Geonovum

Explores, connects, anchors

Auteur Paul Janssen

Datum donderdag 27 oktober 2022

GEONOVUM

Standardization as a governing mechanism

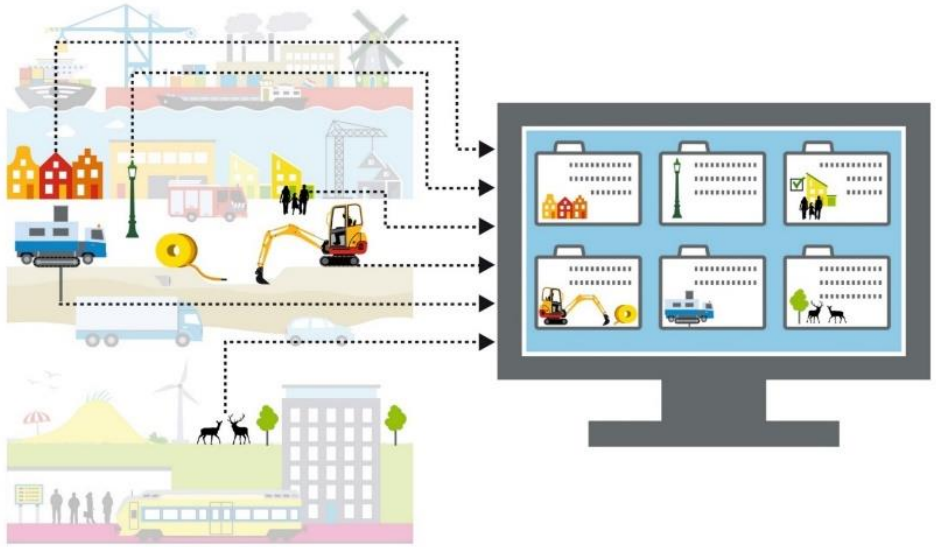
UNWGIC 2022

Paul Janssen: p.janssen@geonovum.nl

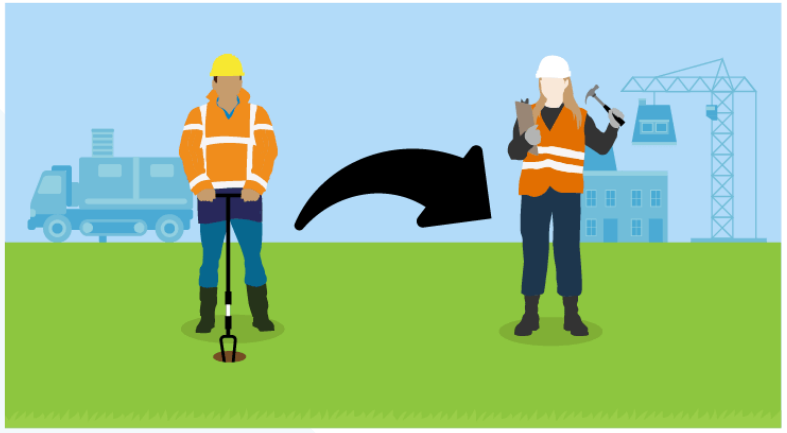
Geonovum - Netherlands

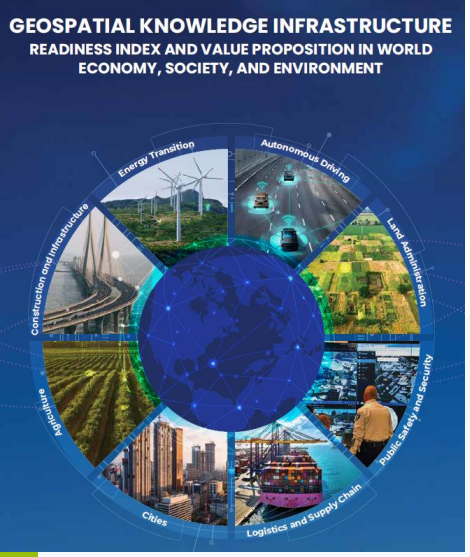
Agenda

- Scope of geo-information
- Role of Geonovum
- Standardisation as governance



Geonovum mission: Findable, accessible, interoperable en reusable geo-information



