


## CADASTRE 2014 in Practice

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


Peter Dütschler, Thun, Switzerland



Motivation Association c2014 Technical concept Marketing City of Thun Challenges Summary


### 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



München 2006, Peter Dütschler


Integration of public right restrictions into the cadastre



Motivation Association c2014 Technical concept Marketing City of Thun Challenges Summary


### 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”



München 2006, Peter Dütschler


Integration of public right restrictions into the cadastre




Motivation Association c2014 Technical concept Marketing City of Thun Challenges Summary

### 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:
 





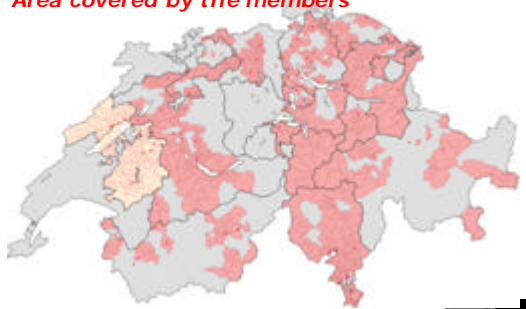
München 2006, Peter Dütschler


Integration of public right restrictions into the cadastre



Motivation Association c2014 Technical concept Marketing City of Thun Challenges Summary


### Area covered by the members





München 2006, Peter Dütschler


Integration of public right restrictions into the cadastre



Motivation Association c2014 Technical concept Marketing City of Thun Challenges Summary


### Task-sharing between Association & Members

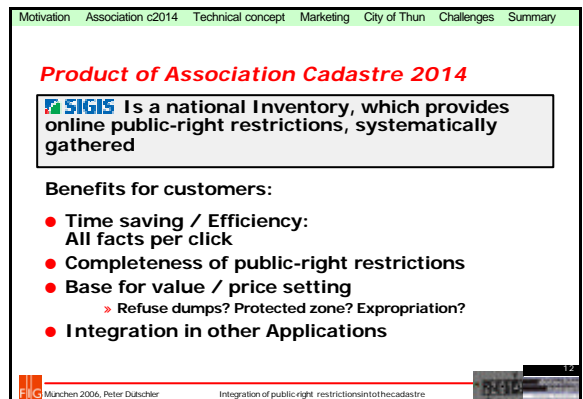
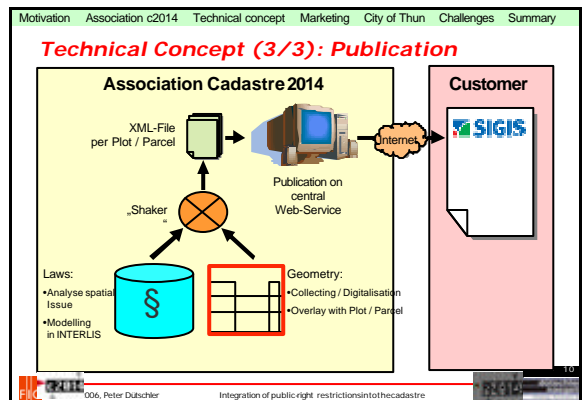
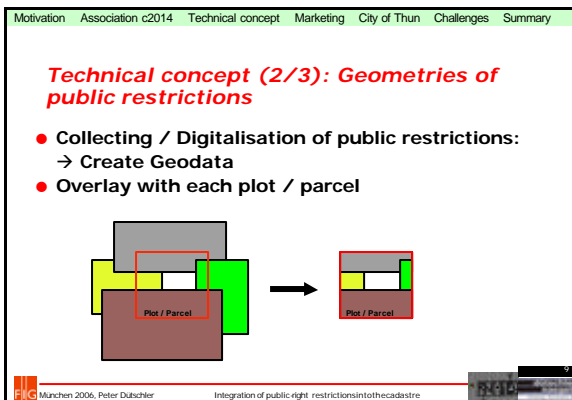
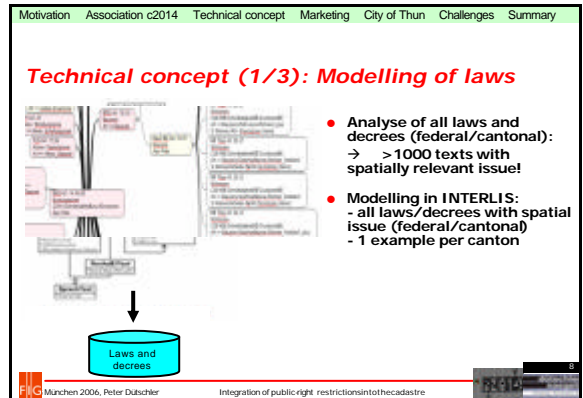
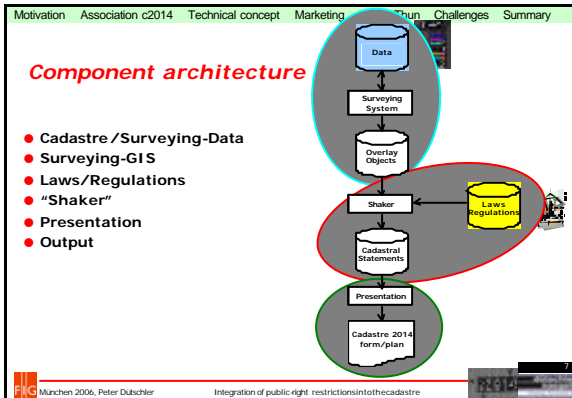
Association c2014	Members

