

# Overview of Developments of Edition II of the Land Administration Domain Model

UNGGIM – Monday 31<sup>st</sup> July 23

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# LADM revision

- UN GGIM EGM on Land Administration and Management 2017 → Proposal to revise LADM ISO 19152:2012 with broader scope
- Five years after becoming an international standard, systematic review of LADM was started in 2018.
- In the 48th Plenary Meeting Week of ISO/TC 211 (2019), it was decided to design LADM Edition II as a multi-part standard.

# LADM v2 will become multi-part

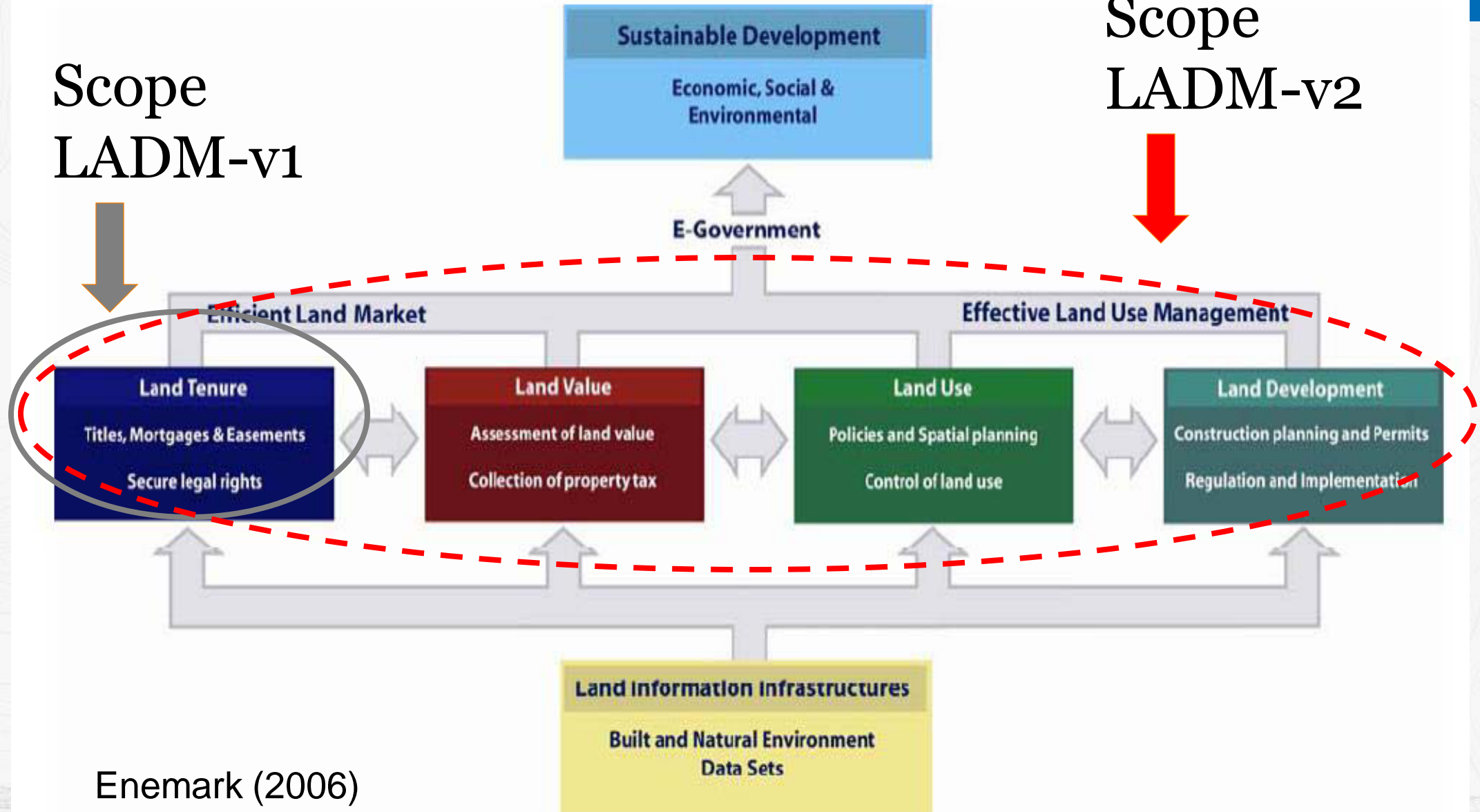
- Part 1 – Generic Conceptual Model
- Part 2 – Land Registration
- Part 3 – Marine Georegulation
- Part 4 – Valuation Information
- Part 5 – Spatial Plan Information
- Part 6 – Implementation Aspects

