



OFFICE INTERNATIONAL DU CADASTRE ET DU RÉGIME FONCIER
INTERNATIONAL OFFICE OF CADASTRE AND LAND RECORDS
INTERNATIONALES AMT FÜR KATASTER UND GRUNDBUCHWESEN

REPORT 2018-19 AND WORK PLAN 2019-2022

FIG General Assembly
Hanoi, Vietnam, April 22nd 2019
Christiaan Lemmen

International Office for Cadastre and Land Records

- One of the permanent bodies of FIG
- Serves as a documentation and study centre for land administration
- Conducts comparative studies
- Publishes the results



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- Team:
 - Anne Burghout left
 - Sylvia Huigen is the new librarian
 - Pauline van Elstrand
 - Christiaan Lemmen



Comparatative studies

- Land Administration Domain Model
- White Paper Land Administration OGC





Sustainable Development Goals



Secure land rights for the world



Purposes

- Peace Building and Security
- Social Justice and Poverty Eradication
- Disaster Management
- Resource Management
- Tenure Security
- Access to Credit
- Taxation
- Smart and Resilient Societies
- Sustainable Land Use and Food Security
- Protected Environment
- Slum Upgrading
- Access to Housing
- City Management
- Access to Basic Infrastructure

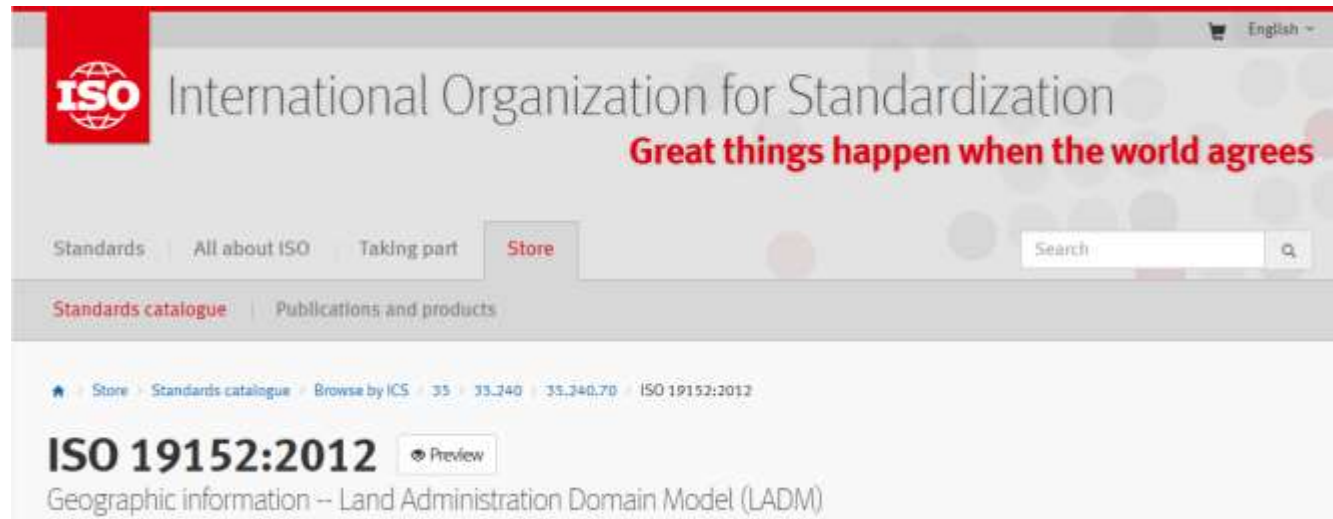
Workplan

- Edition II of LADM with ISO and OGC
- Operationalisation of LADM I with OGC and ISO

