

The 6<sup>th</sup> Land Administration  
Domain Model (LADM) Workshop



16-17 March 2017  
Delft, the Netherlands

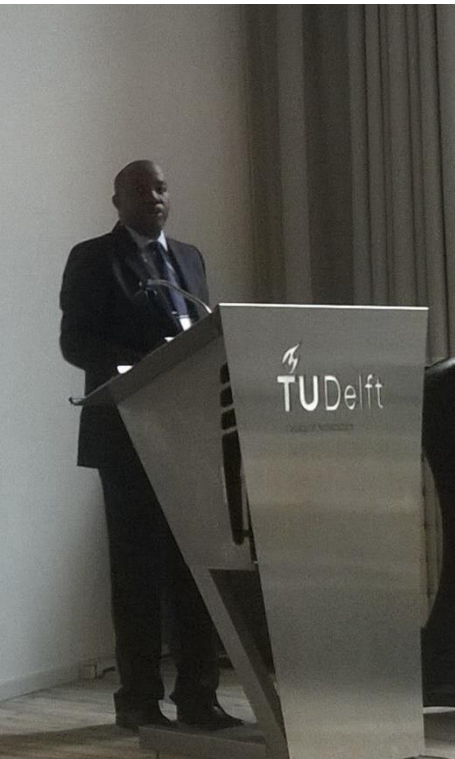
Peter van Oosterom

Summary of  
Preliminary

Workshop  
Decisions/  
Proposals

# UN-GGIM: EG-LAM Input for LADM workshop

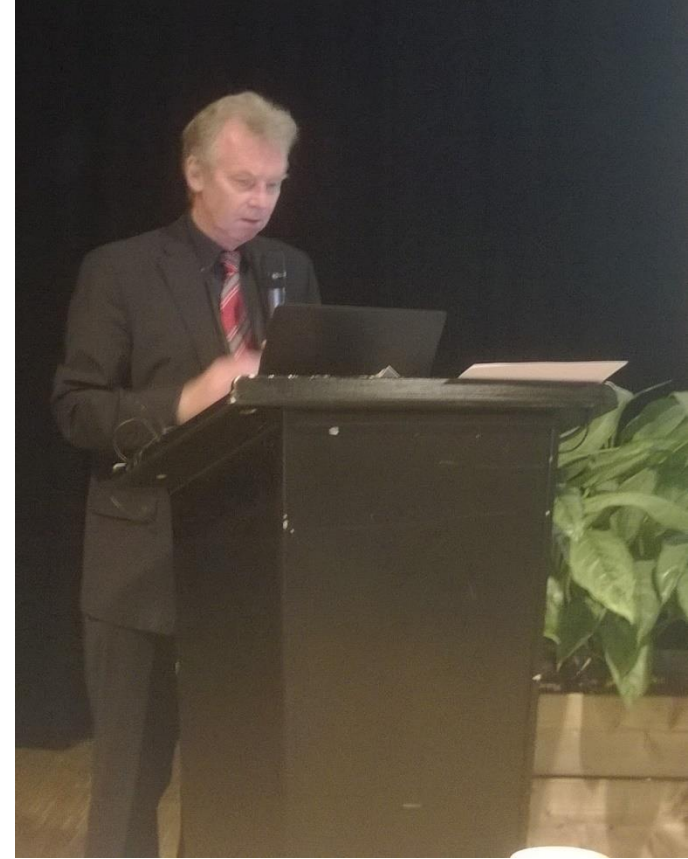
- UN-GGIM Meeting of the Expert Group on Land Administration and Management, 14-15 March 2017, Delft
- Main goal: **improve tenure security and better land and property rights for all!**
- Complex domain, many stakeholders



- Sustainable Development Goals (SDG) require more reliable LA Indicators
- Visualization through Tenure Atlas
- Standards are needed in a Fit-for-Purpose approach
- Together with implementations and tools (STDM)
- Attention is needed for valuation  
→ might help to define/support Fit-for-Purpose
- Main outcome meeting: **LADM revision is needed**

# First resolve the LADM – STDM confusion...

- LADM is just a conceptual domain model
- STDM is implying much more:
  - Profile for developing countries
  - Application schema
  - Software implementation  
(both open or closed source)
  - Fit-for-Purpose approach
- Perhaps term STDM (**Domain Model**) causes confusion and perhaps better use another, more comprehensive term
- For example: Social Tenure Domain Method (STDM) or ..