} Scope current version  
LADM 2012



Scope  
LADM-v1

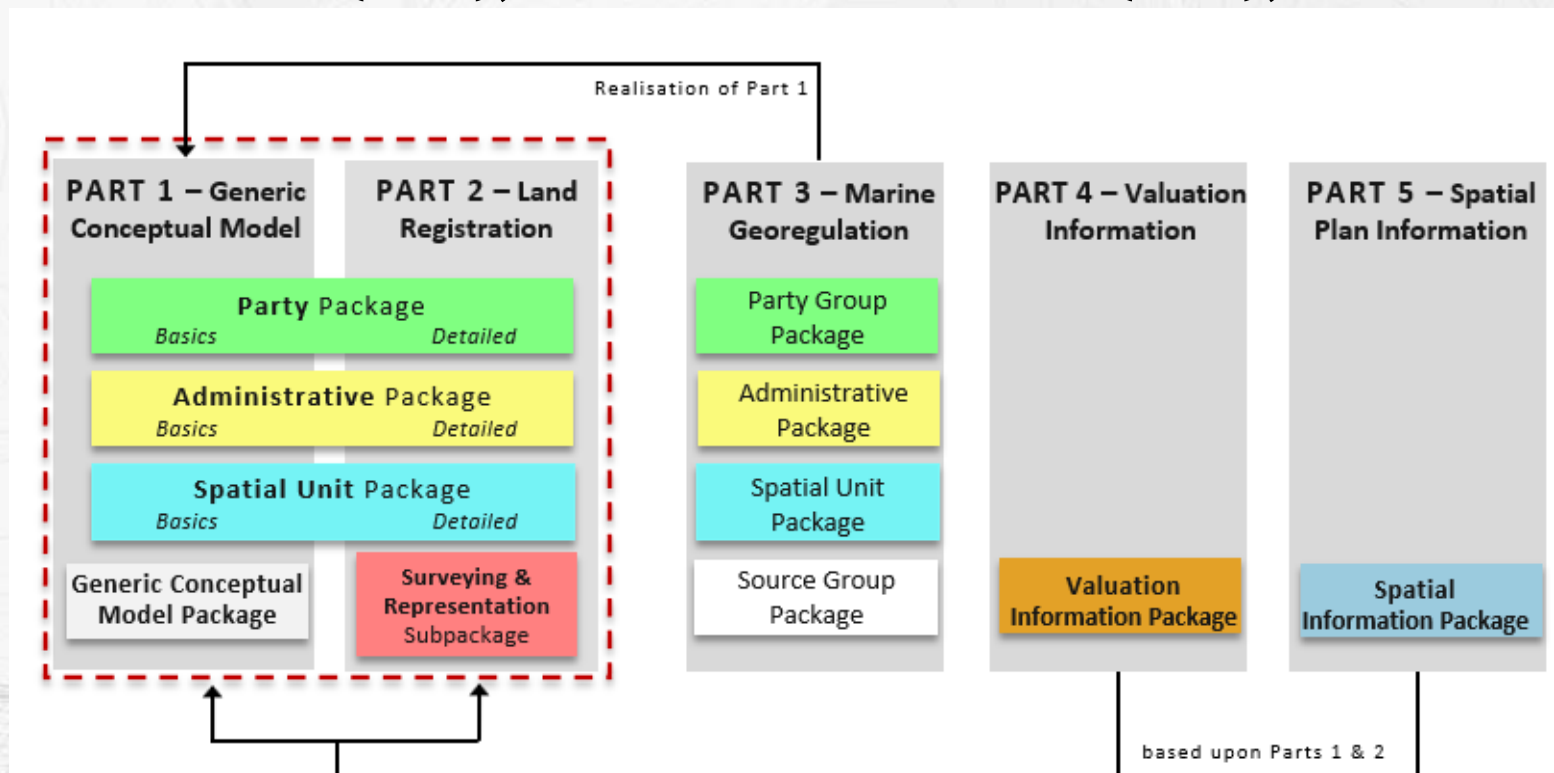
Scope  
LADM-v2



Enemark (2006)

# ISO 19152 LADM – Part 1 and the other Parts

- All the concepts and definitions given in Part 1 – Generic Conceptual Model is used by the other Parts of LADM Edition II.
- **Editor team:** Chris Body (Standards Australia) Douglas O’Brien (Standards Canada), Jean-François Beaupré (Standards Canada), Knut Jetlund (HMMG) Christiaan Lemmen (FIG), Peter van Oosterom (FIG), Abdullah Kara (FIG).