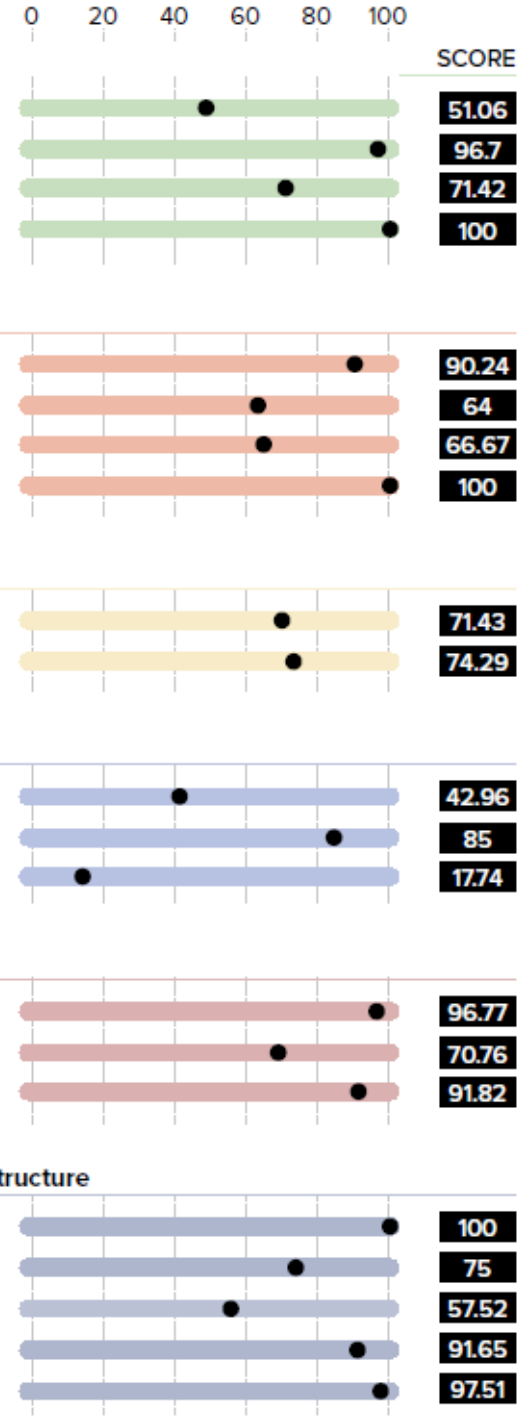


GKI Readiness index 2022

Rank 2022	Country	Score (0-100)
1	USA	100.00
2	United Kingdom	83.89
3	Denmark	81.52
4	Netherlands	80.27
5	Germany	78.53
6	Switzerland	77.04
7	Canada	75.10
8	Singapore	74.82
9	Ireland	72.09
10	France	72.00
11	Australia	71.69
12	China	71.51
13	Sweden	71.19
14	Finland	70.55
15	Norway	70.21

CHALLENGERS

Rank 2022	Country	Score (0-100)
16	Spain	69.54
17	Japan	69.04
18	Belgium	66.84
19	Poland	65.97
20	Estonia	64.18
21	New Zealand	63.02
22	Italy	62.24
23	Austria	62.16
24	Portugal	60.17
25	South Korea	58.07
26	Russia	58.03
27	India	56.16



GEOGRAPHIC AREA (SQ. KM.)
33670

GDP (USD)
1.02 Trillion

POPULATION
17.53 Million

MAJOR GEOSPATIAL AGENCIES

Cadastre, Land Registry and Mapping Agency (Kadaster)

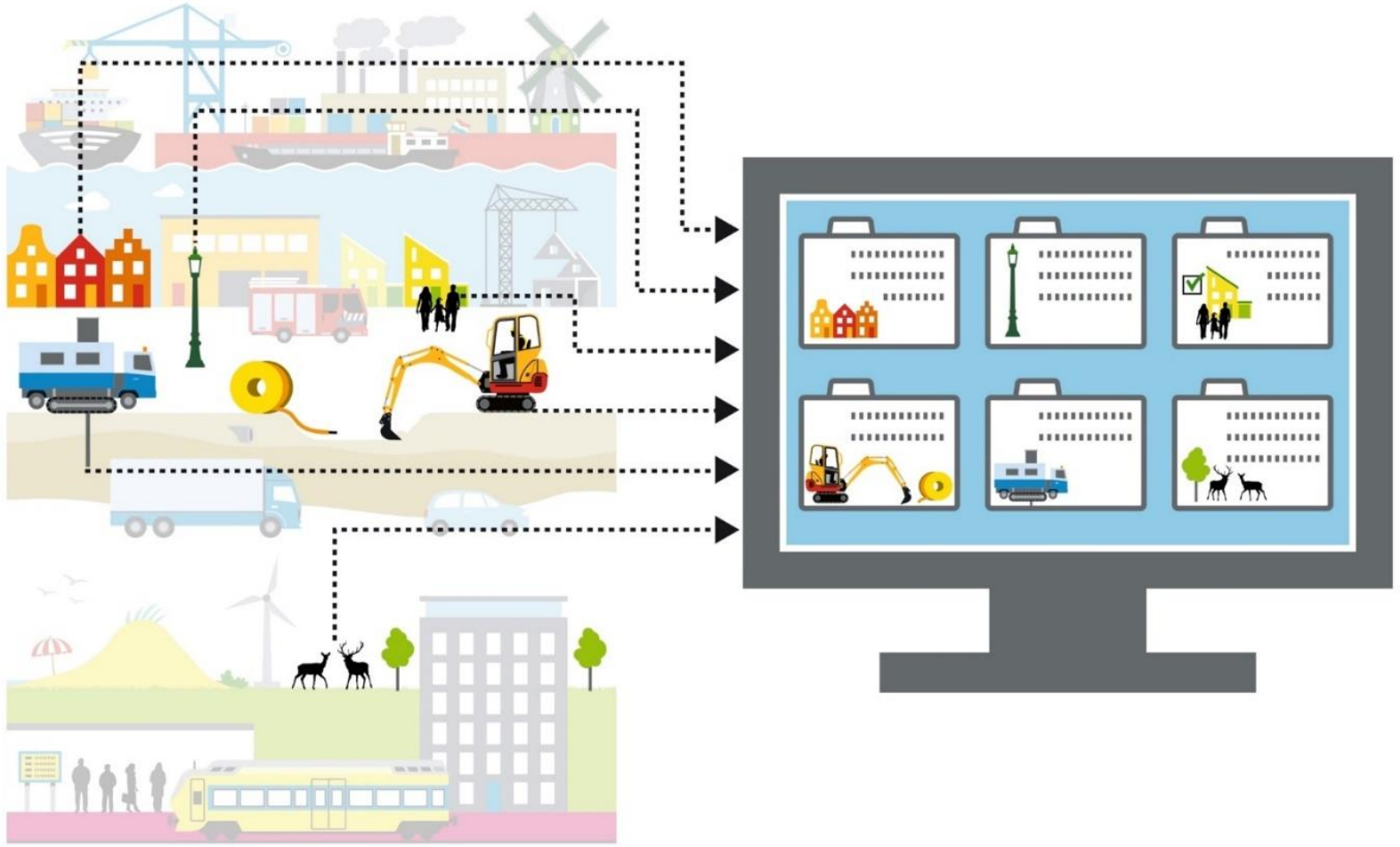
Geological Survey of the Netherlands (GDN)

