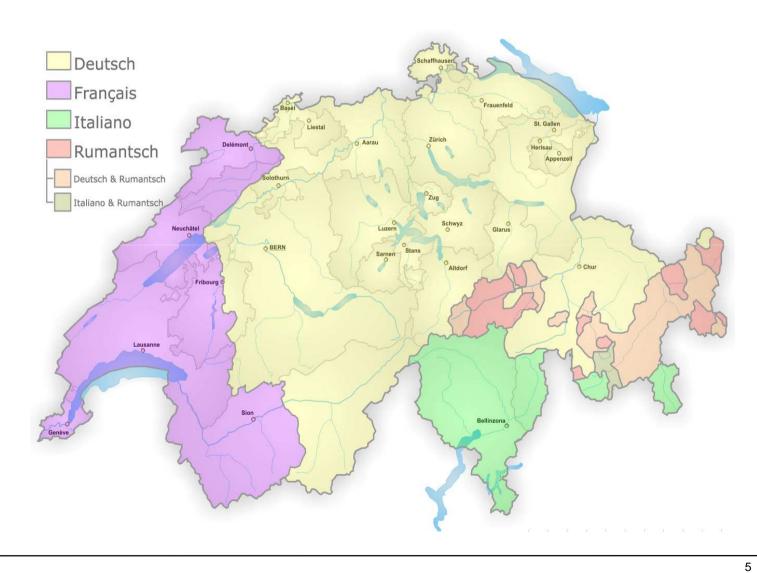
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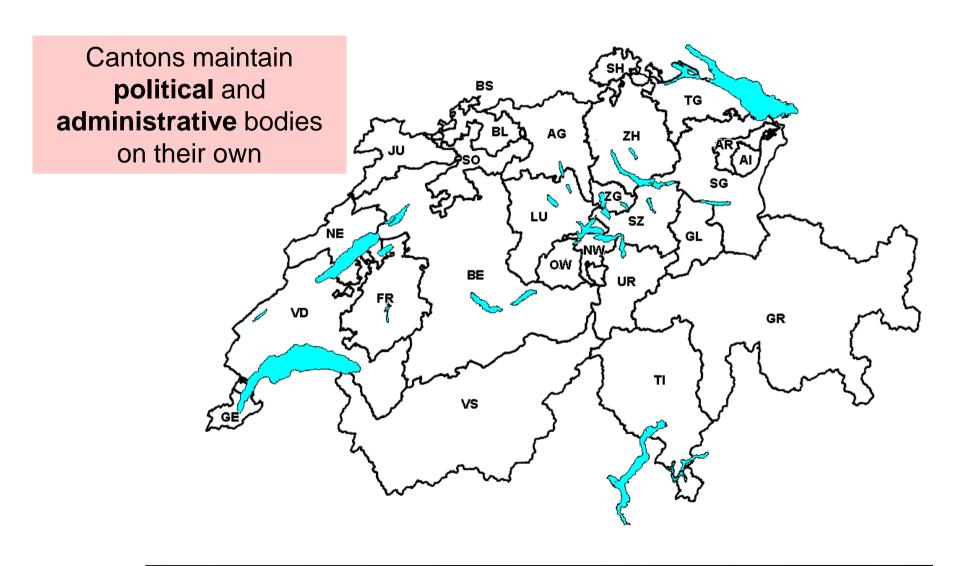
### Basic Dimensions