Packages of All LADM Parts

# ISO 19152 LADM – Part 1: Generic Conceptual Model

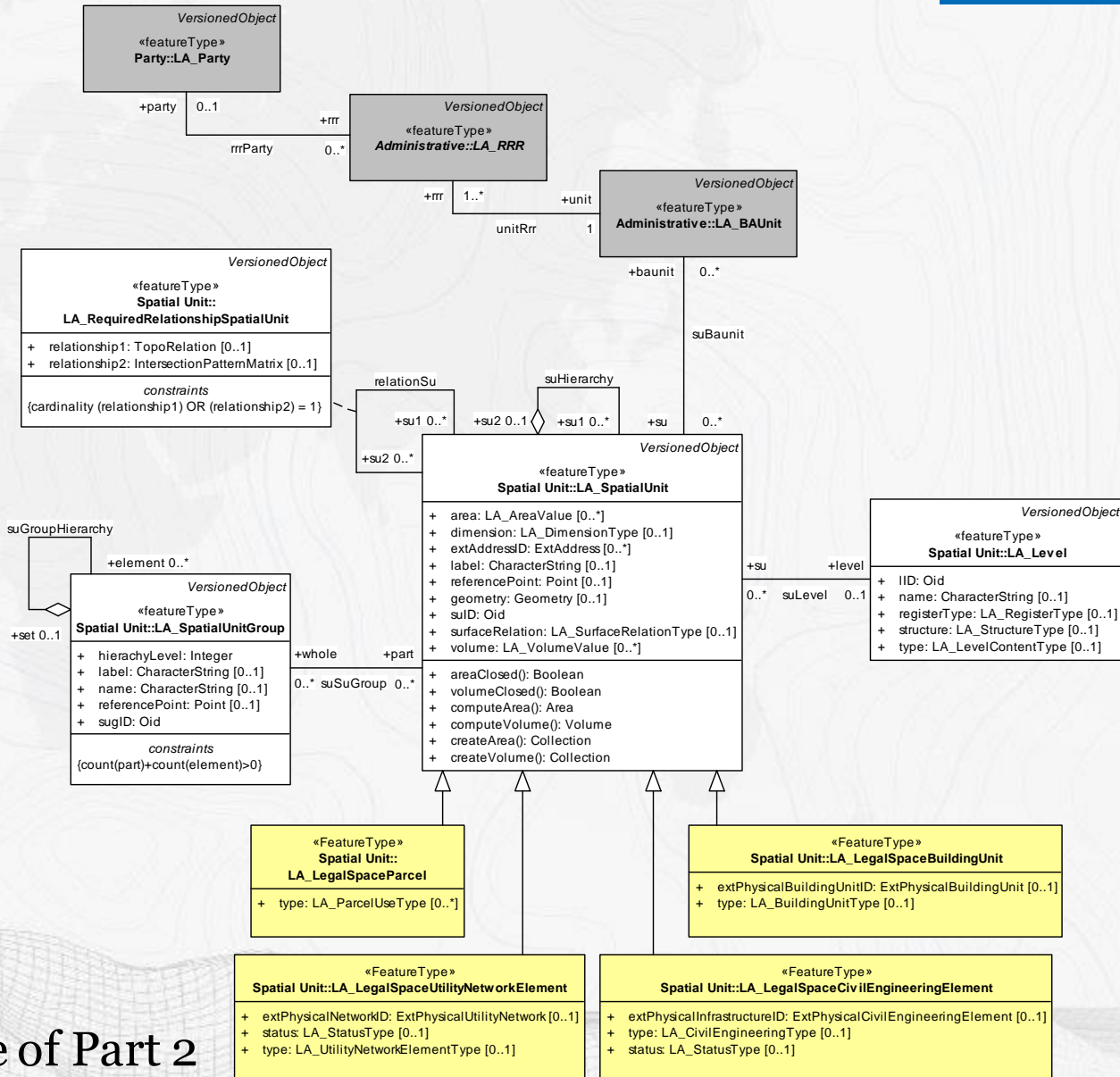
## **Current status:**

- With ISO for publication as Final Draft International Standard (FDIS)
- FDIS ballot Sep timeframe
- International Standard (IS) to be published early 2024