Royal Netherlands Navy Hydrography Service

Netherlands Space Office

scope of geo-information

Realworld **Registries/GIS/SDI**



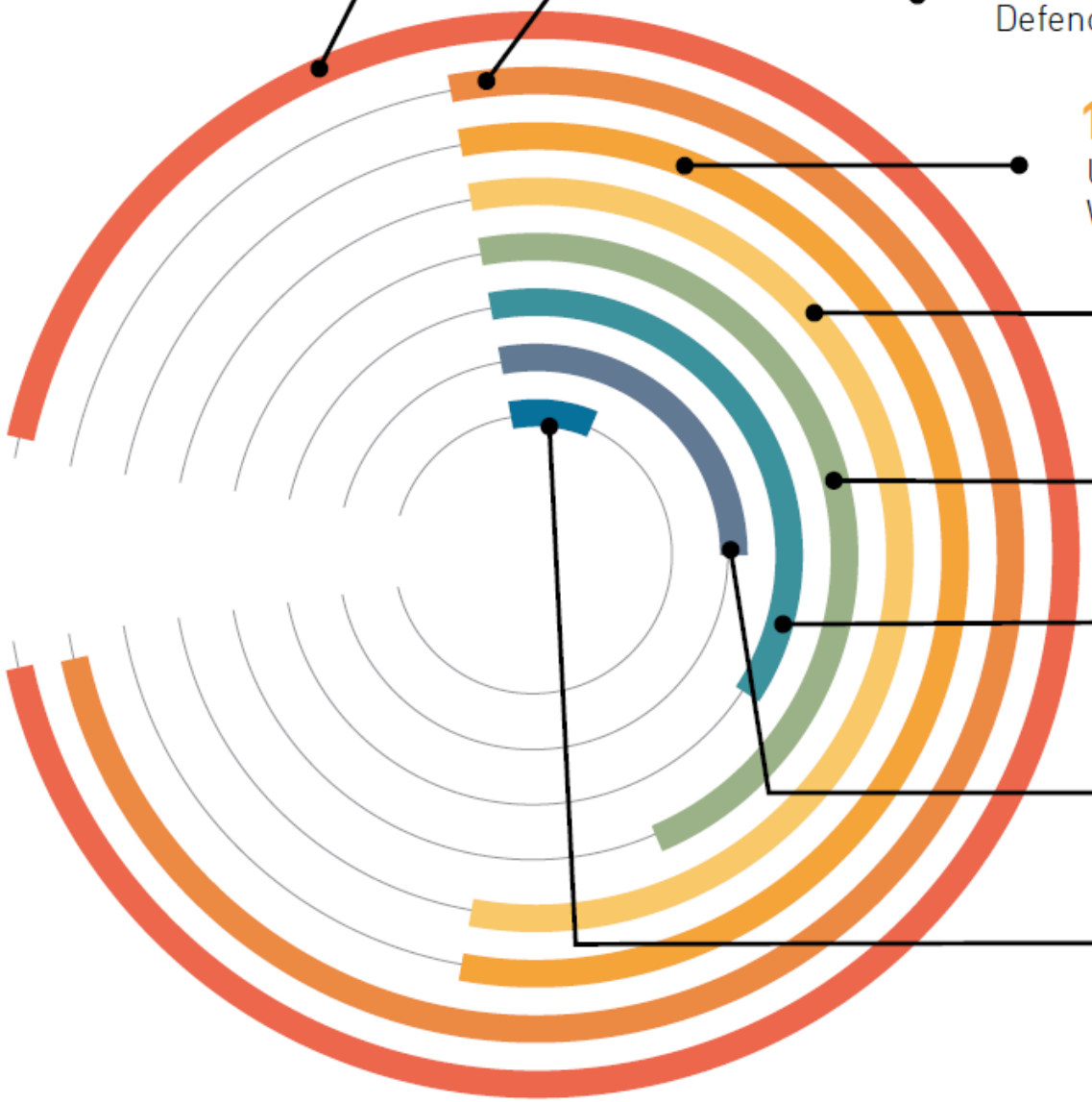
interoperability in technology and semantics

Spatial Data Infrastructure

Geospatial Knowledge Infrastructure

Priority User Sectors for the Netherlands Geospatial Industry

Source.: Netherlands Geolocation Economy Report (Geospatialworld)



23%
Infrastructure (Urban Development and Smart Cities)

19%
Defence and Intelligence

14%
Utilities (inclusive of Telecom, Water, etc.)