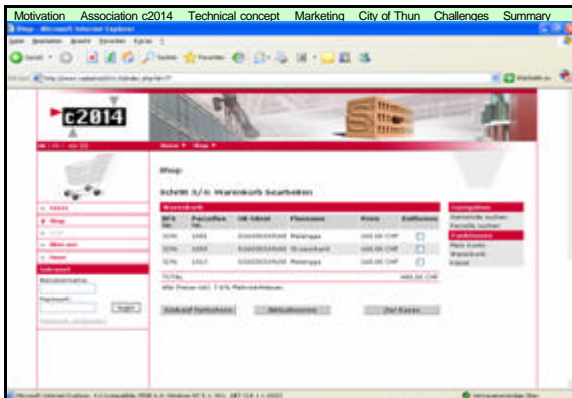
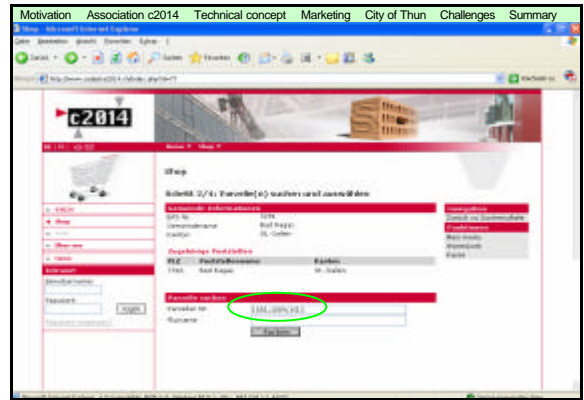
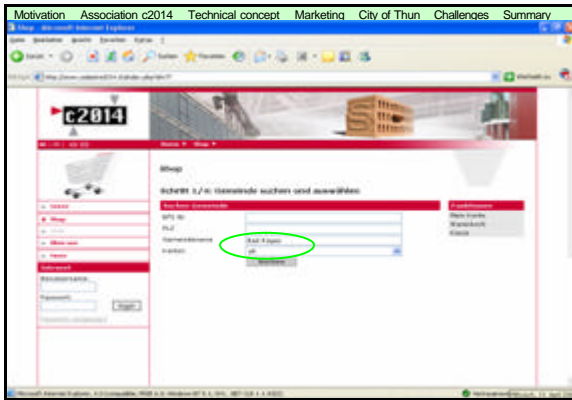


München 2006, Peter Dütschler

Integration of public right restrictions into the cadastre







Motivation   Association c2014   Technical concept   Marketing   City of Thun   Challenges   Summary

## *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)

Motivation Association c2014 Technical concept Marketing City of Thun Challenges Summary