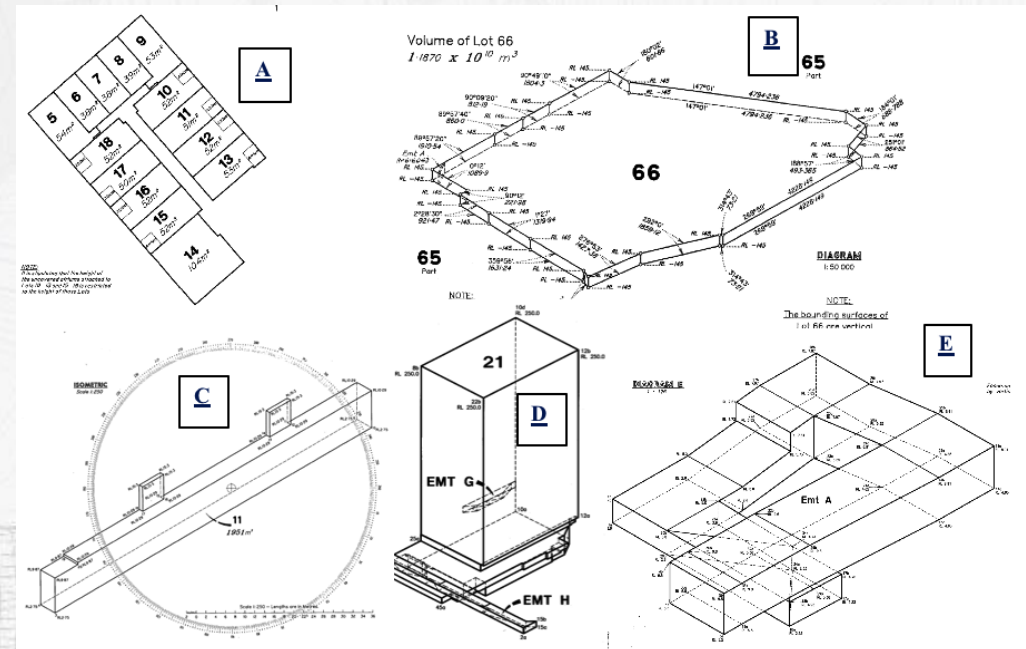
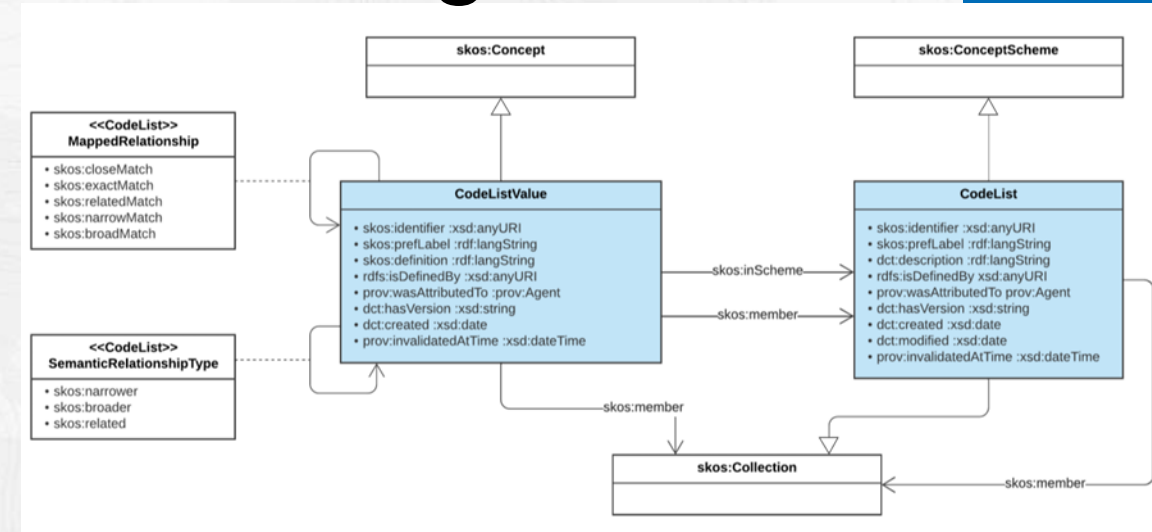
# ISO 19152 LADM – Part 2: Land Registration