14%
Governance

11.5%
Transport Infrastructure

9%
Disaster Management

7%
Supply Chain and Logistics

2.5%
Agriculture

Sensors in public space

Energy transition

Geo policy

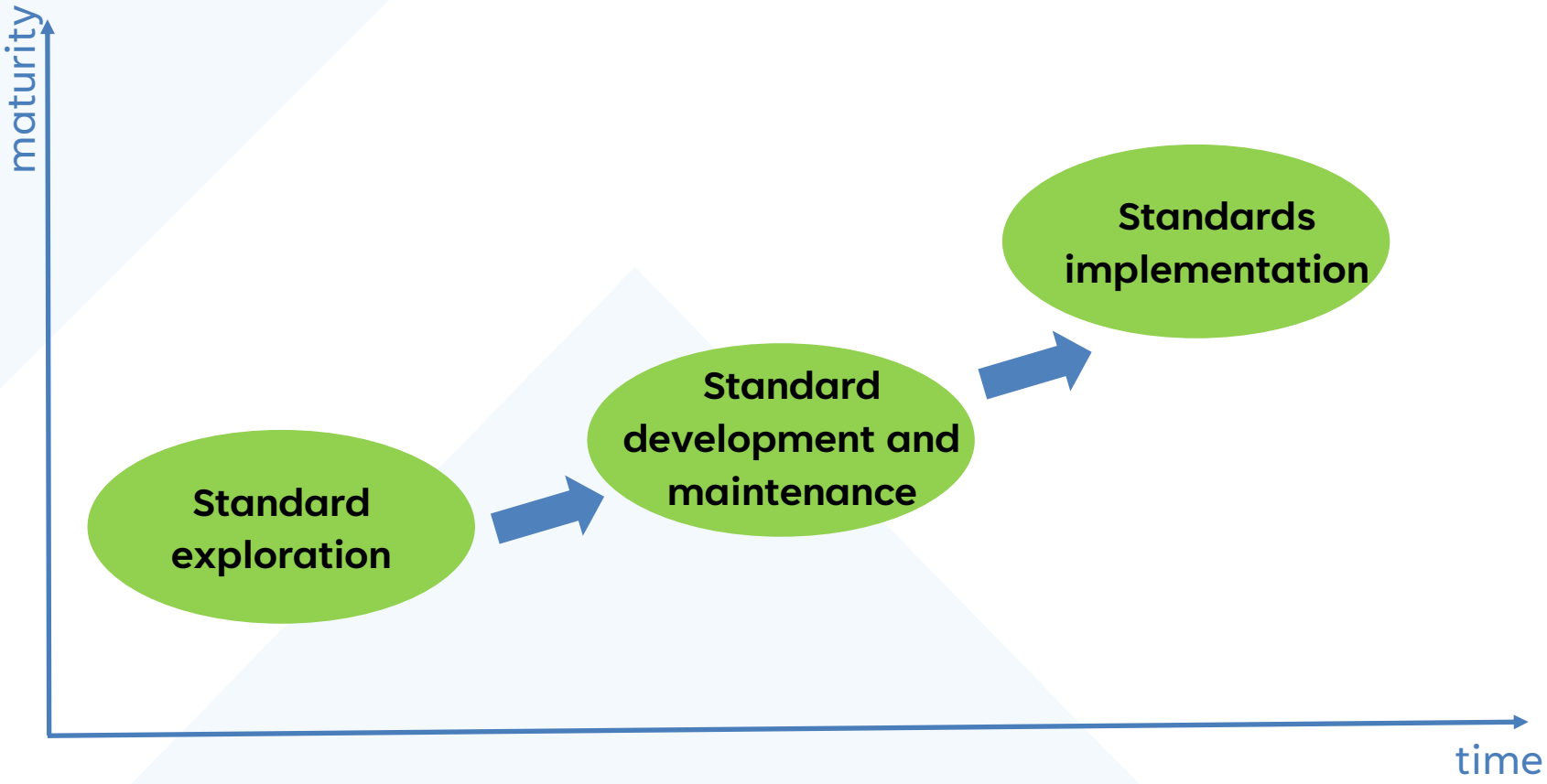
Standardisation

ation platforms

! Social i

SDI.next

Geonovum process chain



International Standardisation is International Cooperation

We all Benefit

Level playing field

Multi stakeholder partnership

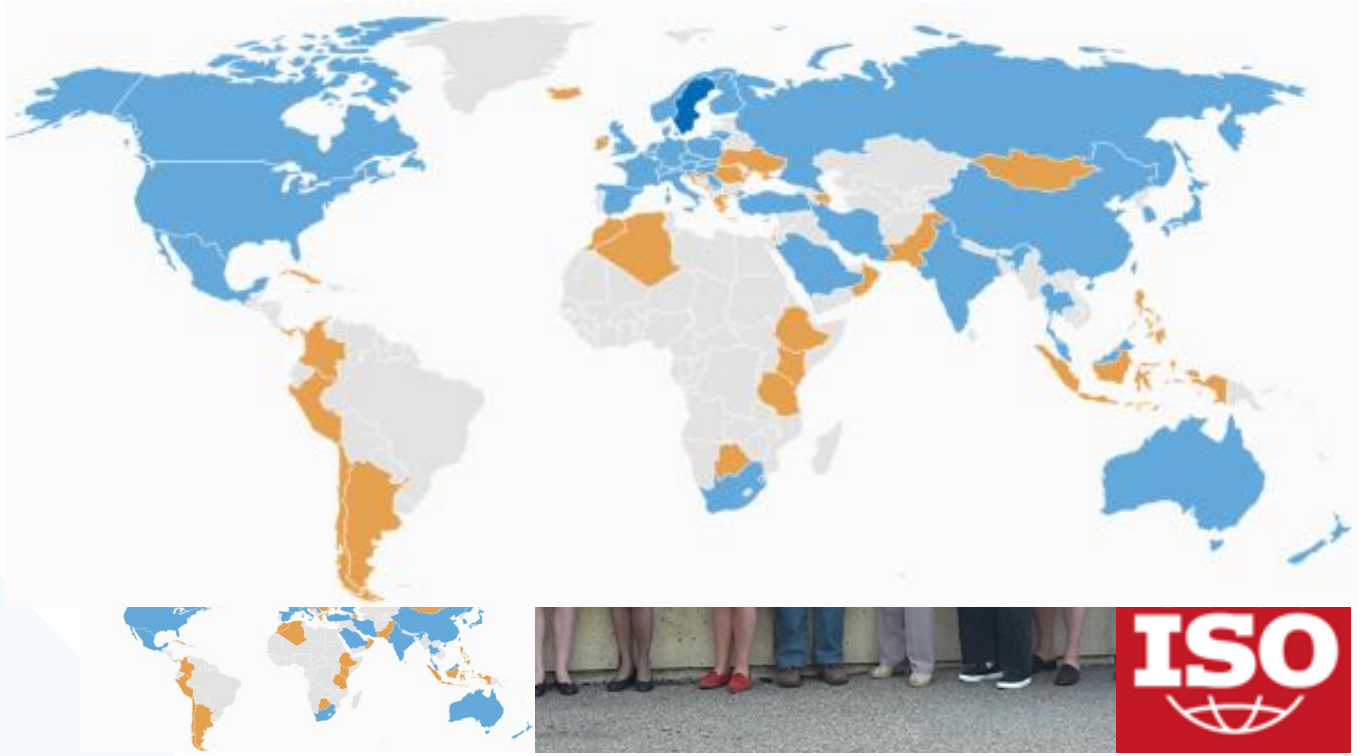
SDI is collaborative effort

Standardisation is a collaboration platform

International Friends

GEONOVUM

