International code list management
- The case of Land Administration

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What is a code list ?

<< codeList >> Ice Cream:: IceCreamFlavour
+ Bacon + Bastani Sonnati + Black walnut + Blue moon + Cherry + Chocolate + Coconut milk + French vanilla + Grape + Mango + Mint + Pistachio + Stracciatella + Vanilla

Why code lists for land administration?
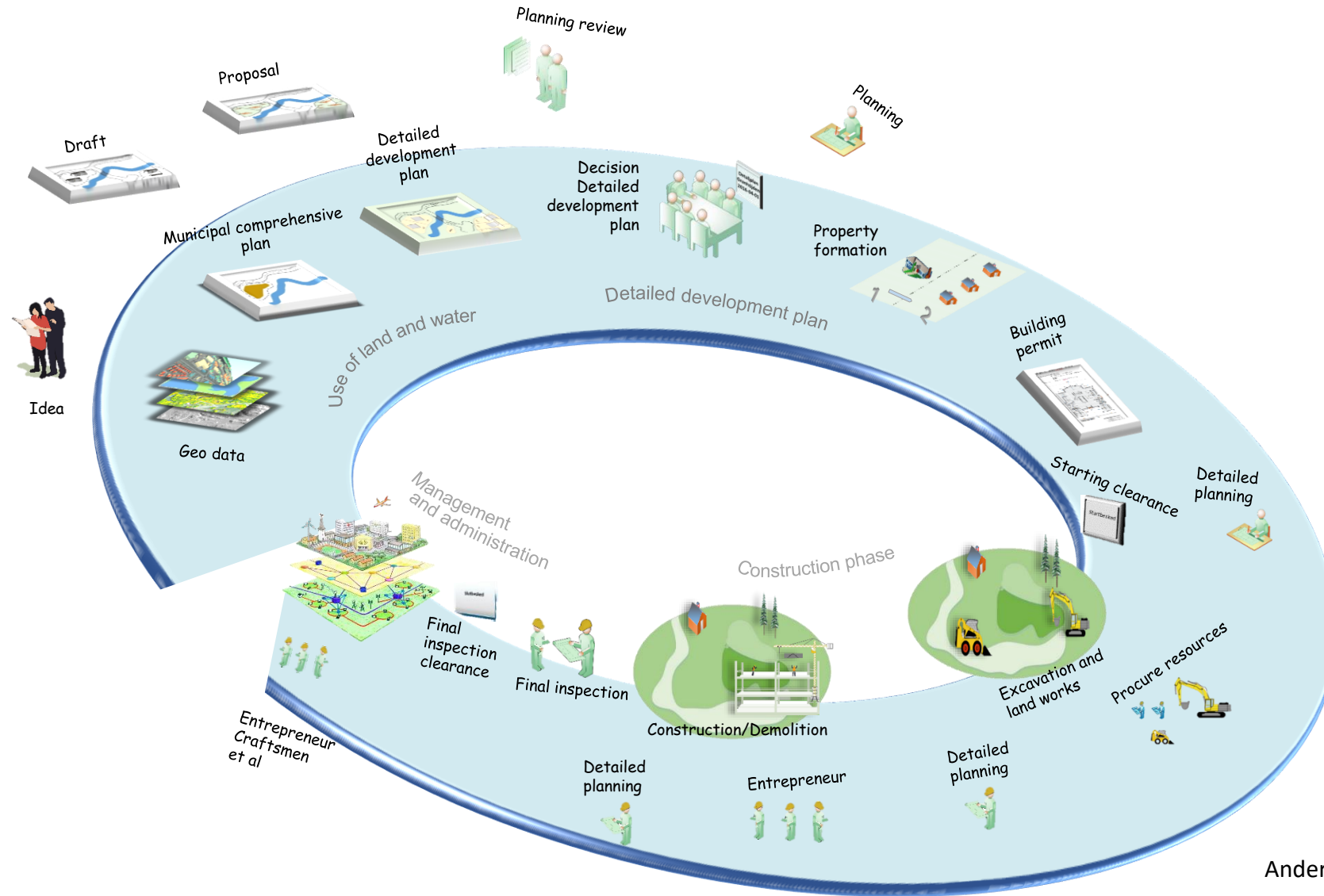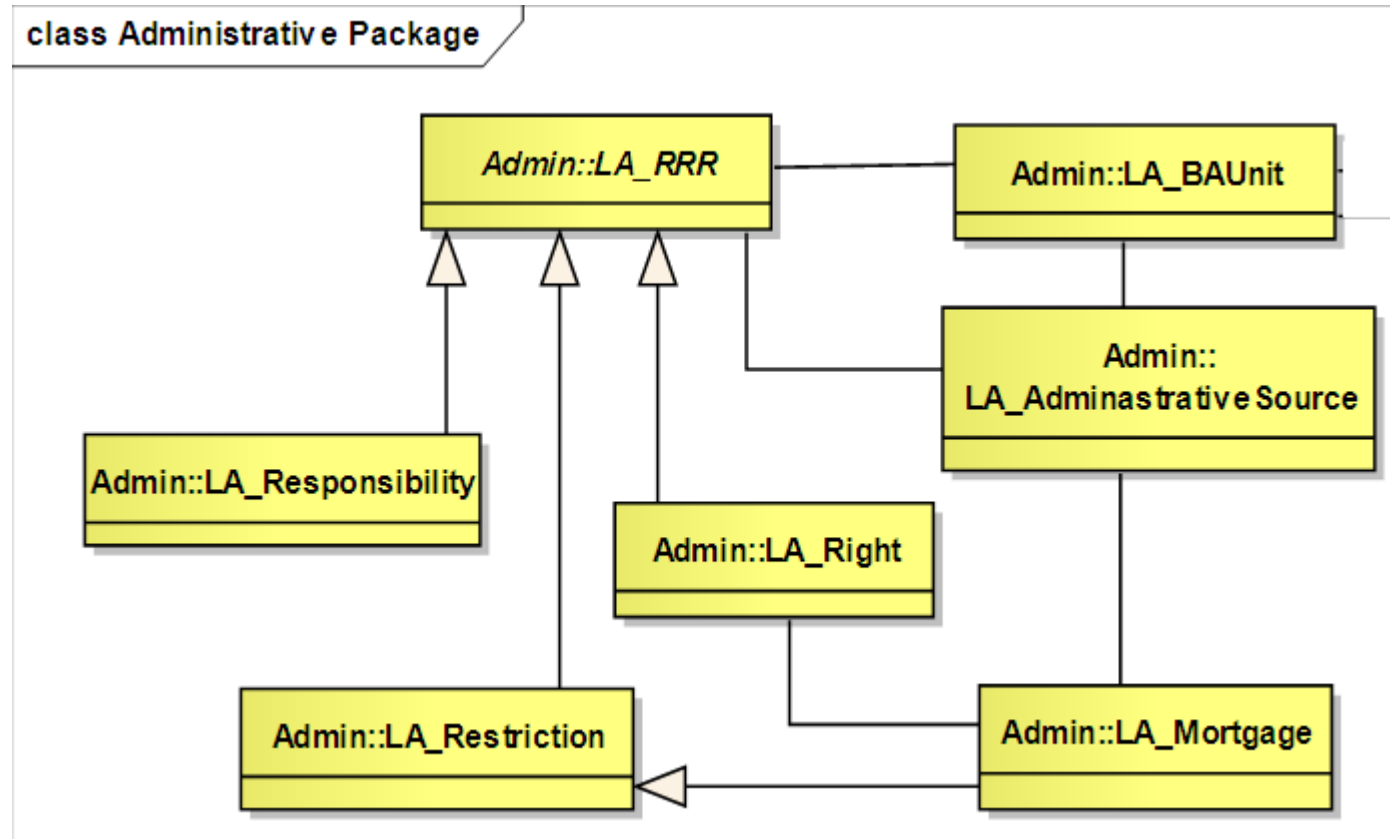

