

**Presentation of COST G9:
Modelling Real Property Transactions**

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**COST Social Sciences and Humanities, 48th Technical Committee
Meeting
Vienna, 19. March 2004**

Overview

- Identification, Objective, Research domain
- Research questions
- Methodology
- Use of COST resources, Outcomes
- Relations to European organisations and needs

COST action G9: "Modelling Real Property Transactions"

	01/03/2001	
Domain: Miscellaneous	Austria	Finland
MoU: 224/01	Denmark	United Kingdom
Entry Into Force: 1/03/2001	Germany	Sweden
CSO Approval: 14/12/2000	Netherlands	Hungary
End of Action or Prolongation: 4/06/2005	Spain	Latvia
1st MC: 5/06/2001	Slovenia	14/06/2001
		Greece
		6/11/2003

COST G9: Publications

The Ontology and Modelling of Real Estate Transactions
(Eds) Heiner Stuckenschmidt, Erik Stubkjær and Christoph Schlieder,
Ashgate Publisher's *International Land Management Series*. 2003.
170 p.

Page 9 to 11 in COST G9 Progress Report 2003. 25 titles

Website: <http://costg9.plan.auc.dk>

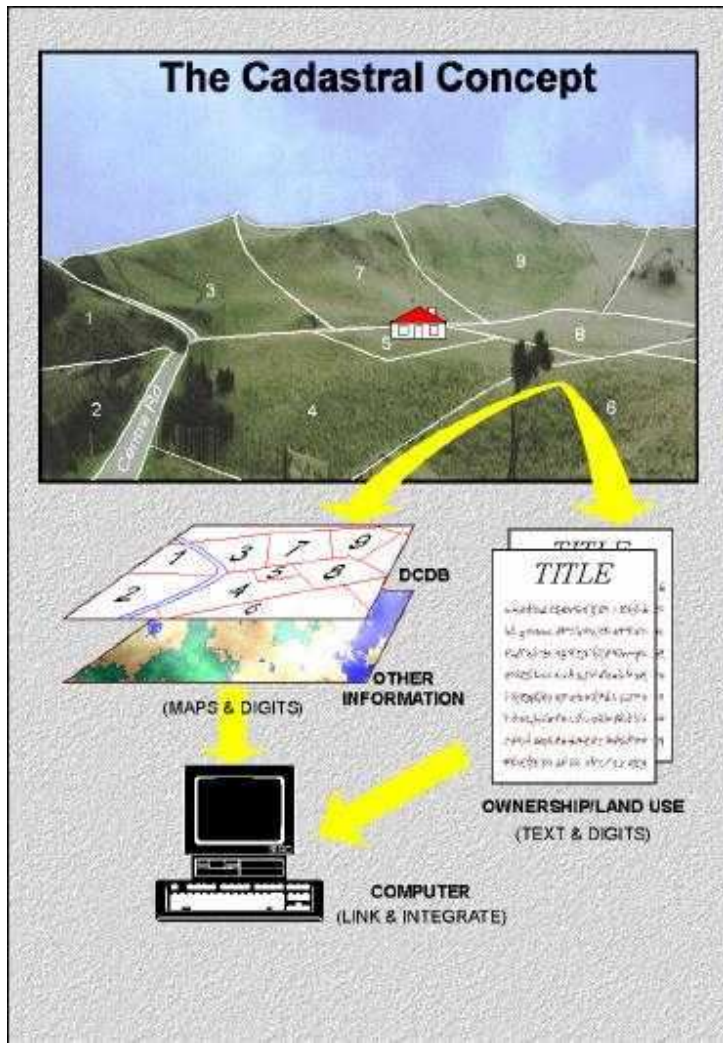
Objective

The main objective of the *action* is to

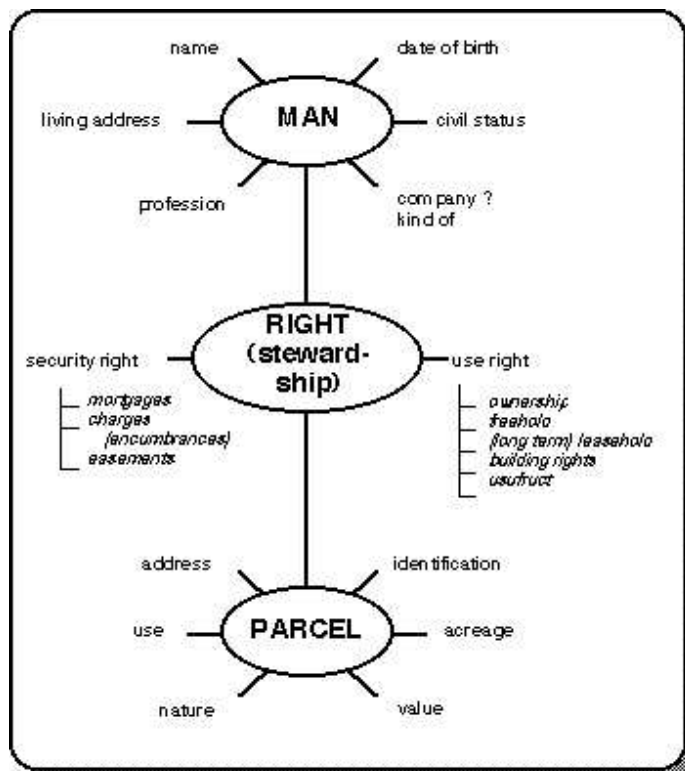
improve the transparency of real property markets
and to provide a stronger basis for the reduction of costs of real property transactions

by preparing a set of models of real property transactions,
which is correct, formalised, and complete according to stated criteria,
and then assess the economic efficiency of these transactions.

Aspects of the research domain: FIG's conception



Aspects of the research domain: Henssen's Man-Right-Land relation



Research questions

- What are the costs of transactions related to real property