Open Geospatial Consortium



W3C®

Spatial Data on the Web Working Group Charter

UN-GGIM Standards guide

http://standards.unggim.ogc.org/

Revised Guide to the Role of Standards in Geospatial Information Management

an online resource for all

9 February 2022

Standards on the move

White paper
Vision Upgrade Dutch SDI
2021-2023

Setting new standards for the future

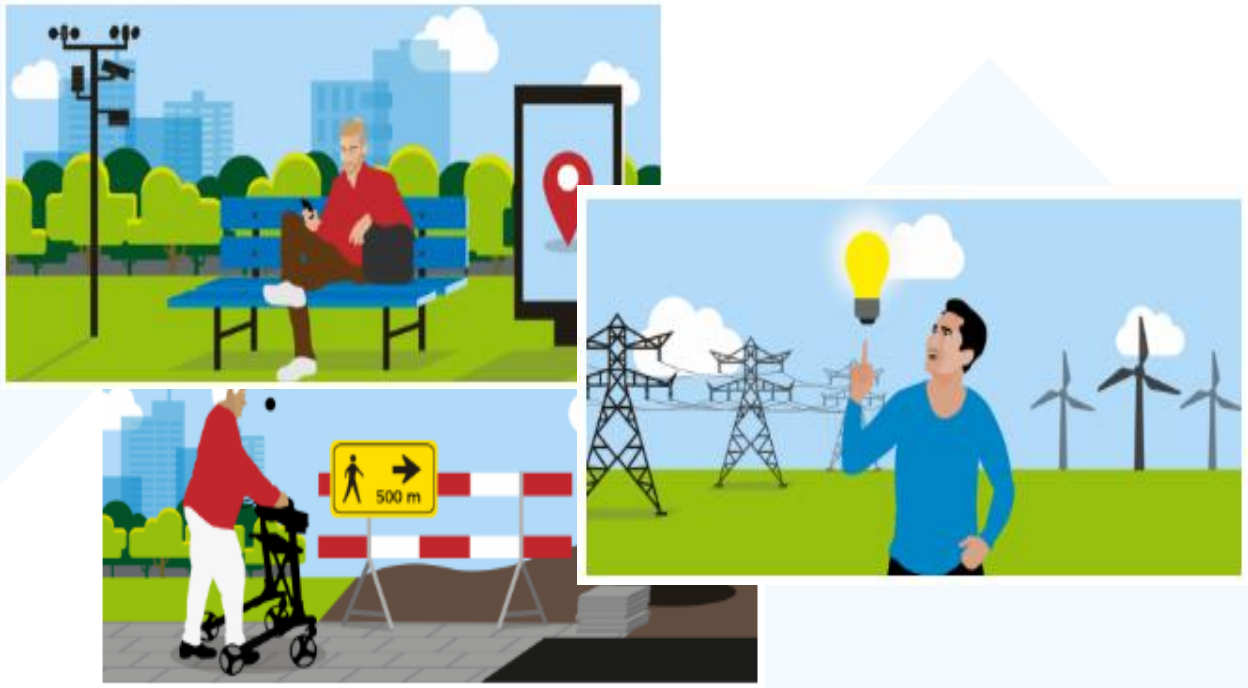
Topics addressed

Data distribution

- API’s (including when to use – who benefits?)
- Linked open data (including when to use – who benefits?)
- Light encodings (JSON, Geo-package)