# Four official languages

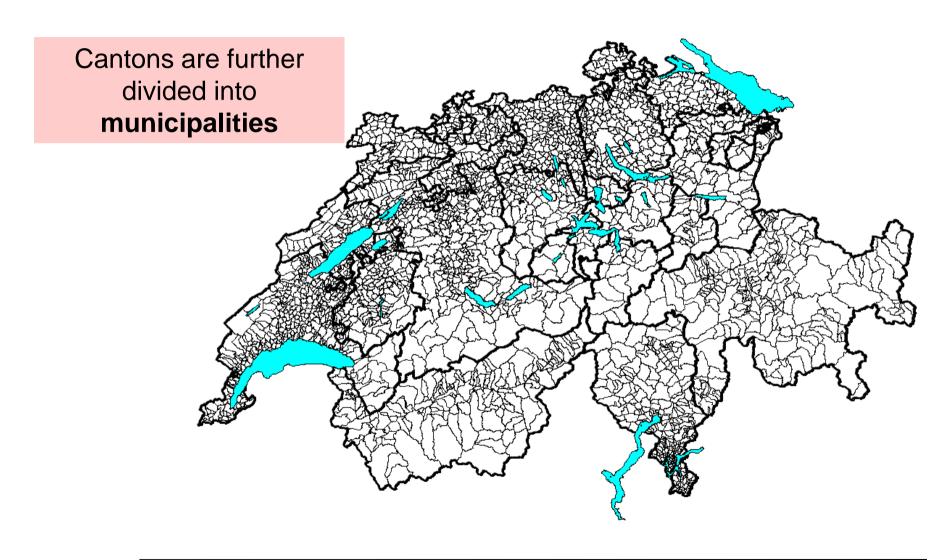


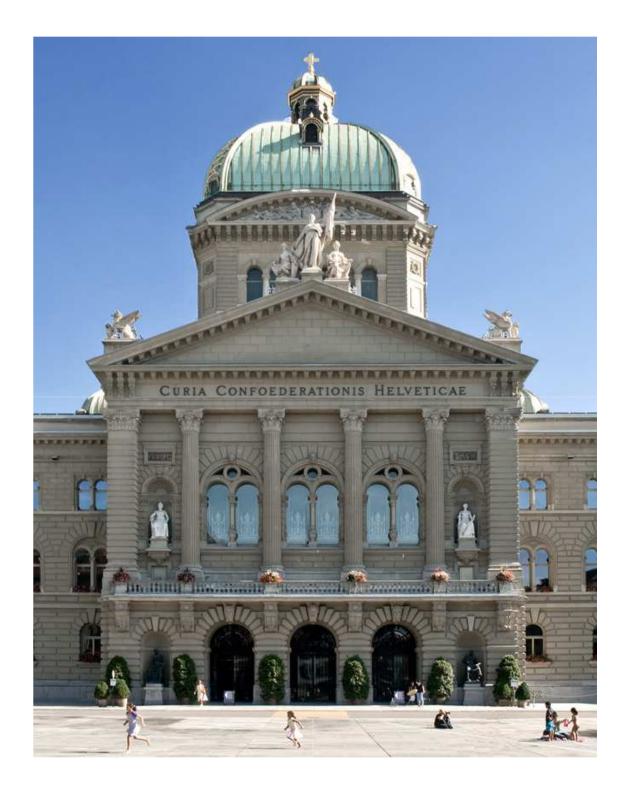
# Federated Country with 26 Cantons...





# ... and 2596 Municipalities

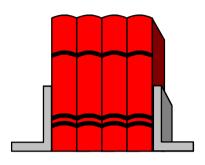




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# Legal basis and objectives



**Swiss Civil Code, 1912** 



### **Objectives of the legislator:**

 Security of ownership, efficient land market, and mortgaging of real estates

# Swiss civil code (in force since 1.1.1912)

#### Art. 942

<sup>1</sup> All rights on real estates have to be registered in the **land registry**.

<sup>2</sup> The land registry consists of the main book with its associated maps, the auxiliary registers (in particular the list of property owners), the deeds (records and evidences), the description of properties, and the day book.