- Part 2 extends the concepts from Part 1 with some refinements from LADM Edition I
- New subclasses for LA\_SpatialUnit
- Refined survey model (derived from OGC's LandInfra/InfraGML standard)



# ISO 19152 LADM – Part 2: Land Registration

- semantically enriched and versioned code list (metamodel for refined code list using the definitions of SKOS)
- integration of the LADM and OGC's IndoorGML (Alattas et al., 2018)
- a set of possible representations of spatial units in 2D, 3D or mixed dimension (Kalogianni et al., 2021)
- legal spaces in buildings
- refined legal profiles





# ISO 19152 LADM – Part 2: Land Registration



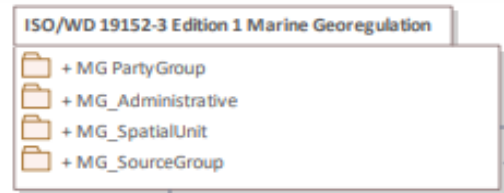
## **Current Status:**

- Committee Draft (CD) has been approved
- Editing Committee will meet mid-Aug 23
- Draft International Standard (DIS) to be submitted for ballot by Oct-Dec 23
- International Standard (IS) to be published 2024

# ISO 19152 LADM – Part 3: Marine Georegulation

- Part 3 provides the concepts and structure for standardisation for georegulation in the marine space.
  - It addresses the information structure related to management of legal spaces such as the international maritime limits and boundaries, marine living and non-living resources management areas, marine conservation area and their related rights and obligations.
  - It references and uses the work by IHO S-100 Universal Hydrographic Model and S-121 Marine Limits and Boundaries and United Nations Convention on the Law of the Sea.
  - It provides a model for representing rights, restrictions and responsibilities within the context of the marine space.
  - Based on realization of LADM core classes.

