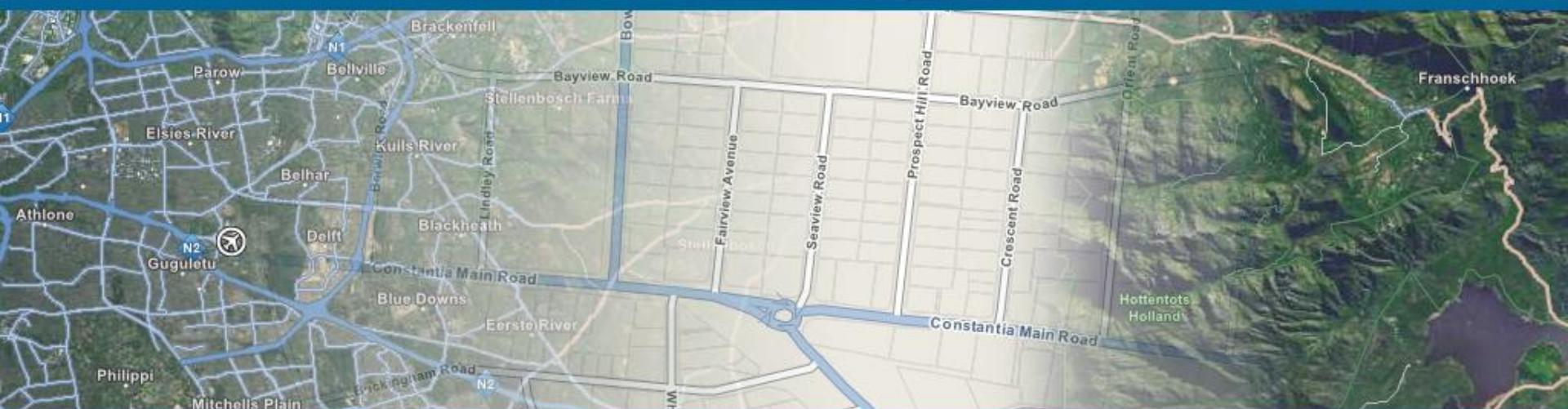


# Land Administration Domain Model (LADM) and its revision program

UNWGIC, 19-21 Nov 2018, Deqing, China

Chris Body



21 November 2018

ISO/TC 211 Geographic information/Geomatics

1

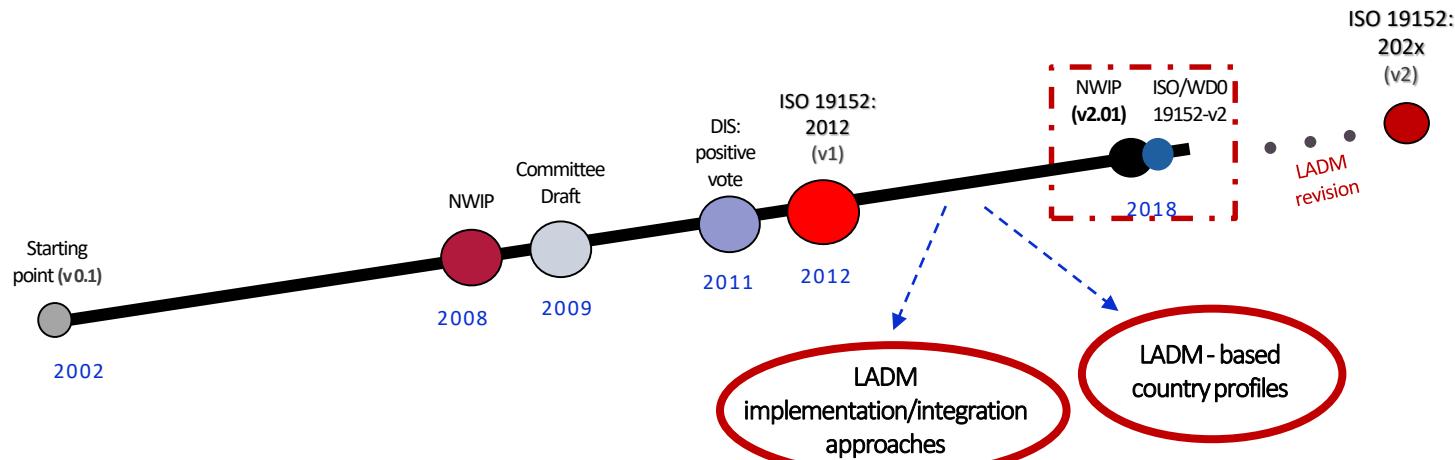


ISO/TC 211

# Agenda

- Overview to Land Administration Domain Model
- Existing ISO 19152:2012 Land Administration Domain Model (LADM)
- Scope of new work for LADM v2 and user requirements
- Links with UNGGIM
- Process & Steps
- Summary

# Overview & Incremental Stages



- Fully & Partly operational implementations
- UN Habitat/GLTN STDM
- Fit for Purpose Land Administration