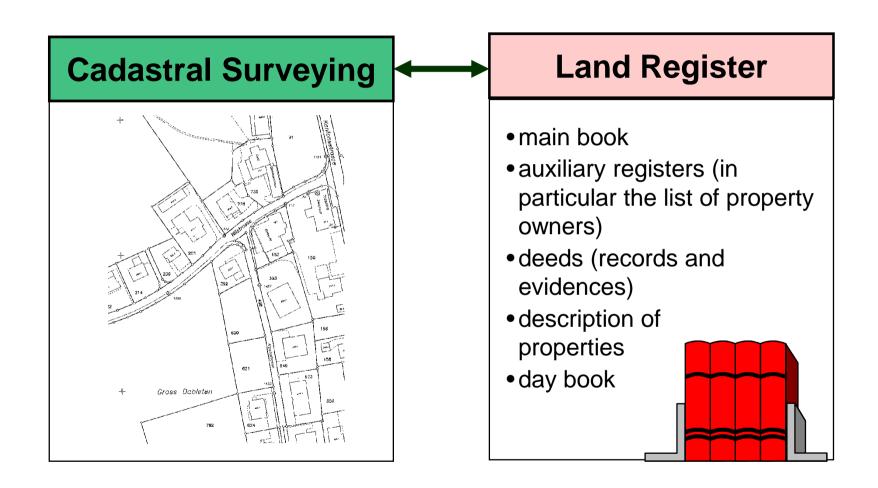
#### **Art. 950**

- <sup>1</sup> Registration and description of the properties in the land register have to be done on the basis of a map, which as a rule, has to be the result of an official cadastral survey.
- <sup>2</sup> The Federal Council decides on which principles these maps have to be based upon.

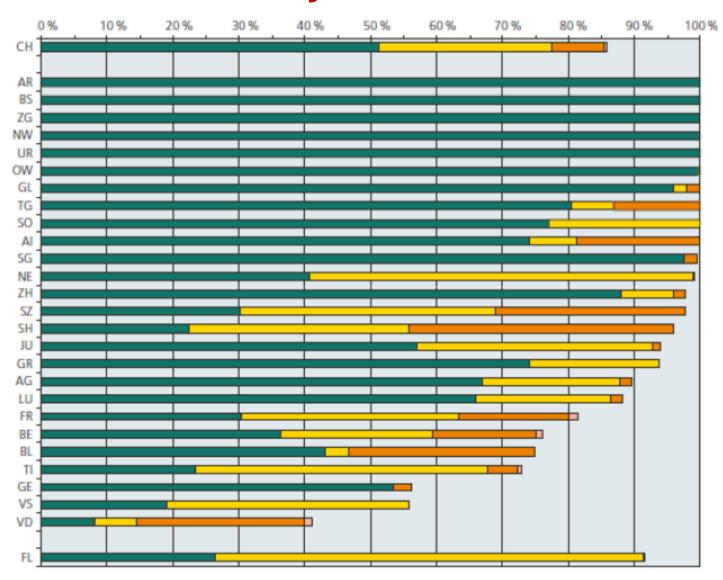
# Basic Principles (as in civil code)

- No ownership without registration (art. 656)
- No registration without surveying (art. 950)
- No surveying without boundary definition (art. 669)
- Title registration system
- > Title guaranteed by the government