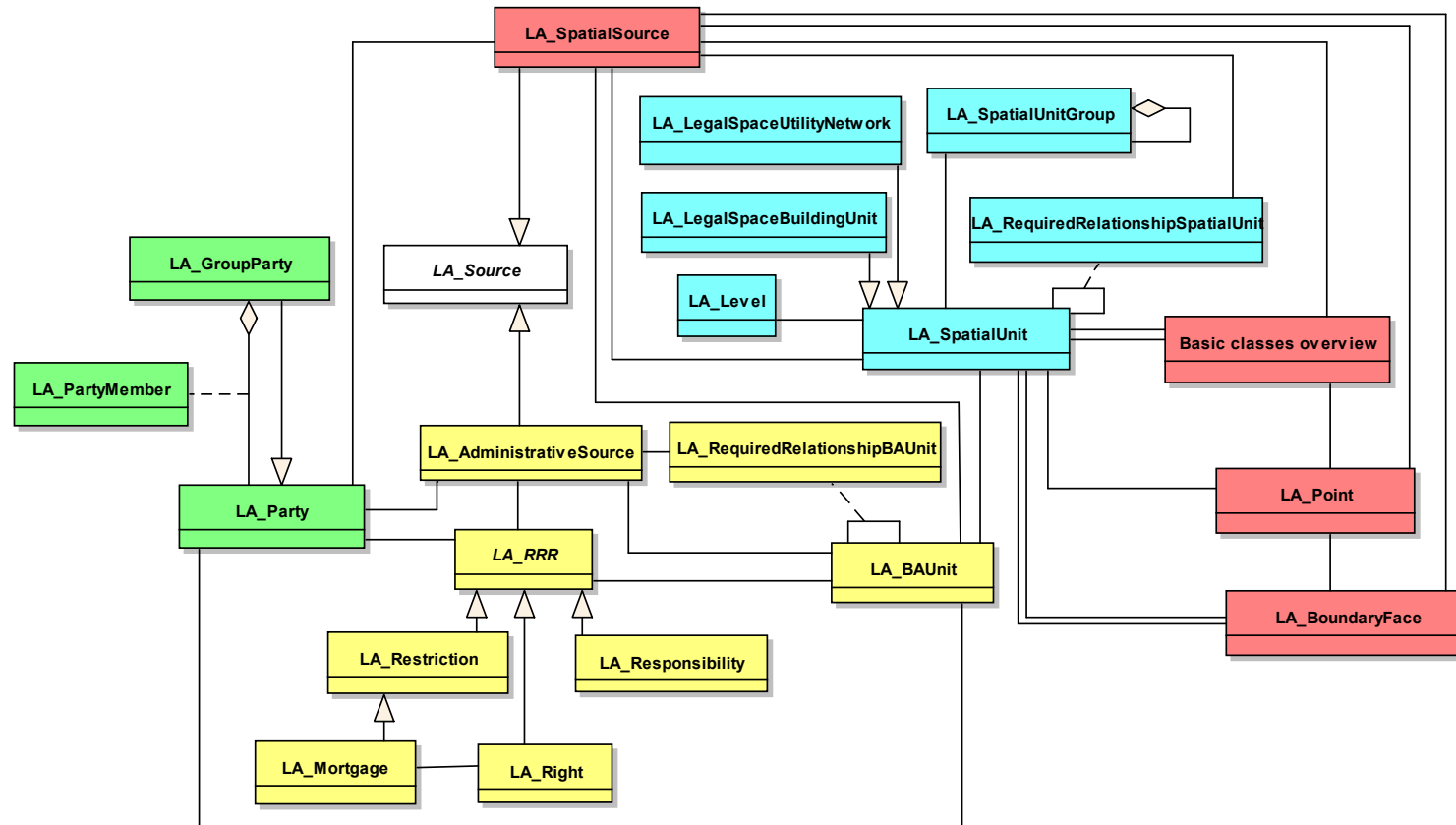


Land Administration Domain Model

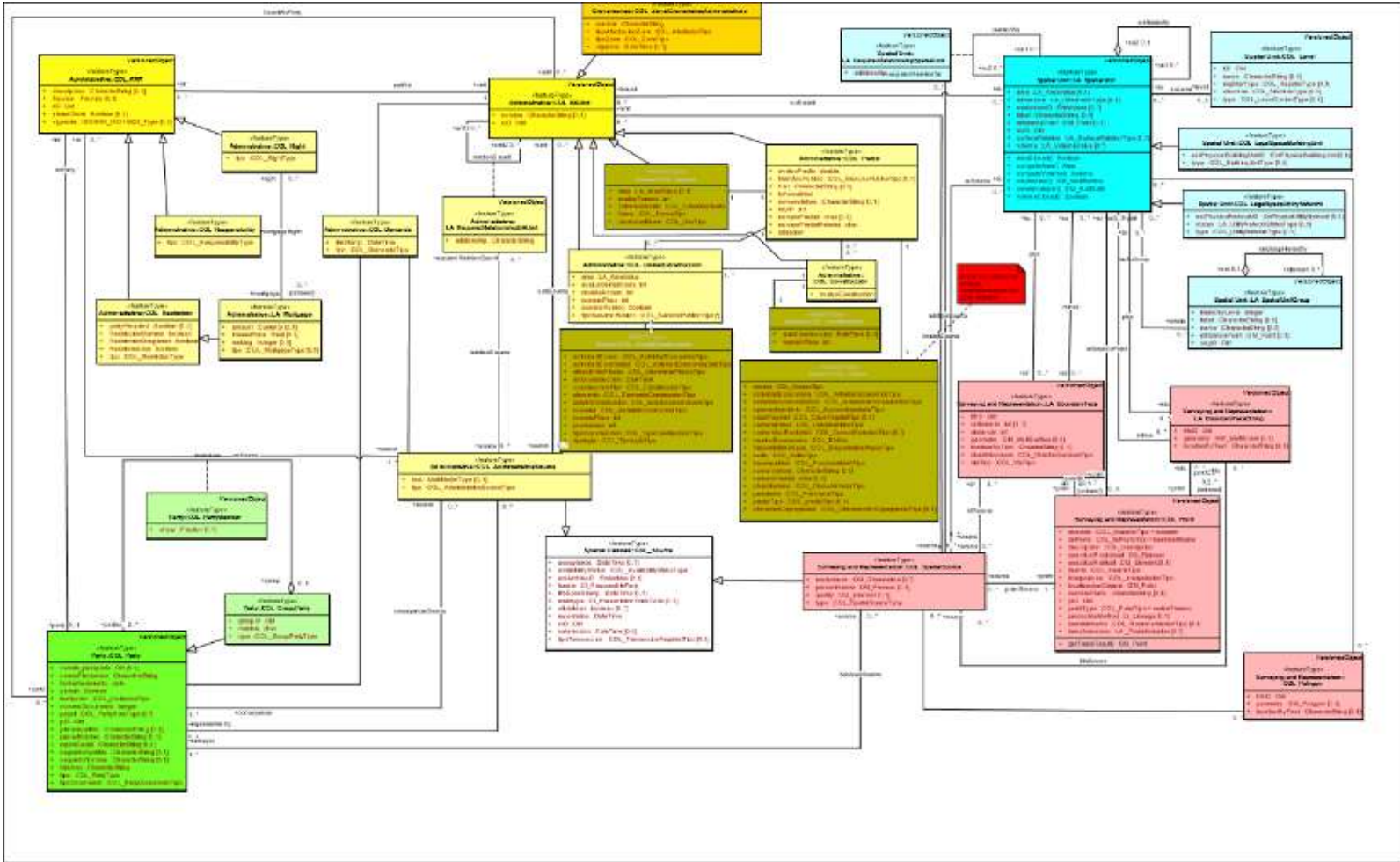
- ISO 19152
- Edition 1 published in 2012



Land Administration Domain Model



LADM Country Profile Colombia



ISO/TC 211 Land Administration Domain Model (LADM) Standard Revision

- Ongoing Work

- Correct errors in Edition I
- Backwards Compatibility
- Sustainable Development Goals
- Methodology of developing country profile
- Input from developing countries & UNGGIM Expert Group on Land Administration & Management

- Potential Revision Topics

- Land Management Processes
- Taxation and Valuation
- Maritime Limits & Boundaries
- 3D & 4D
- Indoor & Building Information Models (BIM)
- Volunteered Land Administration & Crowdsourcing
- Sustainable Development Goals (SDG)
 - Land Indicator
- Social Tenure to Legal Tenure
- Application of Blockchain