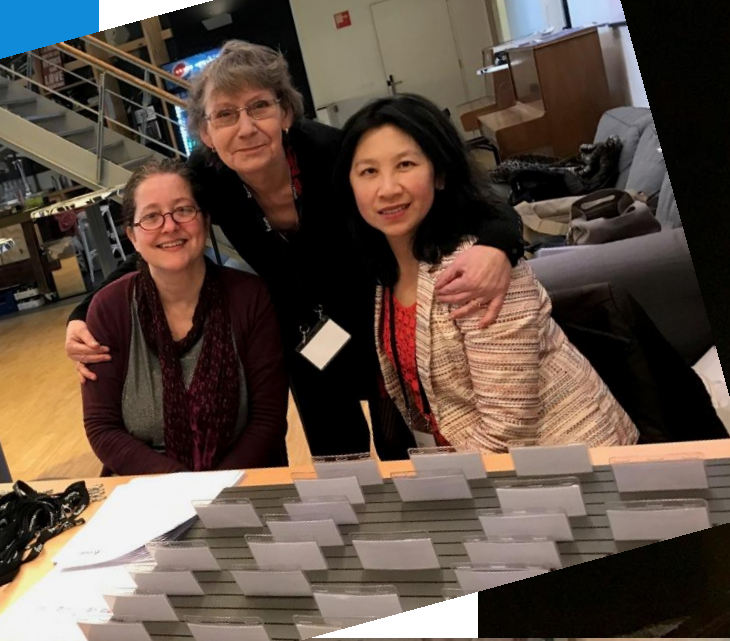


# Summary preliminary decisions

## LADM 2017 workshop

1. FIG makes New Work Item Proposal (NWIP) to ISO TC211
2. ISO Stage 0-project, given potential broad scope
3. Multi-part standard, 2-4 years development
4. OGC Innovation Program (option NMCA support developed countries)
5. GLTN support for developing countries
6. In collaboration with many partners (more than list below)





# Multi-part LADM standard, ISO 19152:2020

## Some initial thoughts on possible parts

- Part 0: Core (update current version LADM)
- Part 1: Potential conceptual model extensions
- Part 2: LADM Profiles
- Part 3: Application schema, technical models & encodings
- Part 4: Process & workflow standardization
- Sample implementation (open and closed source)



# Part 1: Potential conceptual model extensions

- Fiscal/valuation extension module
- More explicit semantics of code list values
- Further modelling LADM's rights, restrictions, responsibilities (RRRs)
- Further modelling of LADM's survey and spatial representation
- SDG Indicators (aggregated values at different levels)
- 3D/4D Cadastre
- Spatial planning/zoning with legal implications
- LADM in support to Marine Cadastre (esp. coastal zones)
- More explicit relations with Building Information Modelling (BIM)
- Other legal spaces: mining, archaeology, utilities,...



# Part 2: LADM Profiles

- Methodology to define profiles
- STDM
- Sample country profiles





# Part 3: Application schema, technical models & encodings (for schema and data)

- Existing xxxML's: CityGML, IndoorGML, InfraLand (InfraGML), LandXML
- Own/new LA xxxML (...LAML)
- (Geo)BIM/IFC
- INTERLIS
- Linked data (RDF)
- GeoJSON



# Part 4: Process & workflow standardization

- Initial registration (legal+spatial)
- Transactions: complete parcel, split of parcel, reallotment,
- Information delivery (mass, individual)
- Survey workflow (best practices, incl. use of imagery, BIM, topo)
- SDI, create/maintain references (buildings, utilities, spatial plans,...)
- Blockchain and ledger technologies (ISO TC307)



# Valuation Questionnaire

[Edit](#)[Edit wiki text](#)[Attach](#)[PDF](#)

## Questionnaire for the development of ISO 19152:2012 LADM Valuation Module

A recently initiated collaborative research aims at developing a LADM based international information model for one of these external registrations, namely in terms of a Valuation Module for the ISO 19152:2012 LADM. The purpose of this research is to define the semantics of valuation information maintained by public authorities especially for recurrent taxes on immovable property, and to extend the scope of LADM from a fiscal perspective to provide an information model that could be used to construct information systems for immovable property valuation.

- Given importance of valuation extension, please submit questionnaire missing countries
- <http://isoladm.org/ValuationQuestionnaire>
- Deadline 1 april 2017

So far received completed questionnaires:

1. [Croatia](#) (Hrvoje Tomić)
2. [Cyprus](#) (Anastasis Aristidou)
3. [Denmark Erik](#) (Erik Stubkjaer)
4. [Denmark Manohar](#) (Manohar Velpuri)
5. [India](#) (Manohar Velpuri)
6. [Macedonia](#) (Vasil Miskovski)
7. [The Netherlands](#) (Ruud Kathmann)
8. [Singapore](#) (Manohar Velpuri)
9. [Slovenia](#) (Dušan Mitrović)
10. [South Africa](#) (Manohar Velpuri)
11. [South Korea](#) (Lee Young-ho, Kim Bong-Jun)
12. [Turkey](#) (Volkan Çağdaş, Abdullah Kara)
13. [UK Ben](#) (Ben Elder)
14. [UK Pete](#) (Pete Wyatt)



Many thanks to all participants of the 6<sup>th</sup>  
FIG LADM workshop, March 2017 Delft

