# CADASTRE 2014 in Practice

**Integration of public-right restrictions into cadastre**
**Case study from the practice**

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c2014



## Summary

- Motivation
- Association c2014
- Technical concept
  - Necessary components
  - Procedure in the municipalities
  - Publication and sale
- Marketing
- Success Story: „Grundlagenbescheid“ City of Thun
  - Specimen
- Challenges
- Summary / Questions





## Where we want to go

- Strengthening the profession
- Enlargement of traditional activity
- Becoming specialists for general land-related information
- Initiators towards CADASTRE 2014
- Surveyors becoming “information brokers”





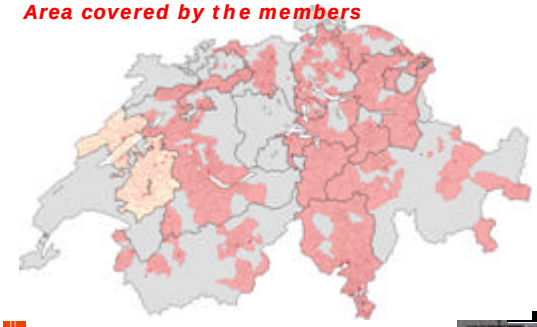
## Association c2014

- co-operative society
  - Board of 5 administrators
  - Acting manager
  - Technical delegate
- founded in 2003 on initiative of IGS
  - (Ingenieur Geometer Schweiz – Association of the private licensed surveyors of Switzerland)
- 87 members ($^1/_3$ /offices)
  - private rural engineering and surveying offices
- Purpose:
  - Development of modern methods for the complete, reliable, fast and cheap gaining of information on land related rights
  - leading role in Cadastre 2014 project in Switzerland.
- Product: SIGIS





## Area covered by the members





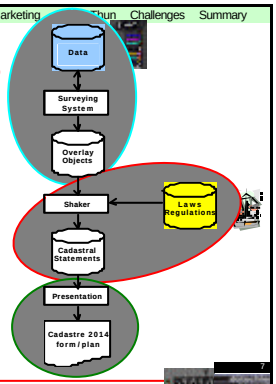


## Task-sharing between Association & Members

| Association c2014 | Members |
|---|---|
| | |

## Component architecture

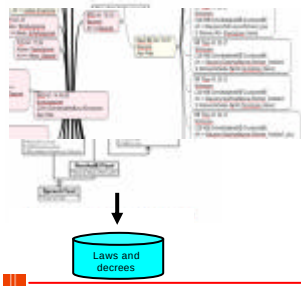
- Cadastre / Surveying-Data
- Surveying-GIS
- Laws / Regulations
- "Shaker"
- Presentation
- Output








## Technical concept (1 / 3): Modelling of laws



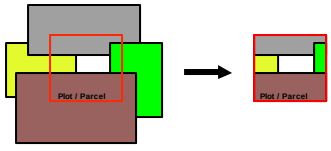

- Analyse of all laws and decrees (federal / cantonal):
  → >1000 texts with spatially relevant issue!
- Modelling in INTERLIS:
  - all laws / decrees with spatial issue (federal / cantonal)
  - 1 example per canton





## Technical concept (2 / 3): Geometries of public restrictions

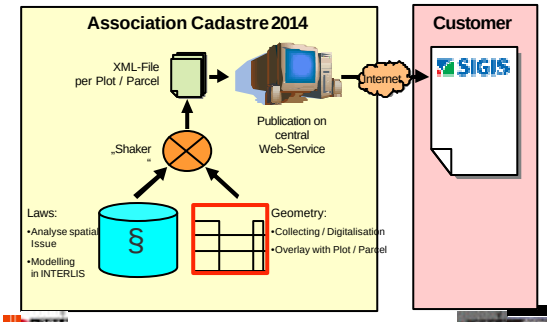
- Collecting / Digitalisation of public restrictions:
  → Create Geodata
- Overlay with each plot / parcel