## Building inspectorate city of Thun

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

```
graph LR; Customer[Customer] -- "Pre investigation" --> FrontDesk((Front Desk Information  
Building Inspectorate City Thun)); FrontDesk -- "Fundamental decision Thun" --> Customer; FrontDesk --> GLB[GLB Application]; GLB -.-> Surveyor[External Data Management  
Back Office (Maintenance)  
Surveyor]; Surveyor -.-> FrontDesk;
```

The diagram illustrates the system architecture for the Building Inspectorate City of Thun. It features a central red circle representing the 'Front Desk Information' and 'Building Inspectorate City Thun'. To the left, a box labeled 'Customer' with three blue stick figures is connected to the central circle by a red double-headed arrow labeled 'Pre investigation' (pointing to the circle) and 'Fundamental decision Thun' (pointing to the customer). Below the central circle, a stack of three green squares is connected to a blue box labeled 'GLB Application' by a red arrow pointing down. The 'GLB Application' box is connected to a blue box on the right labeled 'External Data Management Back Office (Maintenance) Surveyor' by a dashed black arrow pointing right. A dashed black arrow also points from the 'Surveyor' box back to the central circle.

Munich 2006, Peter Dubschier

Integration of public right restrictions into the cadastre

Motivation Association c2014 Technical concept Marketing City of Thun Challenges Summary

## Schema GeoPortal

The diagram illustrates the architecture of the Schema GeoPortal, showing the flow of data and services between various components.

**Products Services** (Red box): This layer contains five main components: **Viewer**, **5t-CRS**, **Plotter**, **Shop**, and **Server**. These components are connected to the **Interface** layer.

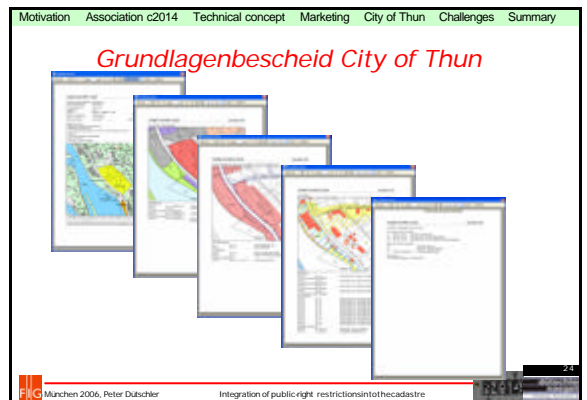
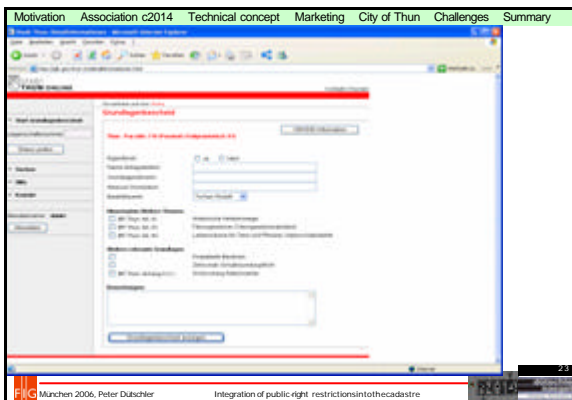
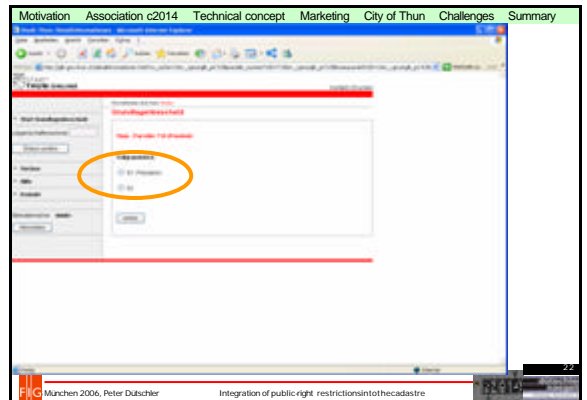
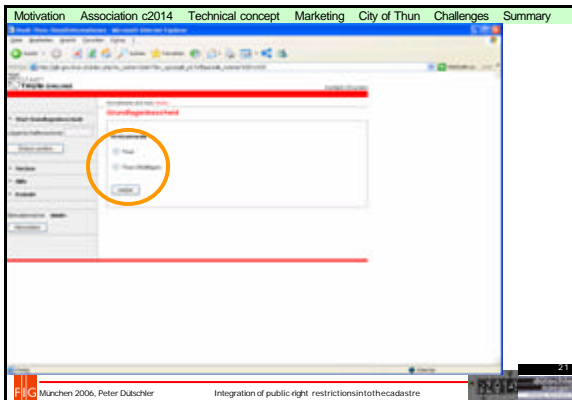
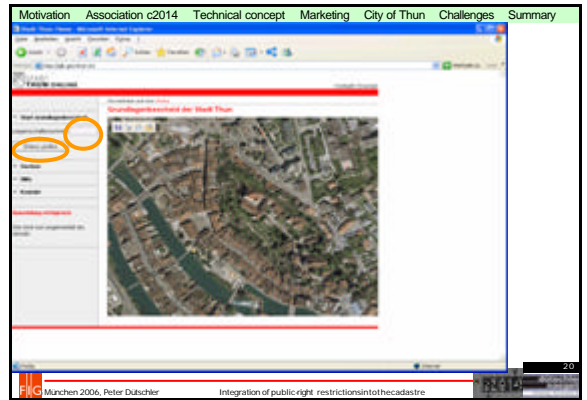
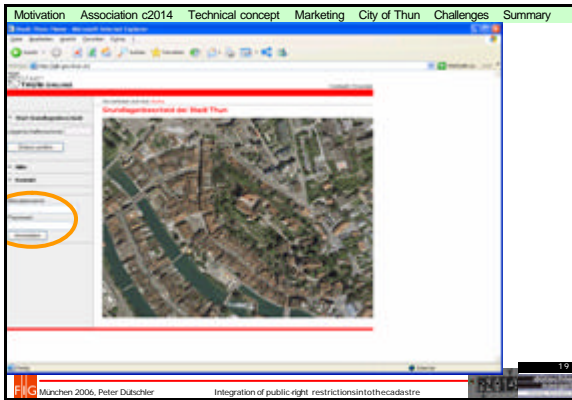
**Interface** (Yellow box): This layer acts as a bridge between the **Products Services** and the **Data Hub**.