It’s all about data and semantics

Need for semantic, syntactic and technical interoperability

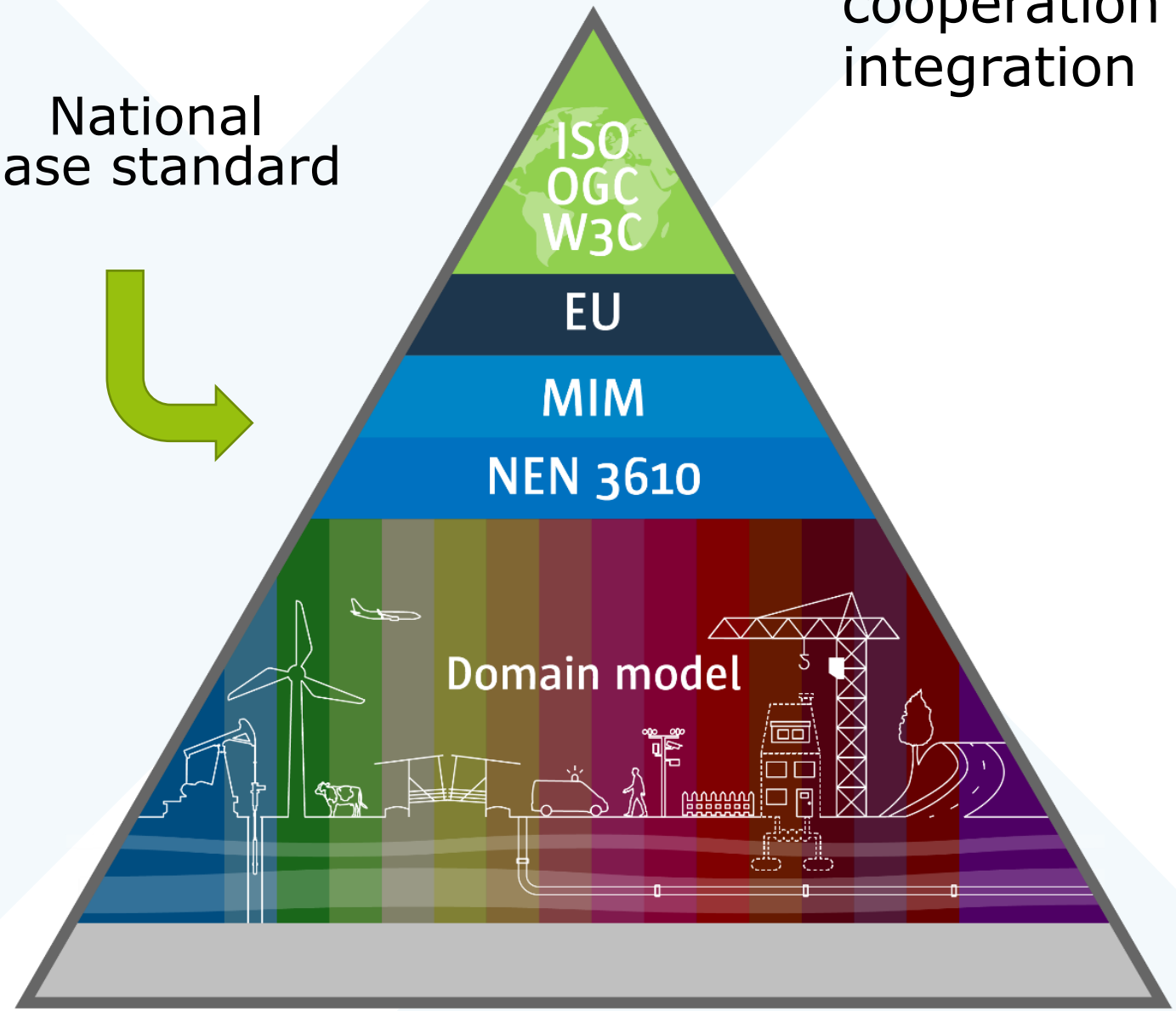


- Spatial zoning 2015
- Spatial zoning 2022
- Water
- Rural area
- Nature conservation
- National security
- Utility services
- Cadastral registry
- Cultural history
- Large scale geography
- Maintenance public areas
- Observations and measurements
- Register on soil and geology
- Register on buildings and addresses
- Register on property value
- Earius nitrogen deposition
- Register on small scale topography
- Register on external security
- Register on noise
- Landscape features
- Access and navigation
- Smart grid
- Energy/Power installations

GEONOVUM

Governance by standards: Framework for cooperation - integration

National base standard



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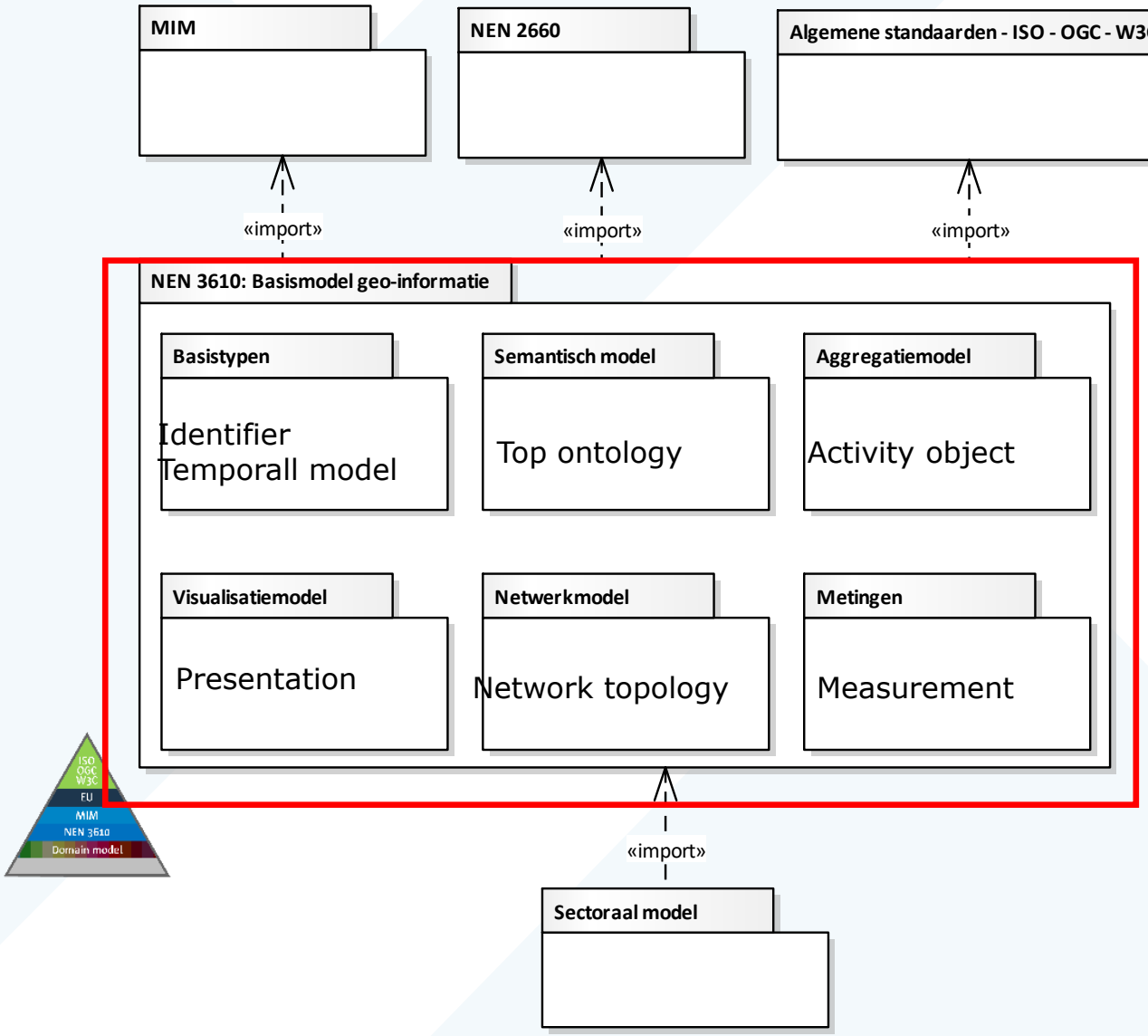
GEONOVUM