Organizations with Interest in ISO LADM (19152) V2

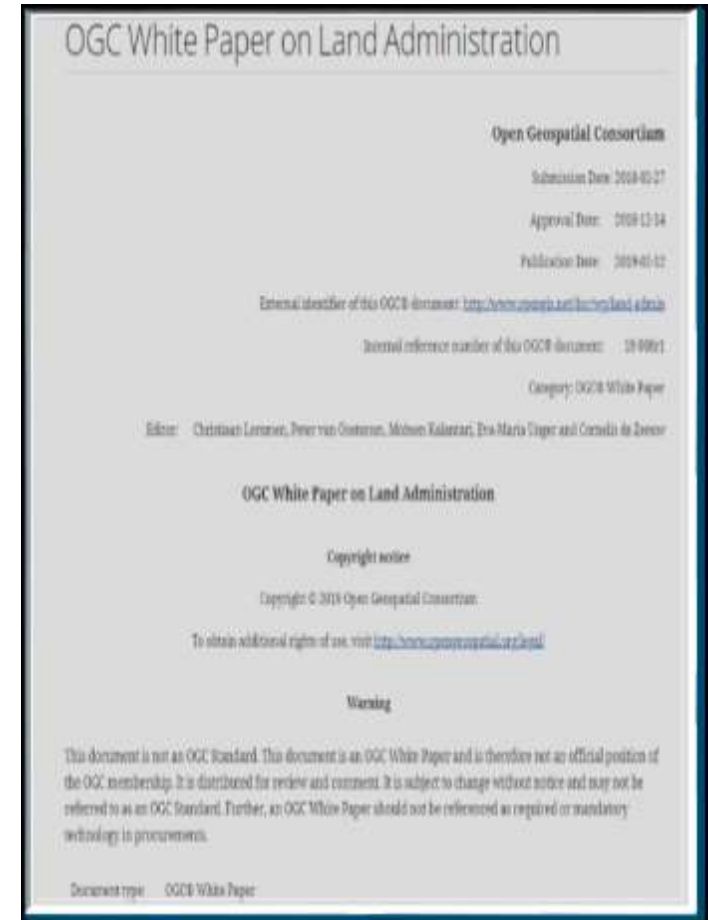
- UN – FAO
- UN – HABITAT
- Global Land Tool Network
- UN – Division for Ocean Affairs and the Law of the Sea
- UNGGIM – Expert Group Land Administration and Management
- World Bank
- ISO/TC 211 members
- Open Geospatial Consortium
- International Federation of Surveyors
- Valuation Community
- International Hydrographic Organisation
- Royal Institution of Chartered Surveyors
- *European Land Registry Association – ELRA*
- *IPRA-CINDER Registrars*



OGC Land Administration White Paper

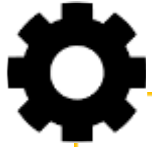


- Focus on land rights for all
- Cross community collaboration
- Addresses:
 - Conventional methods and participatory approaches
 - Complex 3D & 4D urban environments (underground, Indoor)
 - Valuation
 - Land indicators, Performance Index
 - Linking legal space to physical objects
 - Indoor models
 - Marine Cadastre
 - Integration of key / relevant complementary standards (indoorGML, BIM, CityGML, etc.)



<http://docs.opengeospatial.org/wp/18-008r1/18-008r1.html>

Mapping and Recording Options



Location

- In the Field



- Community Gathering



Main Mapper

- Grassroot surveyor



- Surveyor



Material

- Digital



- Paper



Mapping Tool

- Imagery

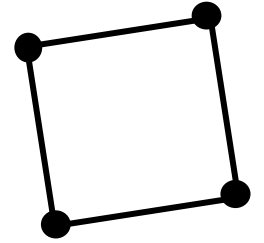


- GNSS

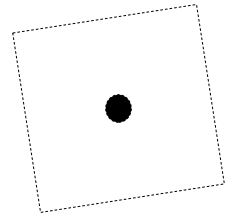


Mapping Technique

- Polygons



- Points



OGC & Land Administration Domain Working Group

- Focus:
 - Examination of existing systems of land administration;
 - **Advance best practices** that enable nations to address their needs in less time, cost, and effort through standards-based implementations; and
 - Evaluate emerging information resources and technologies to assist nations in leapfrogging capability.
 - **Test and Pilot** new standards-based technologies processes with practitioners where possible.
 - **Collaboration** – address interoperability issues that span land administration community of practice, geospatial, and broader IT environments

Upcoming LADM Standard and Related Events

- ISO/TC 211: Slovenia, 4 Jun 2019.
LADM v2 Working Draft discussion
- OGC Technical Committee: Leuven, Belgium, 24-27 Jun 2019
OGC Land Administration DWG, Country Cases, piloting, Review of LADM implementations
- Geospatial Kuala Lumpur 2019: Malaysia, 1-3 Oct 2019
FIG 8th LADM Workshop
Joint ISO/TC 211 / OGC Operationalization meeting (Proposed)

The 8th Land Administration Domain Model Workshop (LADM2019)

1-3 October 2019 Kuala Lumpur, Malaysia



Standards Network

Government
Business
Society

Business
Society
Government

Business
Government
Society

Thank you