- Esri Collector App
- References: IHO, WorldBank, UN GGIM EG Land Administration

- LADM was proposed to ISO/TC 211 by FIG 2008
- ISO/TC 211 approved LADM as a standard & allocated 19152
- Published as International Standard "ISO 19152:2012 Geographic Information – Land Administration Domain Model (LADM)"
- Proposed to revise LADM after UNGGIM EG-LAM and LADM Workshop in Delft NL in 2017
- LADM Workshop in Zagreb in 2018
- Approve by ISO/TC 211 to revise
- Initiate Stage 0 to collect new requirements (12 month)

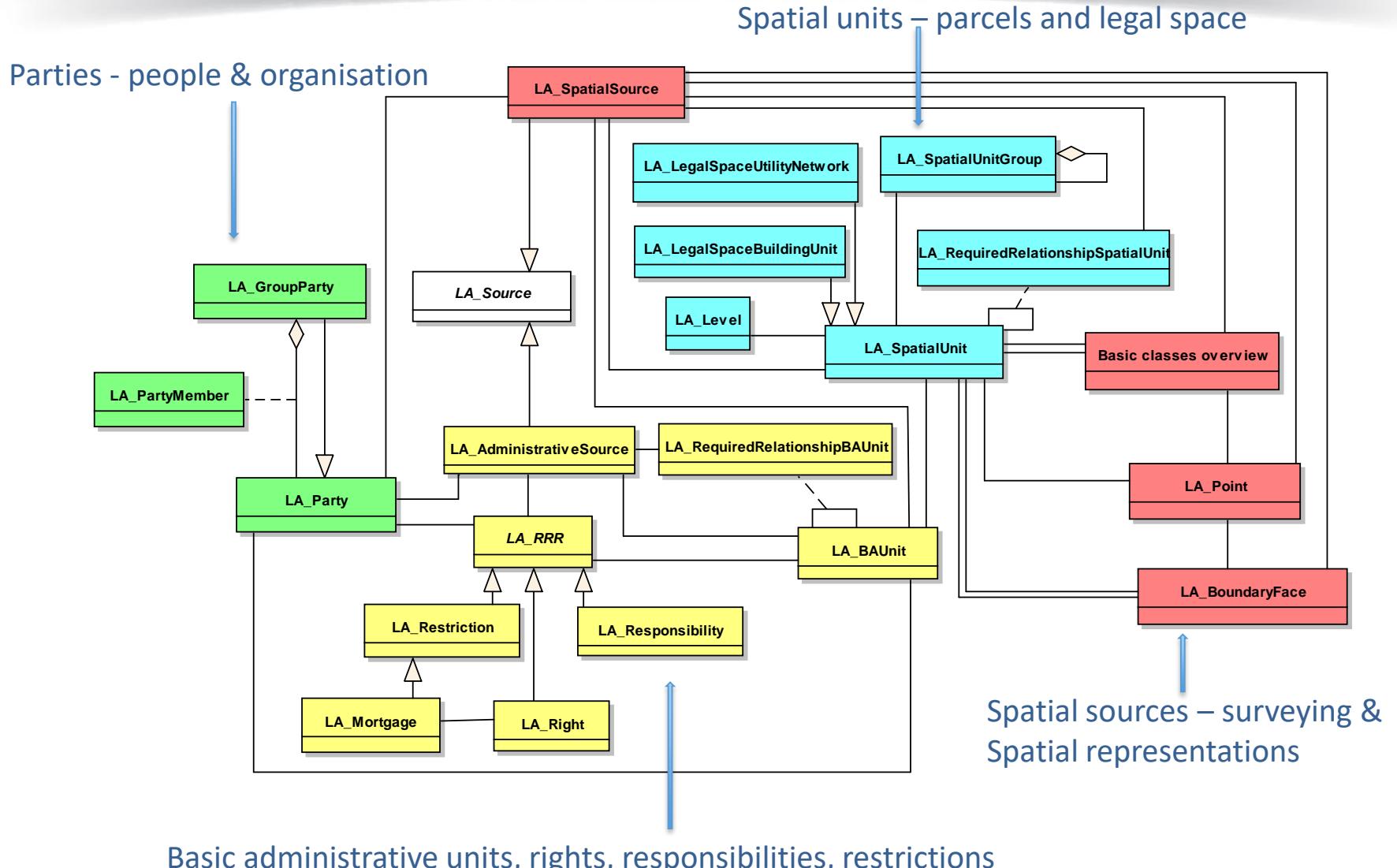
# Existing ISO 19152:2012 Land Administration Domain Model (LADM)