## Technical Concept (3 / 3): Publication








SIGIS



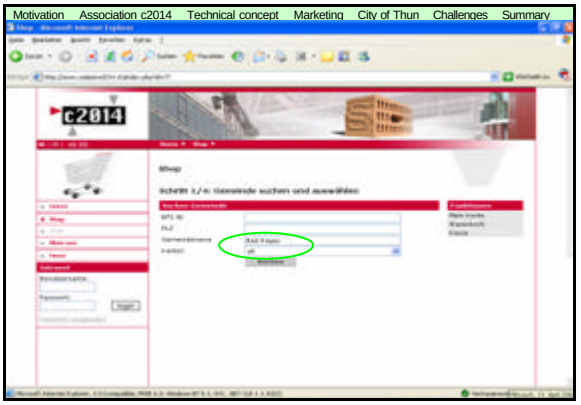


## Product of Association Cadastre 2014

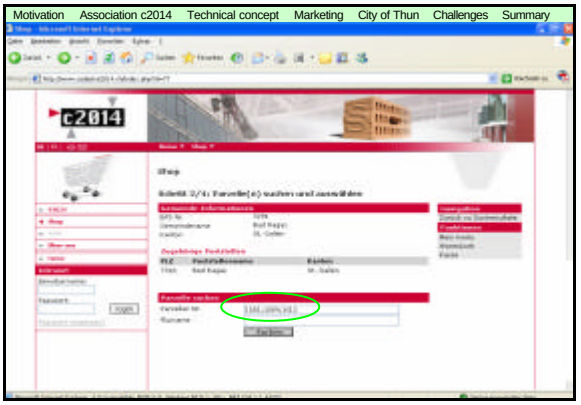
**SIGIS Is a national Inventory, which provides online public-right restrictions, systematically gathered**

**Benefits for customers:**

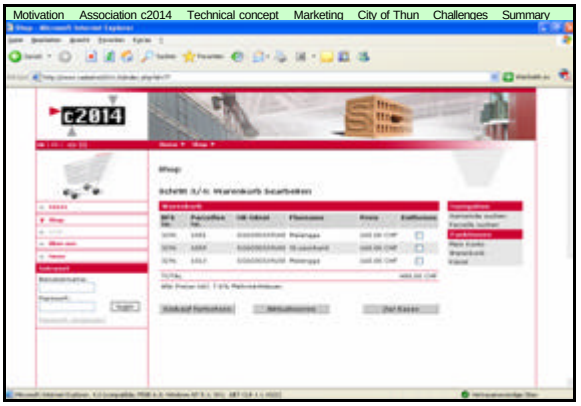
- Time saving / Efficiency:
  All facts per click
- Completeness of public-right restrictions
- Base for value / price setting
  - » Refuse dumps? Protected zone? Expropriation?
- Integration in other Applications













## *Realization for the city of Thun(40'000 Inh.)*

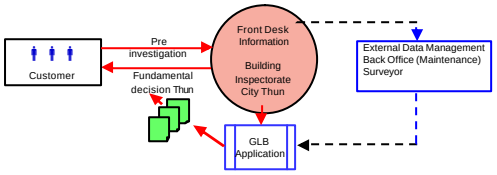
- **XML / Internet based**
- **Online Application (Password and Protocol-Protected => https)**
- **Thematical maps included**
- **Easy to use, without formation**
  - **(push here dummy)**





## *Building inspectorate city of Thun*

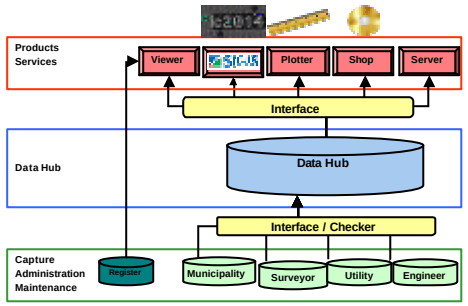
- **Front desk operated by the city of Thun, service in background provided (ASP from surveyor).**