# ISO 19152 LADM – Part 3: Marine Georegulation

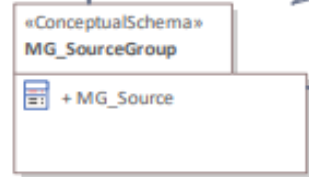


## Packages

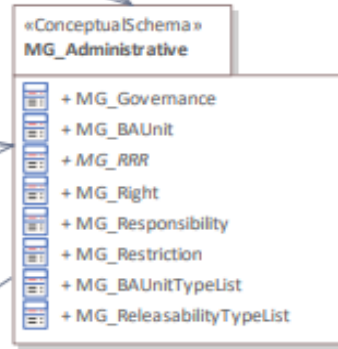
MG PartyGroup



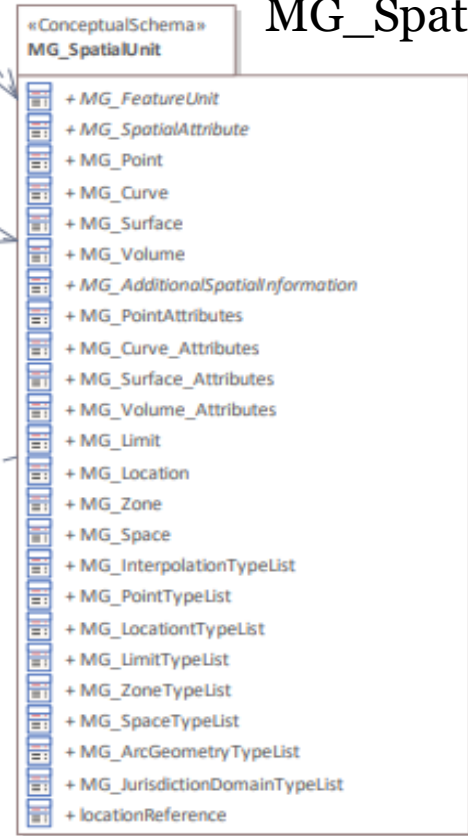
MG\_SourceGroup



MG\_Administrative



MG\_SpatialUnit





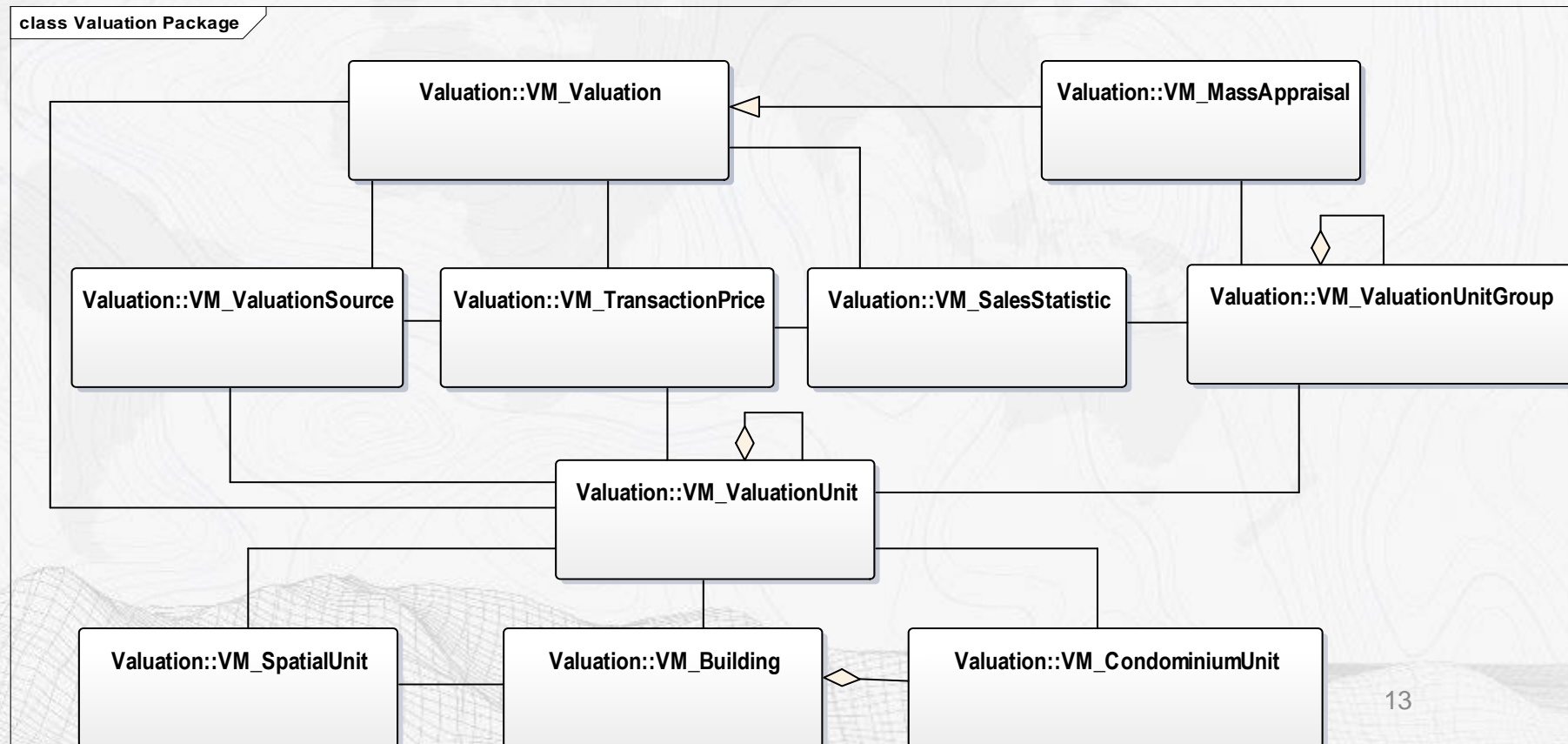
# ISO 19152 LADM – Part 3: Marine Georegulation

## **Current Status:**

- Draft International Standard (DIS) ballot ends 21 Aug 23
- Editing Committee will review DIS comments – Sep 23
- International Standard (IS) to be published early 2024

# ISO 19152 LADM – Part 4: Valuation Information

- Representing all stages of administrative property valuations (input and output data in valuation processes).
- Basic components of property valuation systems: transaction prices, sales statistics, valuation units,...