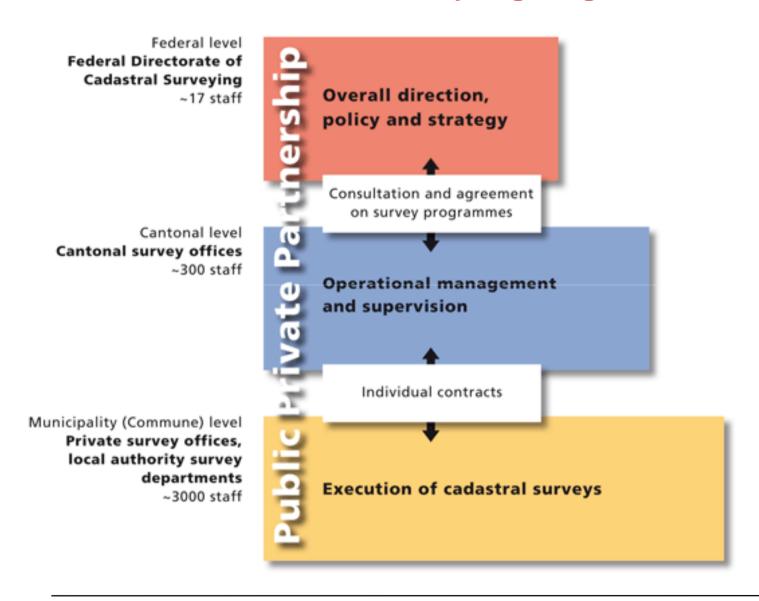
# Swiss cadastral system



# Swiss cadastral system

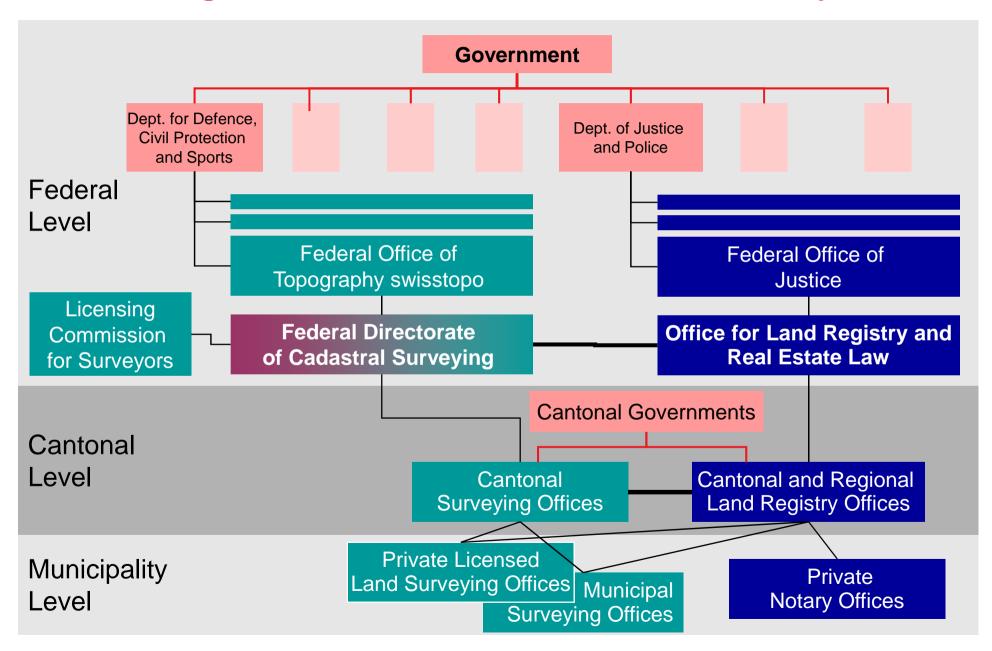


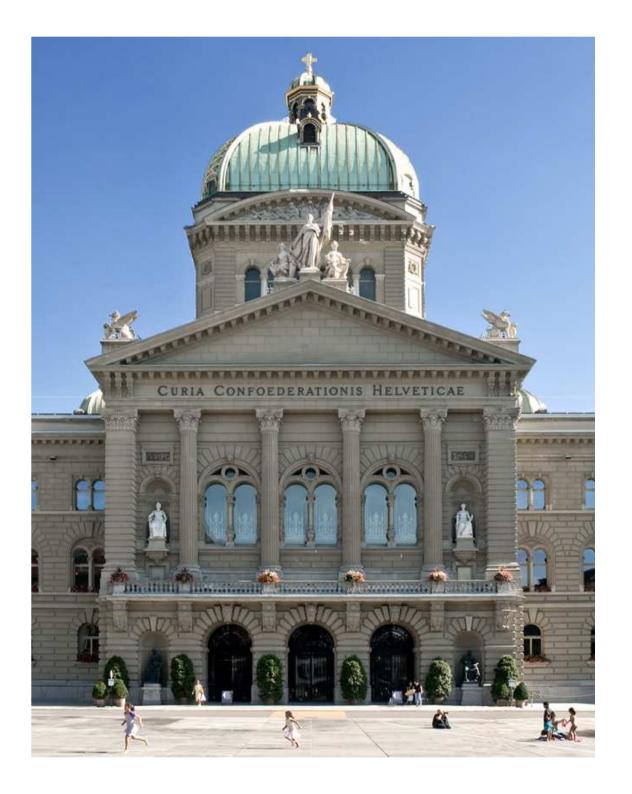
# How is cadastral surveying organized?