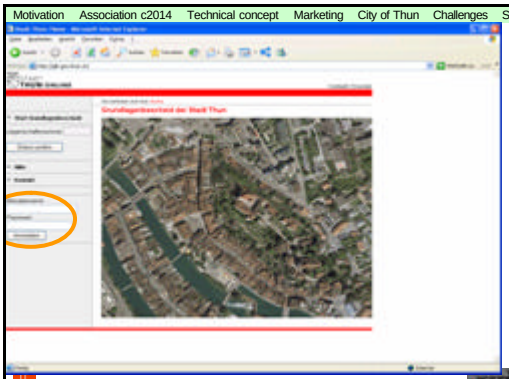






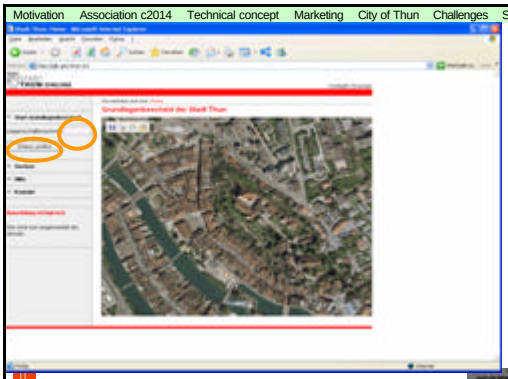

## *Schema GeoPortal*





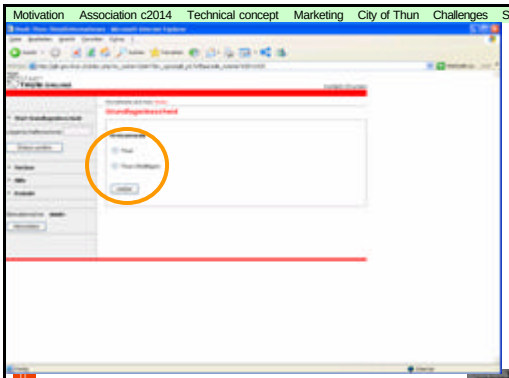






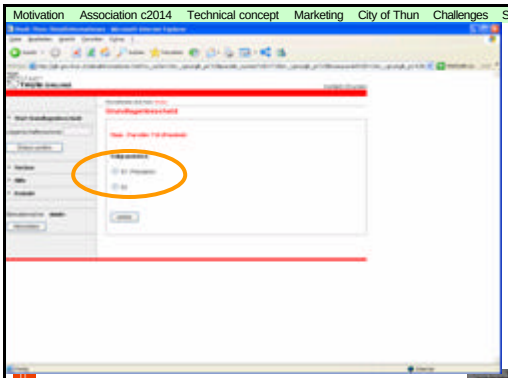






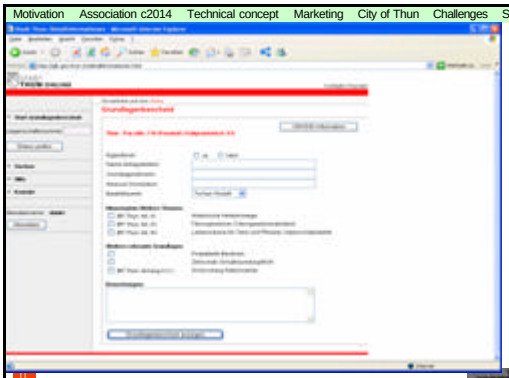












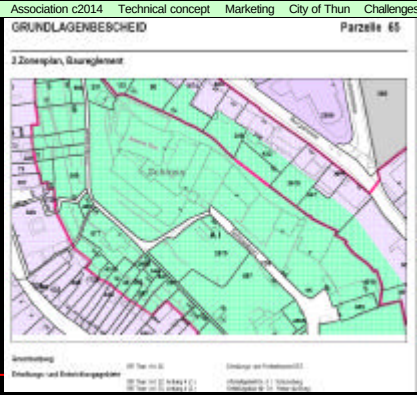




## *Grundlagenbescheid City of Thun*

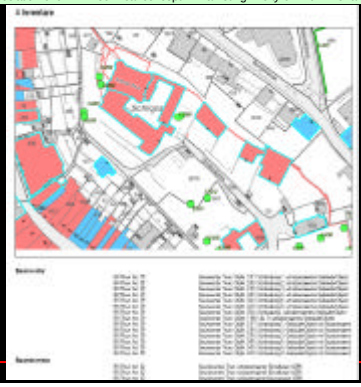














## *Challenges / Must have (Interviews with customers)*

- Complete and quality:
  - **c2014 as label, confidence in product**
- Actuality:
  - **No money for old information**
- Coverage:
  - **critical moment" for marketing activities, credibility**
- Technical solutions:
  - **easy, simple, reliable**
  - Standardisation / Normalisation
- Good Price / Benefit relation
- One stop shop

- **STRONG COOPERATIONS WITH PUBLIC PARTNERS**



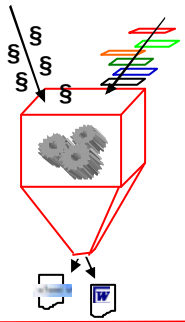


## *Conclusion*

- **Private Sector took the lead in the technical part**
- **Easy and practicable solution**
  - **Multiple use of geodata (not separately for c2014)**
  - **Fully integrated in SDI**
  - **Standard workflow for data producers (automated)**
  - **Checker functions, Quality assured**
  - **Web based (Browser, no additional Software)**
- **Formation of the members started**
- **First results achieved**
- **New business models (Product)**
- **It takes longer than planned… (Investement > 0,7 Mio SFR)**
- **We are ready for the GeoIG** (New Swiss Geoinformation Law)



## Technik 1






## Technik 2