www.lant

visitasnen.s

The Social Tenure Domain model. www.fig.net

Terms are used everywhere, e.g. in the planning and building process

Anders Rydén,
www.lantmateriet.se

LADM: Administrative package

class Administrative Package

Admin::LA_RRR

Admin::LA_BAUnit

Admin::LA_Adminastrative Source

Admin::LA_Responsibility

Admin::LA_Right

Admin::LA_Restriction

Admin::LA_Mortgage

Right
"action, activity or class of actions that a system participant may perform on or using an associated resource"

Restriction
"formal or informal obligation to refrain from doing something"

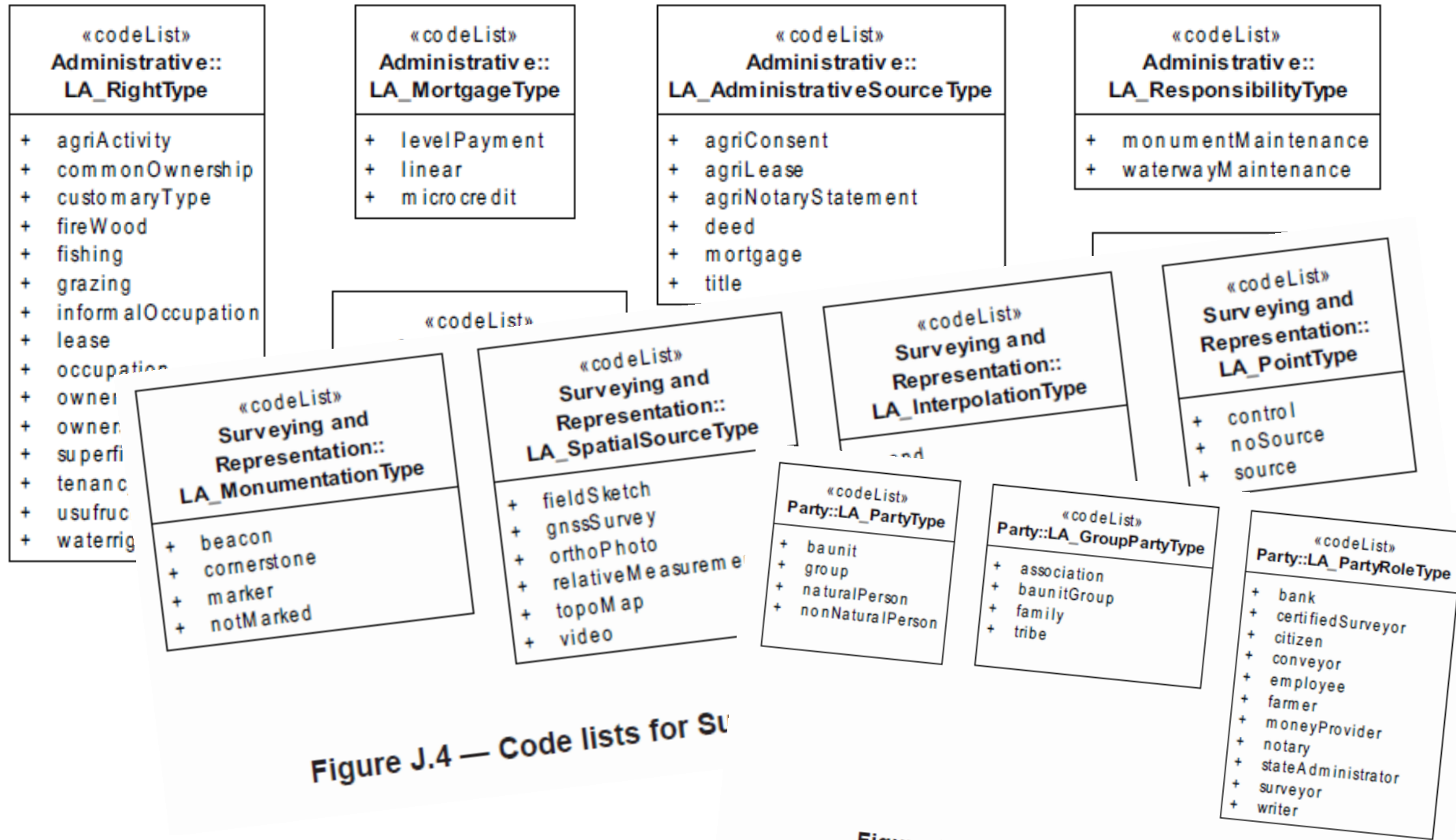**Responsibility**
"formal or informal obligation to do something"

Some RRR …
(from Sweden, Ireland, Germany, the Netherlands and Portugal)

Possibility of reverter

Easement

B.P. right

Freehold covenant

Beschränkte persönliche Dienstbarkeiten

Erbbaurecht

Grunddienstbarkeit

Gemensamhetsanläggningar

Servidão de Estilicio

Profít á pendre

Wayleave

Niessbrauch

Servitut

Erfdienstbaarheid

Bearbetningskoncession

Building lease

Right of entry or re-entry

Vruchtgebruik

Rentenschuld

Leasehold

Detaljplan

Mortgage

Emphyteusis

Opstal

Grundschuld

Lien

Reallast

Usufruct

Erfpacht

Right of pre-emption

Ownership

«codeList»
Administrative::
LA_RightType

+ agriActivity
+ commonOwnership
+ customaryType
+ fireWood
+ fishing
+ grazing
+ informalOccupation
+ lease
+ occupation
+ owner
+ owner
+ superfi
+ tenanc
+ usufruc
+ waterrig

«codeList»
Administrative::
LA_MortgageType

+ levelPayment
+ linear
+ microcredit

«codeList»
Administrative::
LA_AdministrativeSourceType

+ agriConsent
+ agriLease
+ agriNotaryStatement
+ deed
+ mortgage
+ title

«codeList»
Administrative::
LA_ResponsibilityType

+ monumentMaintenance
+ waterwayMaintenance

«codeList»