# ISO 19152 LADM – Part 4: Valuation Information

## **Current Status:**

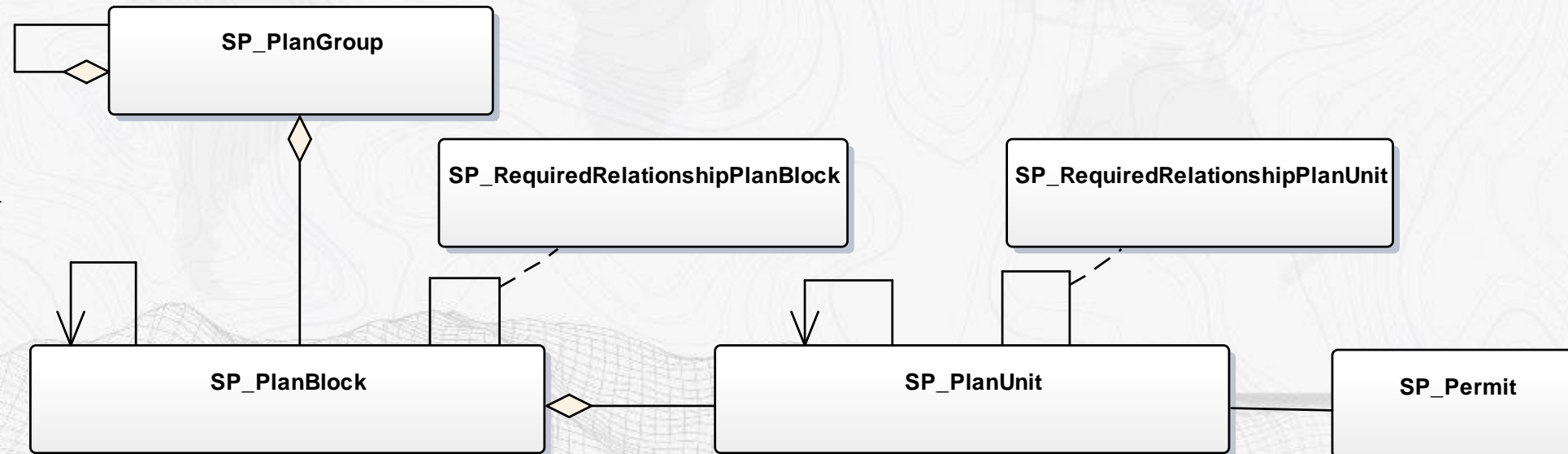
- Committee Draft (CD) has been approved
- Editing Committee will meet mid-Aug 23
- Draft International Standard (DIS) to be submitted for ballot by Oct-Dec 23
- International Standard (IS) to be published 2024



# ISO 19152 LADM – Part 5: Spatial Plan Information

- Defines LADM integrated model covering basic information related components of spatial plan information on land/water, and elements below/on/above the surface of the earth with 2D/3D/4D (3D + time) geometric representation
- Four basic classes:

- plan unit
- plan group,
- plan block and
- permit



# ISO 19152 LADM – Part 5: Spatial Plan Information

## **Current Status:**

- Committee Draft (CD) has been approved
- Editing Committee will meet mid-Aug 23
- Draft International Standard (DIS) to be submitted for ballot by Oct-Dec 23
- International Standard (IS) to be published 2024

# ISO 19152 LADM – Part 6: Implementation Aspects

- OGC SWG Land Administration standard components:
  1. Methodology for developing a country profile
  2. Technical model / encodings
  3. Management and maintenance of semantically rich code list values (SKOS)
  4. Procedures / workflows
- OGC SWG LA standard(s) will become ISO LADM part 6
- ISO TC211 standards become CEN TC287 standards by parallel voting (Vienna agreement)



# SUMMARY - ISO 19152 LADM PARTS

## **Current Status:**

- Part 1: Generic Conceptual Model – IS to be published early 2024
- Part 2: Land Regulation – IS to be published 2024
- Part 3: Marine Georegulation – IS to be published early 2024
- Part 4: Valuation Information – IS to be published 2024
- Part 5: Spatial Plan Information – IS to be published 2024
- Part 6: Implementation Aspects – Work with OGC developing programs to support various LADM Parts

# Thank you!

# Any questions?