### O

### Organisations involved in cadastral system

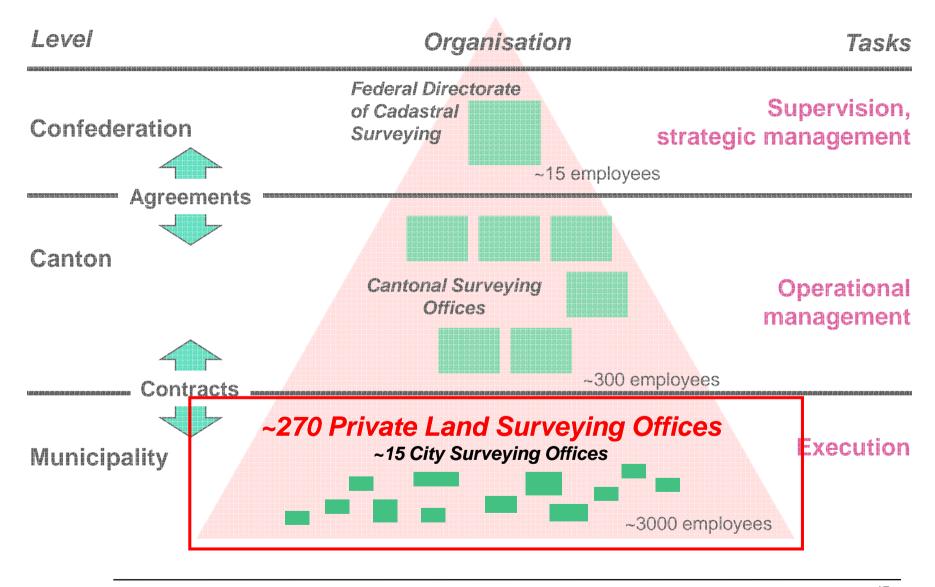




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# Organisation of cadastral surveying



### **Role of Private Sector**

#### **Two Partners:**

#### **Public Sector**

- legislation (Federal and cantonal level)
- •financing structure
- setting standards
- supervision
- co-ordination
- verification

#### **Private Sector**

- production
- maintenance
- service to clients
- innovation

### **Public Private Partnership**

### **Private Sector – Framework**

 Surveyors entrusted with cadastral surveying are carrying out a sovereign function and are in this respect regarded as persons of public trust.



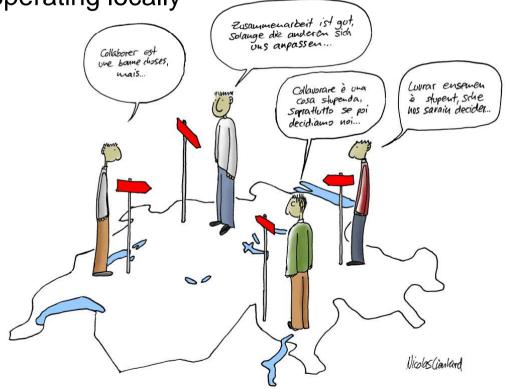
# Private Sector – Why?