«codeList»
Surveying and
Representation::
LA_MonumentationType

+ beacon
+ cornerstone
+ marker
+ notMarked

«codeList»
Surveying and
Representation::
LA_SpatialSourceType

+ fieldSketch
+ gnssSurvey
+ orthoPhoto
+ relativeMeasureme
+ topoMap
+ video

«codeList»
Surveying and
Representation::
LA_InterpolationType

and

«codeList»
Surveying and
Representation::
LA_PointType

+ control
+ noSource
+ source

«codeList»
Party::LA_PartyType

+ baunit
+ group
+ naturalPerson
+ nonNaturalPerson

«codeList»
Party::LA_GroupPartyType

+ association
+ baunitGroup
+ family
+ tribe

«codeList»
Party::LA_PartyRoleType

+ bank
+ certifiedSurveyor
+ citizen
+ conveyor
+ employee
+ farmer
+ moneyProvider
+ notary
+ stateAdministrator
+ surveyor
+ writer

Figure J.4 — Code lists for Su

Figure J.1 — Code lists for Party Package

Many non-LADM code lists exist. Examples are:

ISO   **OGC (Open Geospatial Consortium)**

LADM Code Lists	LandInfra Code Lists
6.3.4 Party Package LA_PartyRoleType LA_GroupPartyType LA_PartyType	**7.2 Core** DocumentType ProfessionalType
6.4.9 Administrative Package LA_AdministrativeSourceType LA_MortgageType LA_RightType LA_RestrictionType LA_ResponsibilityType LA_AvailabilityStatusType LA_BAUnitType	**7.8 Survey** SurveyType SurveyResultType **7.9 LandFeature** LandElementType
6.5.8 Spatial Unit Package LA_BuildingUnitType LA_AreaType	**7.10 LandDivision** DimensionType EasementType

The OGC code list manifesto

Proposing four code list types or cases, based on ISO 19103:2015, GML 3.2.1 and GML 3.3

Case 0 (No list)
No list of values

Case 1 (Enumeration)
Complete (non-extensible) list of values

Case 2 (Union Type)
None or only a few of the allowed values. Other unique values can be added by the implementing body

Case 3 (Reference Type)
None or only a few of the allowed values. Unique values appear from URI-referenced list(s) provided by another body than the organization who issues the standard. Such body is dubbed an 'external authority'

ISO standards related to different aspects of terminology

ISO 1087-1:2000 Terminology work -- Vocabulary -- Part 1: Theory and application.

ISO 860:2007 Terminology work -- Harmonization of concepts and terms.

ISO 1951:2007 Presentation/representation of entries in dictionaries -- Requirements, recommendations and information.

ISO 704:2009 Terminology work -- Principles and methods.

ISO 23185:2009 Assessment and benchmarking of terminological resources -- General concepts, principles and requirements.

ISO 29383:2010 Terminology policies -- Development and implementation.

ISO 10241-1:2011 Terminological entries in standards -- Part 1: General requirements and examples of presentation.

ISO 26162:2012 Systems to manage terminology, knowledge and content -- Design, implementation and maintenance of terminology management systems.

ISO 22274:2013 Systems to manage terminology, knowledge and content -- Concept-related aspects for developing and internationalizing classification systems.

ISO 24156-1:2014 Graphic notations for concept modelling in terminology work and its relationship with UML -- Part 1: Guidelines for using UML notation in terminology work.

ISO 19104:2016 Geographic information – Terminology.

Who decides which codes and definitions to use ?

A joint code list manifesto is needed!

For example :
Draft **Memorandum of Understanding**
[This draft is prepared as an academic exercise and does in no way imply the consent of the parties mentioned]

Memorandum of Understanding

between the signing parties:
International Organization for Standardization (ISO/TC 211),
Open Geospatial Consortium (OGC),
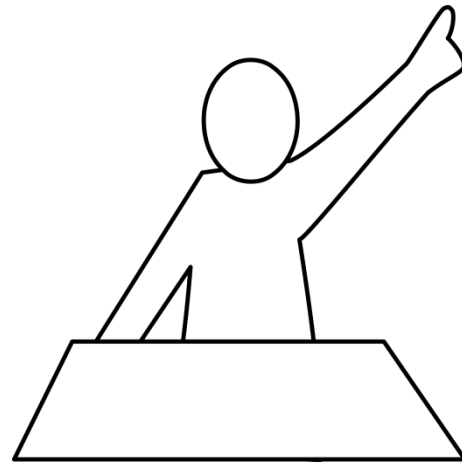International Federation of Surveyors (FIG),
+ ???

concerning joint code list management

See appendix 1

Thank you!

Questions?