### Legal Framework 3D Cadastres

## Report from working sessions I and II

4<sup>th</sup> International FIG 3D Cadastre Workshop, 9-11 November 2014 Dubai, United Arab Emirates



#### **Participants**

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#### Content of working sessions I and II

Working session I
Short tour-de-table
Input from position paper
Discussion of general issues
Discussion of issues from the position paper

Working session II
Cont. discussion of issues from the position paper
Discussions of future research and/or publications



#### Some RRRs

(from Sweden, Ireland, Germany, the Netherlands and Portugal)

Easement

B.P. right

Freehold covenant

liche Dienstbarkeiten

Erbbaurecht

Grunddienstbarkeit

Servidão de Esti

mensamhetsanläggningar

Wayleave

Niessbrauch

Profít á pendre

Servitut

**Emphyteusis** 

Bearbetningskonsession

stbaarheid

Building lease

Right of entry or re-entry

Vruchtgebruik

Leasehold

Mortgage

Opstal

Grundschuld

Lien

Reallast

Usufruct

**Erfpacht** 

Right of pre-emption



#### Position paper

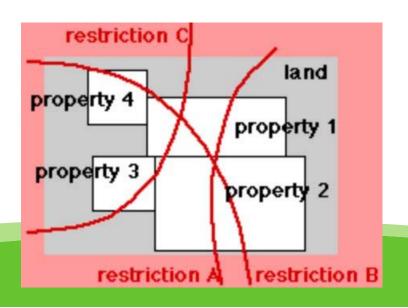
(Paasch and Paulsson, 2014)

Trends in legal 3D cadastre research

Issues literature has mainly concentrated on so far

Input for discussions

FIG Cadastre 2014 statement no. 1: "Cadastre 2014 will present the complete legal situation of land ..."



# Trends in legal 3D cadastre research (position paper)

- Description of the need for national 3D property
- Development of national 3D property legislation
- Implementation of national 3D property legislation
- Case studies on national 3D property
- Practical application of 3D property concepts
- Registration of 3D property
- Modeling of 3D property
- Standardization of 3D property

Based on Paulsson and Paasch (2013). 3D property research from a legal perspective. In *Computers, Environment and Urban Systems* 40 (2013) pp. 7–13.



## Issues literature has mainly concentrated on so far (position paper)

- •The concept of 3D property, its legal status and classification of associated rights
- Questions raised over the legislative framework required to support autonomous registration of 3D property
- Jurisdictional legislative limits and considerations
- Registration of real property vs. physical objects
- Effect of public law on private rights
- Common property regimes

Based on Ho, S., Rajabifard, A., Stoter, J. and Kalantari M. (2013). Legal Barriers to 3D Cadastre Implementation: What is the Issue? *Land Use Policy*. Vol. 35, 2013, pp. 379-387.



# Input for discussions (position paper) What is missing?

Does the limited legal research imply a problem? If so, what should be done in order to change the direction of this development?

Are legal issues in fact a barrier in developing 3D cadastre and, if this is the case, what do these barriers consist of?

Should research focus to the institutional framework with its social and cultural issues? If so, should we ally ourselves with researchers from other fields, such as e.g. sociology and ethnology?

Based on Ho, et al. 2013



#### Question to the audience:

### Who in this room is a lawyer?

(Land surveyors with legal cadastral training not included)



#### Initial discussions output

No lawyers in the workshop (as we are aware of) This limits the outcome of the discussions

3D cad. impact on the property market. – Why use 3D?

No legal difference between 2D and 3D? Only a question of legal documentation? Difference between area and volume?

Questionnaire on who can conduct 3D legal surveys would be beneficial

Organisational issues and procedures are important

Would lawyers abide to a geometric concept?

Ownership may differ from building (use)rights



#### Initial discussions output (continued)

Need for cheap (legal) 3D processes

Need for transparency in (legal) 3D processes

Need for describing the (legal) benefits of 3D

Need for describing the economical benefits

Need for describing management benefits of 3D

We must show that it is **useful** with 3D to describe and secure RRRs

3D informal occupation must be dealt with



- •Comparative studies on the use of 3D property concepts and
- •An international perspective on publications

#### Response:

Comparative legal studies are valuable input for understanding other legal systems and receive input for e.g. further development of one 's own legal system(s).



•3D property terminology

#### Response:

Aim for international legal terminology, but see the need for national variations due to legislation and traditions. LADM (ISO 19152) should be used if possible.



Delimitation and definition of 3D property

#### Response:

National definitions should apply. LADM (ISO 19152) should be used if possible.



•Co-operation (relations) between 3D property owners (RRR)

#### Response:

Same procedures as by 2D, in principle. Depending on legislation and tradition.



•The need for creation of 3D specific land use or access rights

#### Response:

Generally not, but maybe e.g. building rights and development rights. Same set of rights as 2D.



Thank you!

**Questions?** 