- By delegating sovereign duties to the responsibility of the private sector, the federal government can reduce its administrative work load.
- The potential for innovation is considerably increased through the inclusion of the private sector

The private industry is operating locally

= customer proximity

 Peripheral regions are provided with quality jobs



# Tasks of a private surveyor

- Initial Survey and Renewal of the cadastral survey
- Continuous and periodic updating
- Data Processing
- Data management and data backups
- Data delivery
- Consulting
- + Private mandates



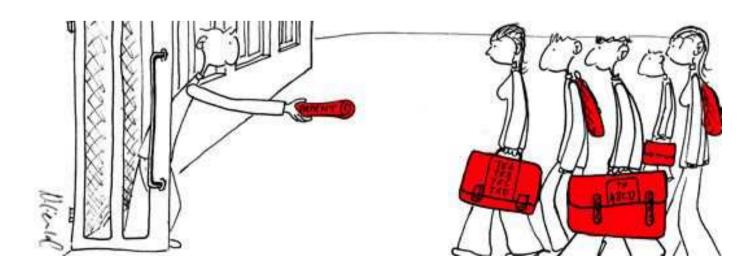
# Un the geoinformation act

Licensed land surveyors who have successfully completed the **federal state examinations** and who are registered in the **Register of Licensed Land Surveyors** are authorised to perform independent (self-employed) work within Cadastral Surveying.



### License and register: Why?

- A license issued to cadastral surveyors and an entry in the register for licensed surveyors guarantee a minimal standard of professional and personal competence in cadastral surveying.
- Through the federal register for licensed surveyors, the surveying ordinance makes a clear distinction between an educational certificate, professional practice and disciplinary measures.



# Path to Licence for Cadastral Surveyor

Academic education		Practical experience 2 years		State examination	Register
Master of Federal Institute of Technology (ETH), Universities, Universities of Applied Sciences	2		1	License	Accreditation for professional occupation

- Accreditation "sur dossier" of academic requirements by Cadastral Surveying Commission
- Additional modules to meet requirements are optional

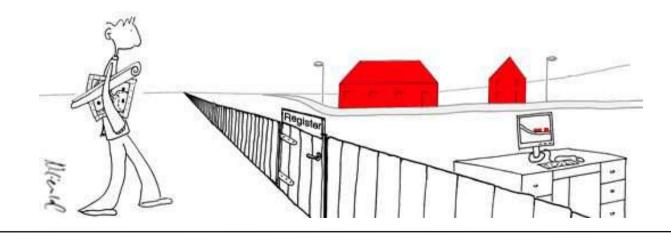
# State examination covers four topics

- Cadastral surveying
- Geomatics
- Land management
- Corporate management



# Register for surveyors

- Only for persons working in cadastral surveying from the private sector and from public institutions
- Duties and supervision apply to the persons registered
- Accreditation to carry out the functions of a licensed surveyor



### What do we need cadastral surveying for?

Many areas in the private sector, public administration and our daily lifes depend on cadastral surveying data.

For example:

- Land register
- Construction projects
- Traffic engineering
- Land-use planning
- Environmental protection
- Public administration
- PLR-cadastre
- Tourism
- ...



### What do we need cadastral surveying for?

As basis for...

- City maps
- Zoning plans
- Utility asset maps
- Geographic information systems
- ...