- ISO 19152
- Version 1 published in 2012

The screenshot shows the ISO website interface. At the top, there's a red header bar with the ISO logo and the text "Great things happen when the world agrees". Below this, the main navigation menu includes "Standards", "All about ISO", "Taking part", "Store" (which is highlighted in red), "Standards catalogue", and "Publications and products". The URL in the address bar is [http://www.iso.org/iso/standard/35\\_35.240\\_35.240.70/ISO\\_19152:2012](#). The page content area displays the title "ISO 19152:2012" and the subtitle "Geographic information -- Land Administration Domain Model (LADM)".



LADM v1



# Organisations that have an interest in LADM 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*
- *CINDER Registrars*



**OGC**<sup>®</sup>  
Making location count.



# Contributing to LADM v2

- Australia
- Austria
- Canada
- China
- Czech Republic
- Denmark
- France
- Finland
- Germany
- Japan
- Republic of Korea
- Netherlands
- New Zealand
- Norway
- Saudi Arabia
- South Africa
- Spain
- Sweden
- UK
- USA
- FIG
- Academia
- IHO
- OGC
- World Bank
- United Nations – FAO & HABITAT
- UNGGIM EG-LAM
- Valuation
- Industry

# Possible Topics for LADM v2

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

# Links with UNGGIM



Global Geodetic  