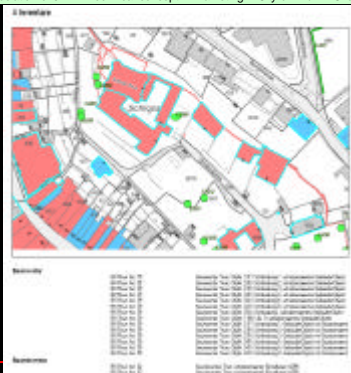
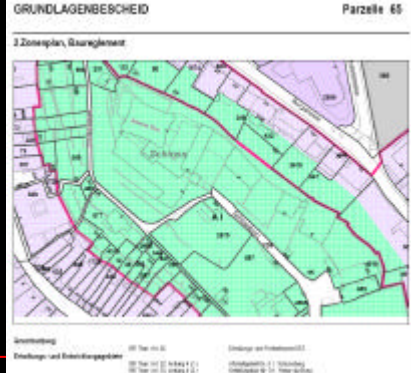
**Data Hub** (Blue cylinder): This central component stores and manages the data, connected to both the **Interface** and the **Interface / Checker**.

**Interface / Checker** (Yellow box): This layer connects the **Data Hub** to the **Capture Administration Maintenance** layer.

**Capture Administration Maintenance** (Green box): This layer contains the **Register** (teal cylinder) and four entities: **Municipality**, **Surveyor**, **Utility**, and **Engineer**. These entities are connected to the **Interface / Checker**.

The diagram shows a clear flow of data and services from the **Capture Administration Maintenance** layer up to the **Products Services** layer.





**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... (Investment > 0,7 Mio SFR)**
- **We are ready for the GeoIG** (New Swiss Geoinformation Law)