RAU

→ National Geodata Infrastructure

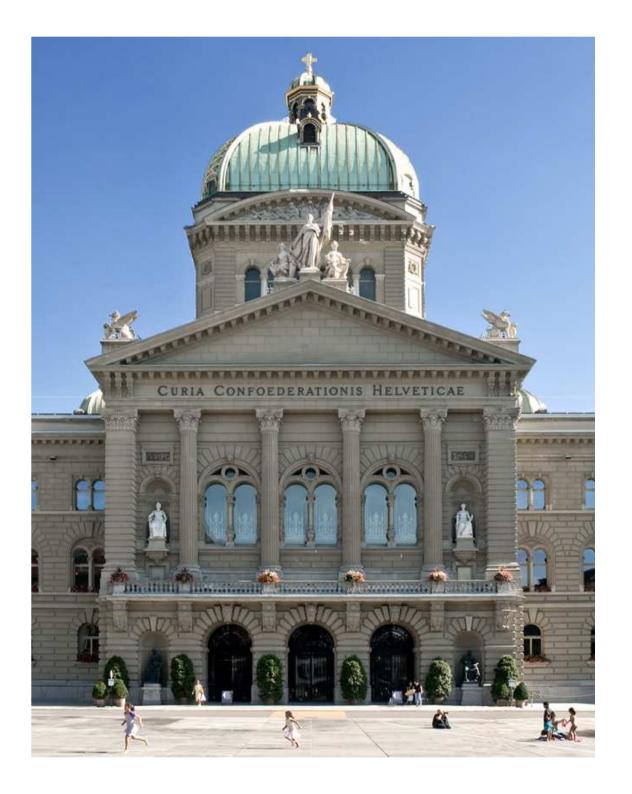
# Weakness and advantage of the system

#### **Advantages:**

- Title guaranteed by the government
- Official cadastral surveying contributes to guarantee over € 600'000'000'000 of mortgages
- Official surveyors are persons of public trust, they are judges of 1st instance
- Licensed surveyors are "protected" by the law
- This system has been functioning successfully since 100 years

#### **Disadvantages:**

- Different systems over the country (free market ≠ circles)
- Cost of the works (after 100 years not yet finished)
- Difficulty to train apprentices in different languages
- This system operational since 100 years



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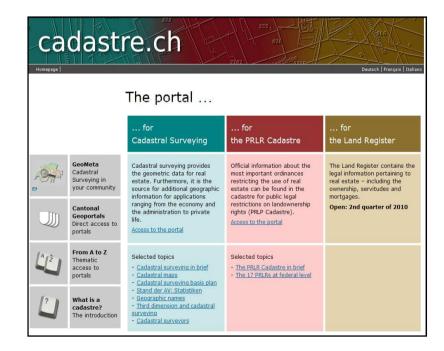


#### ... on the web



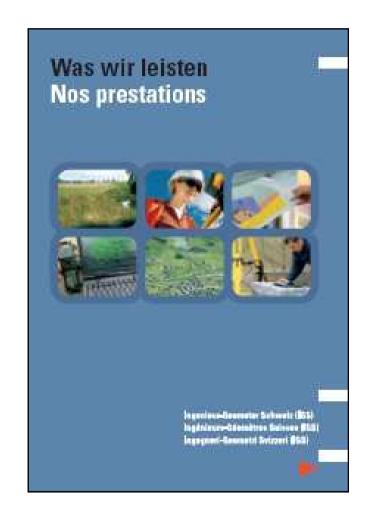
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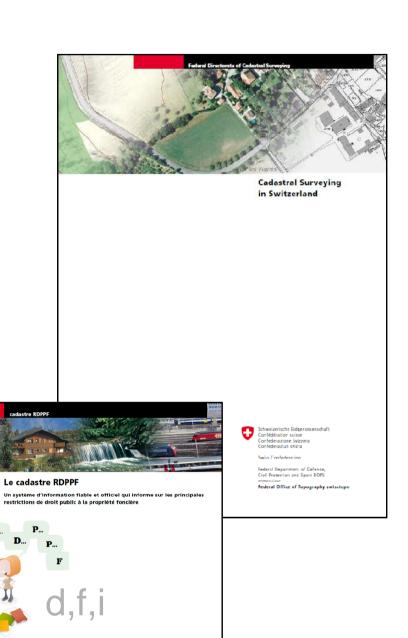
### www.cadastre.ch





### ... brochures







Thank you very much for your aftention