Expanding the Legal/Admin. Package of the Cadastral Domain Model

COST G9 WG's 1&2 / FIG Commission 7 Workshop Bamberg, Germany, 9-10 December 2004

Jaap Zevenbergen





Agenda

- 1. Earlier version of the package
- 2. Ideas for expansion
 - 1. not a 'mere' association class
 - 2. attention to 'person-less' rights/restrictions
 - 3. specializations of abstract class
 - 4. rights of one or restrictions to another
 - 5. alternative packaging
- 3. Implementation problems
- 4. Final Remarks



Earlier version of the package

- RightOrRestricton as a association class
- Not very elaborated
 - RightOrRestriction with lookup table
 - Mortgage which sits on a RoR (no person attached)
 - Public Restriction (with no person attached)



Right defines parcel

- Parcel not a natural phenomena
 - but an institutional creation
- The extend of the right determines parcel
 - different specializations of RealEstateObject are caused by variety in rights/restrictions
- Thus RoR can not be association class: it is leading!



Types of rights and restrictions

- Private law rights
 - Main right (ownership, freehold, ..)
 - Derived right (to use whole)
 - Minor rights (servitudes, ..)
 - Security rights (mortgage, ..)
- Joint facilities (other 'parcels' are beneficiary)
- Not always clear identified beneficiary



Types of rights and restrictions

- Public law restrictions
 - can be related to (private law) 'parcel'
 - can have their own area
 - can follow from natural occurring phenomena
- Beneficiary
 - often 'anonymous' government or society
 - sometimes certain department, ...
- Also responsibilities (to do something), whereas restrictions is to allow or not to do something



Rights minus restrictions

- Except for Main Rights, all other rights have both a beneficiary and 'burdened' right/right holder
- How to reflect this?
 - Always show beneficiary when identifiable
 - Also show with burdened right that something is carved out of that right?
- e.g. Dutch solution:
 - full ownership VE
 - ownership with superfices on it: EVOP + OP



Packaging

- Now packages are showing (mainly) specializations of core classes; aspect systems of the whole
- Since different types of rights are main reason for different types of real estate objects -->
 - packages of a certain type of rights with appropriate real estate object(s)



Implementation problems

- Complexity of nested rights and restrictions will not give a model that is easily understood
- Decision on what to treat as separate class and what to put into 'lookup table' within a class (per (sub) type of rights) likely to be dominated by national situation
- Difference between 'ownership with carving out derived rights' versus 'bundles of sticks' in modeling



Final Remarks

- Pure Western model, elsewhere have to include:
 - customary, indigenous, informal 'rights'
 - conflicts, incl. overlap
- Ideas presented need to be modeled
- Modeling choices not free of the (main) reason for modeling



Final Remarks

- Legal administrative side needs to be extended:
 - RoR is more than an association class
 - We need a 'implied person' specialization of Person
 - RoR as an abstract class with specializations
 - 'carved out' rights should be dependent upon the main right
 - Different type of packages can help clarify the situation

December 9, 2004 11