- What are the main transactions
- How are rights in land described
- What is a unit of real estate

Comparing across selected European countries

Tentative definitions

- *Transaction*: An exchange of assets according to norms
- *Procedure*: A sequenced set of activities with defined outcome. In UML the synonyme term is *Activity*
- *Asset*: A sum of money or other item of economic value, including a parcel of land.
- *Institutions* are the humanly devised constraints that shape human interaction (North, 1990: 3).
- *Function* of an element is what this element causes to happen as a desired contribution to the greater whole (Zevenbergen, 2002)

Methodology - Procedures

- Comparing activities (behavior), not legal texts
- Semi-formal description of procedures (purchase, mortgaging, subdivision)
- No case studies, but procedures as they are taught
- Formal consolidation (to come)

Methodology - Economy

- Comparative estimate of cost of simplest transaction (purchase of unbuilt parcel)
 - Case study in 2-4 countries
- Approaching satellite accounting (SNA, 1993) for the real estate segment of society
 - Environmental protection, education, ..., and now real estate

Use of COST resources

Combined workshops and MCmeetings,
Thursday afternoon to Saturday afternoon

- Riga, Latvia
- Helsinki, Finland,
- Sopron, Hungary, October 2003
- Delft, Netherlands, October 2002
- Vienna, Austria, April 2002
- Bremen, Germany, Nov 2001

Use of COST resources: Working Groups

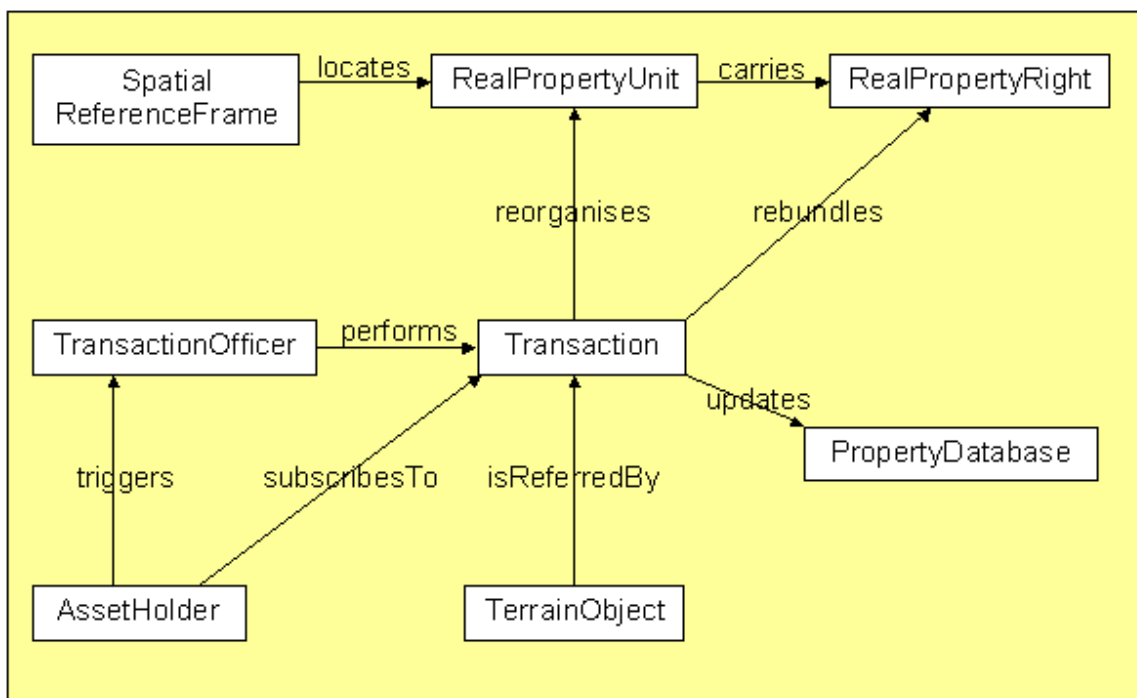
- WG1 on Law and Models Chairman: Christoph Schlieder, D
- WG2 on Cadastral Science Chairman: Jaap Zevenbergen, NL
- WG3 on Economy Chairman: Kauko Viitanen, FIN