Modelling constructs

Enumerations

Metadata

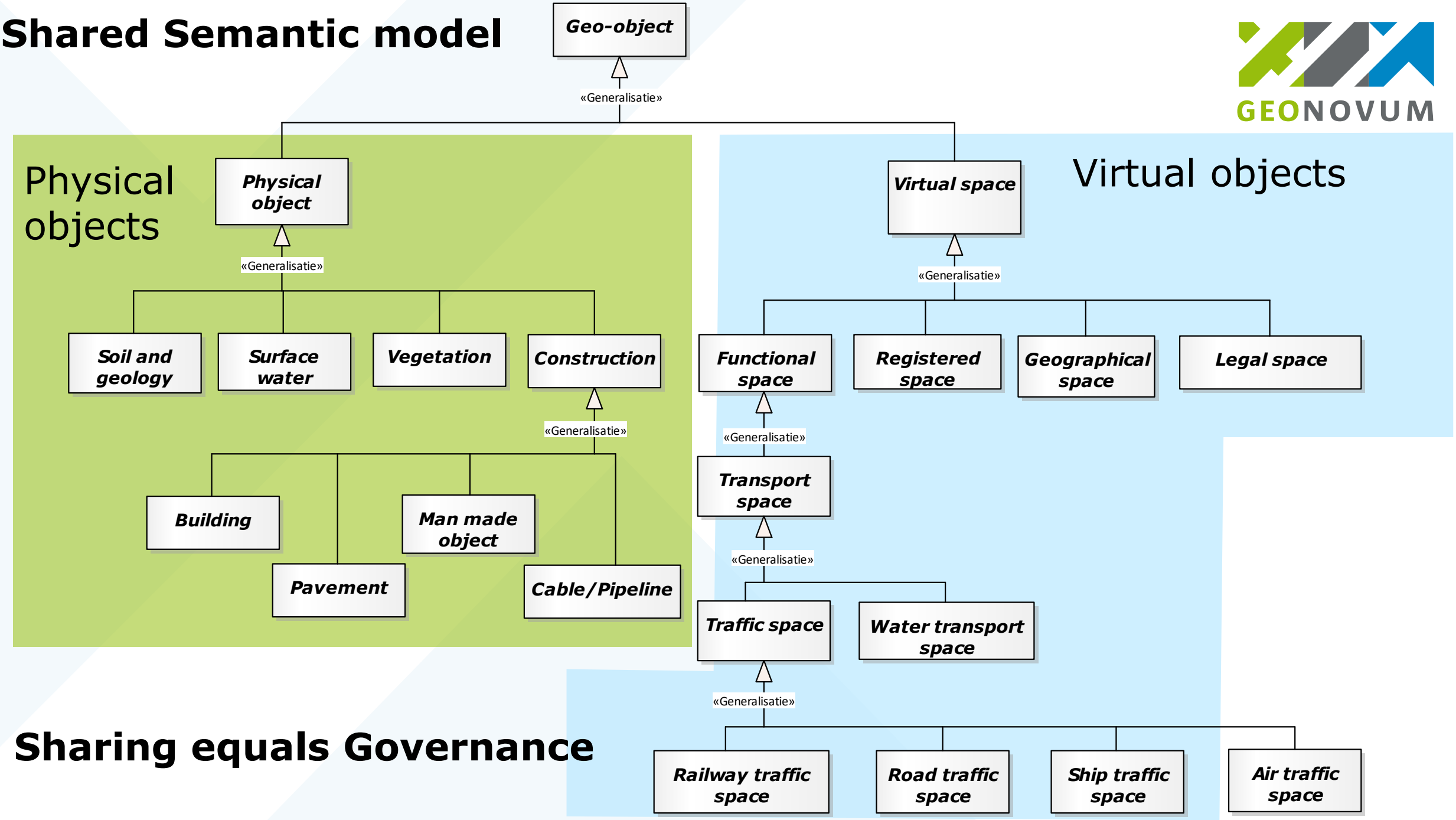
Model Driven Architecture

Implementation-encoding

Coordinate reference system

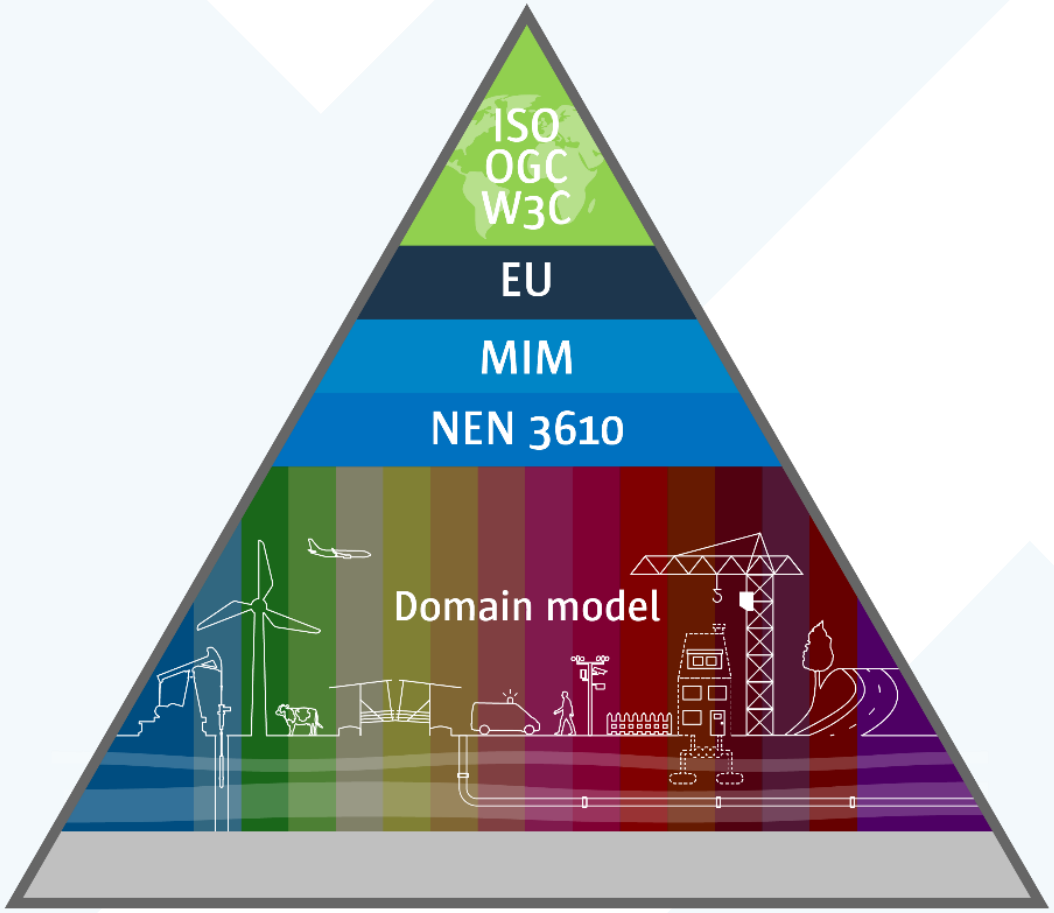
3D

Shared Semantic model



Sharing equals Governance

Regular updates 1995 - 2022



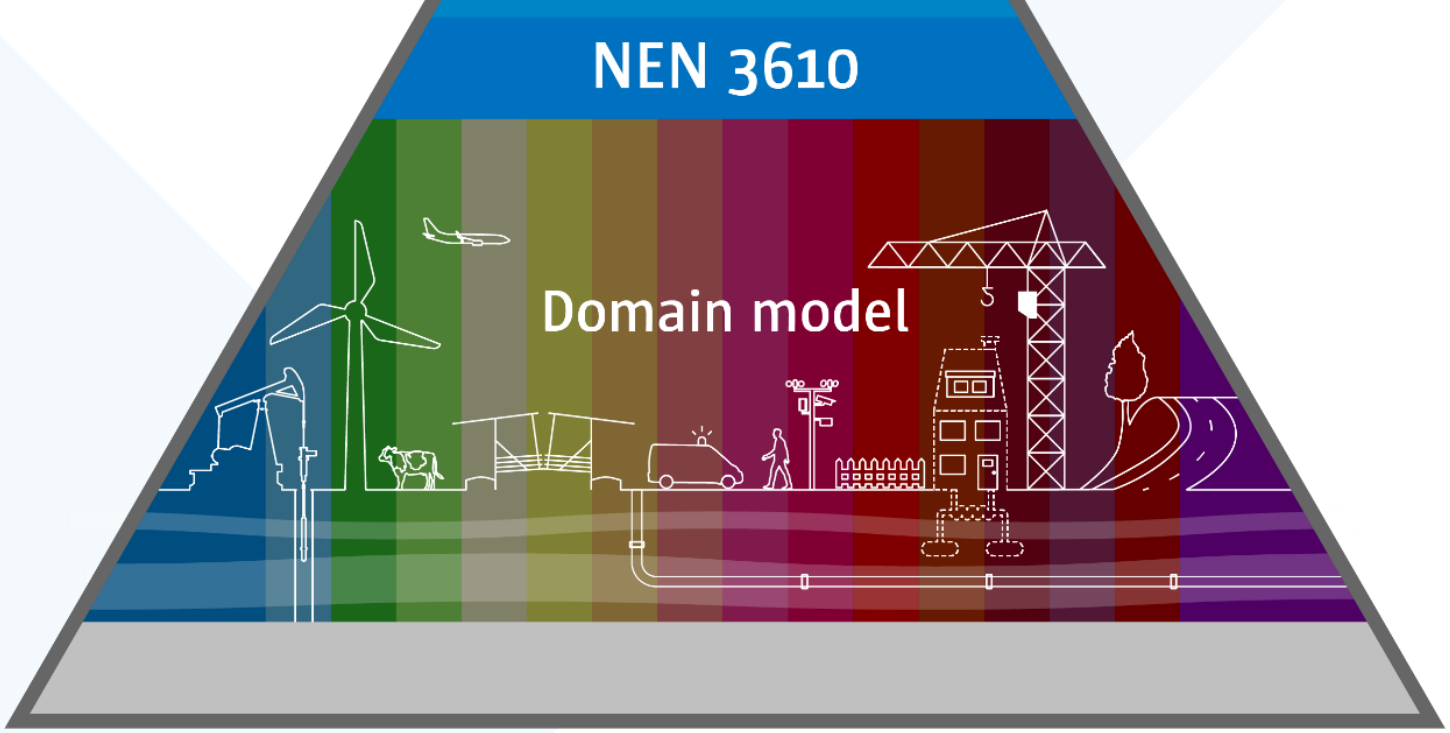
1995 Geo national

2005 Geo international

2011 Geo applied

2016 Geo conformity

2022 Geo integrates with non-geo



IMGeluid	IMBAG	IMKL	IMKICH	IMGeo
IMNAB	IMLG	IMEV	IMKAD	IMBOR
IMWOZ	IMTop	IMBRO	IMLE	
IM-Metingen	IMOOV	IMMEAR	IMDB	
IMRO	IMWA	IMOW	IM Smart grid	

Aligned dataspecifications

- Spatial zoning 2015
- Spatial zoning 2022
- Water
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GEONOVUM

From Darwinism to Dataism

Source:
Geospatialworld

Yuval Noah Harari: Homo Deus

Geo ICT Architect - Social Architect

Access and distribution of information is shaping society

Geo-information is a large part there-off

Think of navigation, location based services, the power of where....

So we do have an impact on human and social affairs

Understand human and social affairs

technical framework – social framework

Thank you

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Thank you!

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