Reference Frame



Addresses



Buildings and  
Settlements



Elevation and Depth



Functional Areas



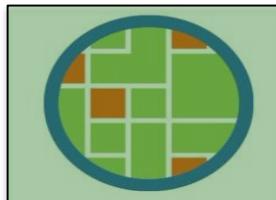
Geographical Names



Geology and Soils



Land Cover and  
Land Use



Land Parcels



Physical  
Infrastructure



Population  
Distribution



Orthoimagery

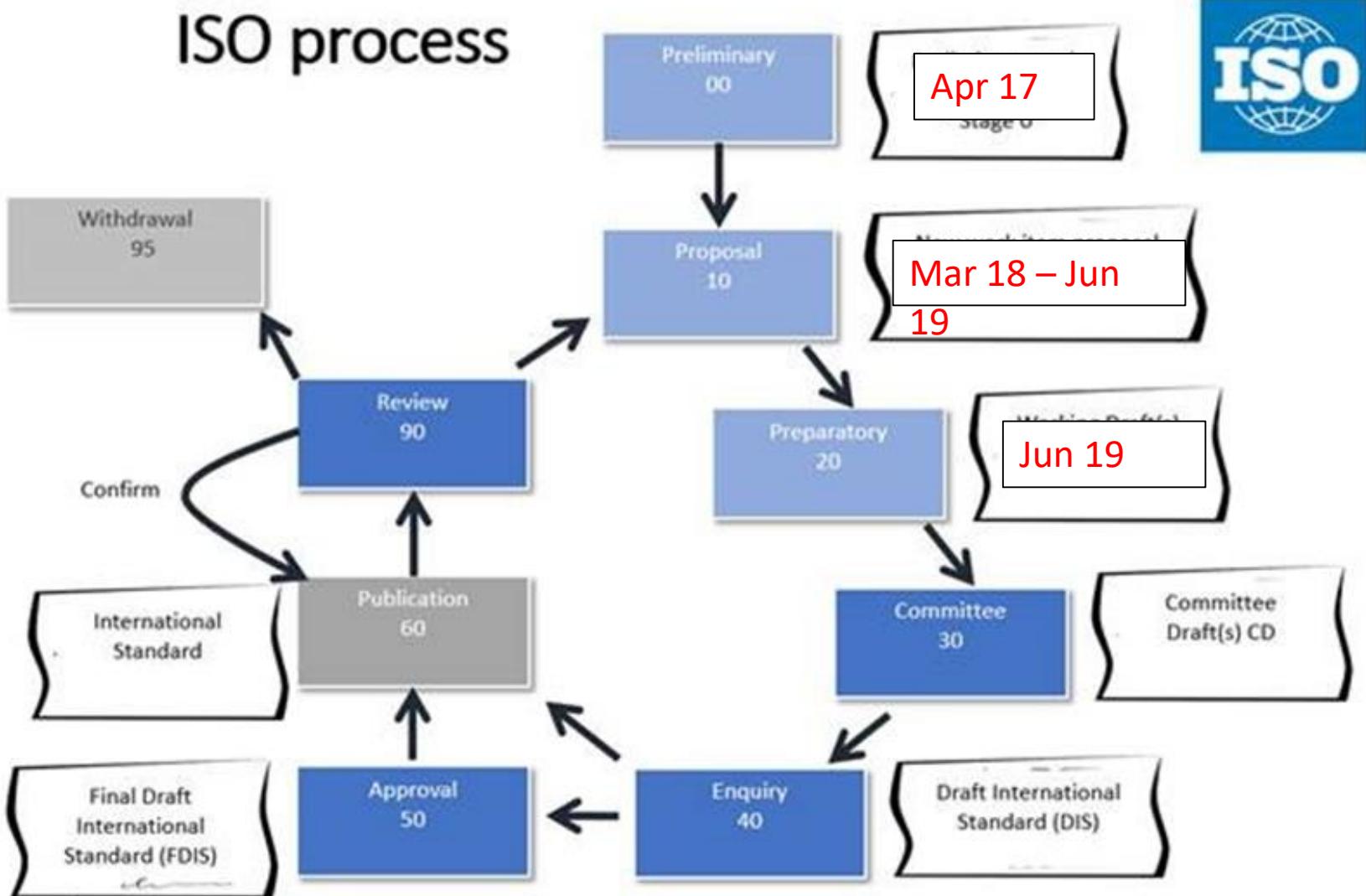


Transport Networks



Water

# LADM v2 Process & Steps



# LADM v2 work

- Roadmap
- What's required in v2 its part 1 (level of content)
- Correct errors in v1
- Backward Compatible with LADM v1
- Multi-part
- Management issues developing the multi-part
- Sustainable Development Goals
- Methodology of developing country profile
- Input from developing countries & UNGGIM EG-LAM
- Encoding

# Input from Developing Countries



## Mozambique



21 November 201

ISO/TC 211 Geographic information/Geomatics

# Input from Developing Countries

## Colombia



# Input from Developing Countries

## Indonesia



# Summary

- LADM v1 – developed to address the basic information of land administration
- LADM v2 – address a wider user community of their needs and requirements
- Start ISO process - June 2019
- Multi-part
- Need assistance from UNGGIM EG-LAM (especially linking up member countries)
- Acknowledgment (Peter van Oosterom & Chrit Lemmen)