WG3 Economy meeting in Ljubljana 11-13. March 2004

Use of COST resources: Short Term Scientific Missions

- Researcher: Marina Vaskovich, Belarus (Sweden), to Aalborg University, Denmark, 16-22 March 2003
- Researcher: Miran Ferlan, Slovenia, to Royal Institute of Technology, Stockholm, 14-20 April 2003
- Researcher: Jantien Stoter, the Netherlands, to Aalborg University, Denmark, 3-28 November 2003
- Researcher: Jaap Zevenbergen, the Netherlands, to Helsinki University of Technology, 3-7 November 2003

Outcomes: Concept analysis



Cadastral Core Packages

Outcomes: Analysis of basic functions

Reorganise rights in land according to wishes of owners

- without compromising the rights of other parties
- in compliance with spatial, environmental, agricultural, .. legislation
- maintaining clarity and efficiency of registration

(Stubkjær, FIG, 2002)

Hypothesis: Institutional functions are the same across countries
However, means, roles and sequencing varies.

Cadastral surveyors in Northern Europe and
notaries in Southern Europe perform similar functions

(Arrunada, Vienna, 2002)

Outcomes: Selected titles

- Auzins, Armand (2003) Institutional arrangements - A gate towards sustainable land use. Paper, presented at Workshop on 'The Commons in Transition: property on natural resources in CEEC', Prague, April 11-13, 2003
- Steffen Bittner and Andrew U. Frank (2002) A formal model of correctness in a cadastre *Computers, Environment and Urban Systems* 26 (5) 465-482
- Lemmen, CHJ, Molen, P van der, Oosterom, PJM van, Ploeger, HD, Quak, CW, Stoter, JE & Zevenbergen, JA (2003) A modular standard for the cadastral domain. Pp. 399-419 in: Konecny, M et al. (Eds) Proceedings of the 3rd international symposium on digital earth: information resources for global sustainability. Brno.
- Stubkjær, E. (2003) Modelling units of real property rights, pp. 227 - 238 in Virrantaus et al.: ScanGIS'03 Proceedings, 9th Scandinavian Research Conference on Geographical Information Sciences. Espoo, Finland.
- Zevenbergen, Jaap (2003) The Dutch system of land registration -Title registration with a 'privatized' registrar. Paper, presented at EULIS Seminar on Conveyancing Practices, 15-16 May 2003, Lund, Sweden.

Relatons to European, etc. organisations

- EuroGeographics: Heads of Topographic Mapping Agencies
- WPLA: Heads of Cadastral Agencies (mutual presentations at Delft and Athens)
- The European Mortgage Federation (mentioned in EOI)
- Notaries?
- (Development agencies: GTZ, SIDA,..)

Relations to European Research Area

- Call EOI.FP6.2000: Network of Excellence: Modelling Real Property Institutions. The EOI was formally recorded
- EULIS project aims at developing a European Land Information Service (Zevenbergen presentation)
- JRC, Ispra, Unit on Remote Sensing (Mail 21-02-2003 from simon.kay@jrc.it)

Conclusion

COST G9 has made a difference

- Before: Little and fragmented research
- Now: Emerging body of knowledge, which is attracting PhDs and MScs

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Thank you !