



ISO/TC 211

Geographic information/Geomatics

Standardization in the field of digital
geographic information.

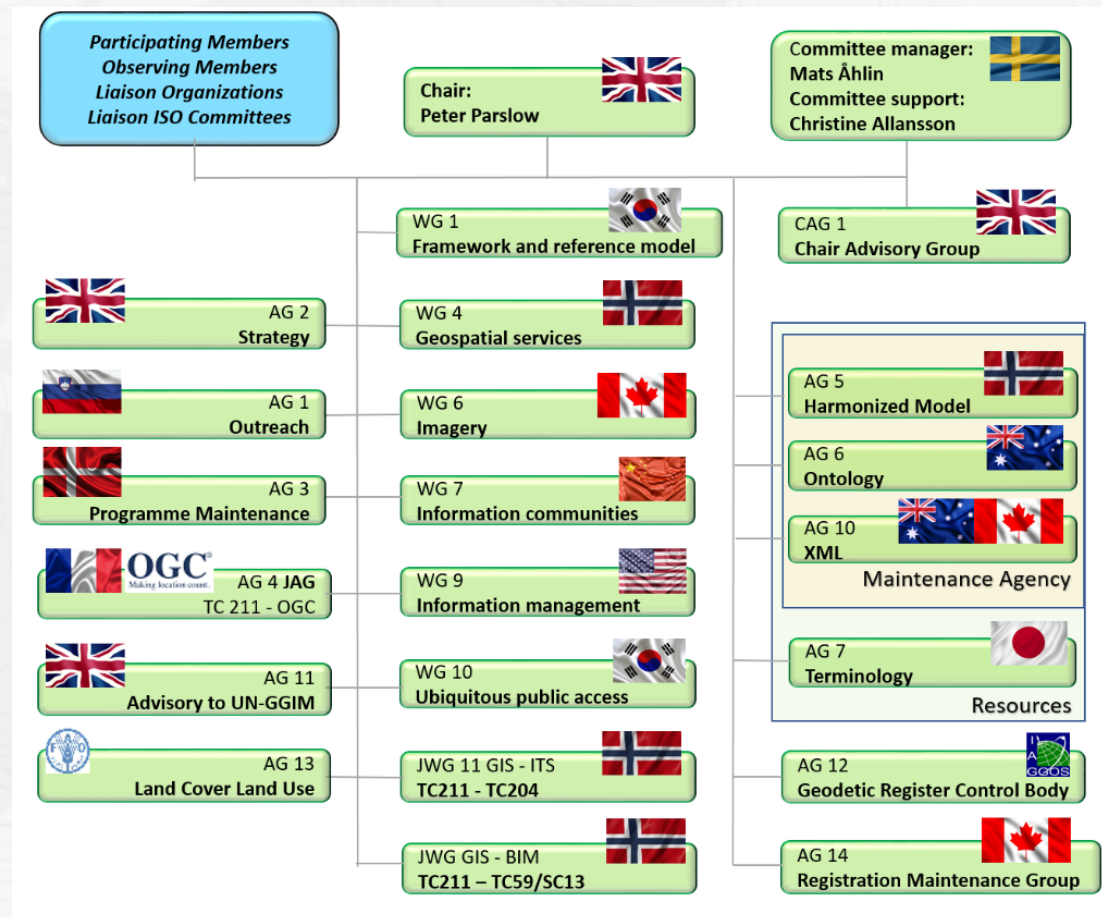
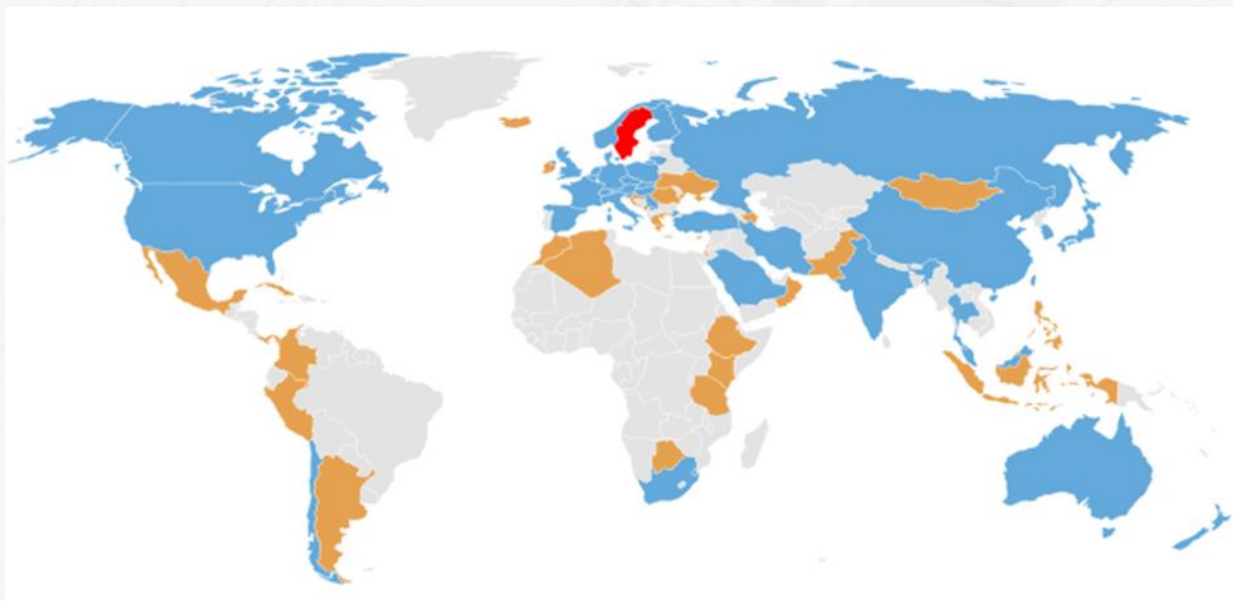
EU INSPIRE “MIG-T”
Friday 7th July, 2023

Our vision:

ISO/TC 211 wants to support a sustainably prosperous future by providing, in cooperation with others, a set of standards that enable better management of geographic information.

Our strategy:

- Collaboration
- Harmonization
- Outreach





Domains: INSPIRE,
IHO, WMO, etc

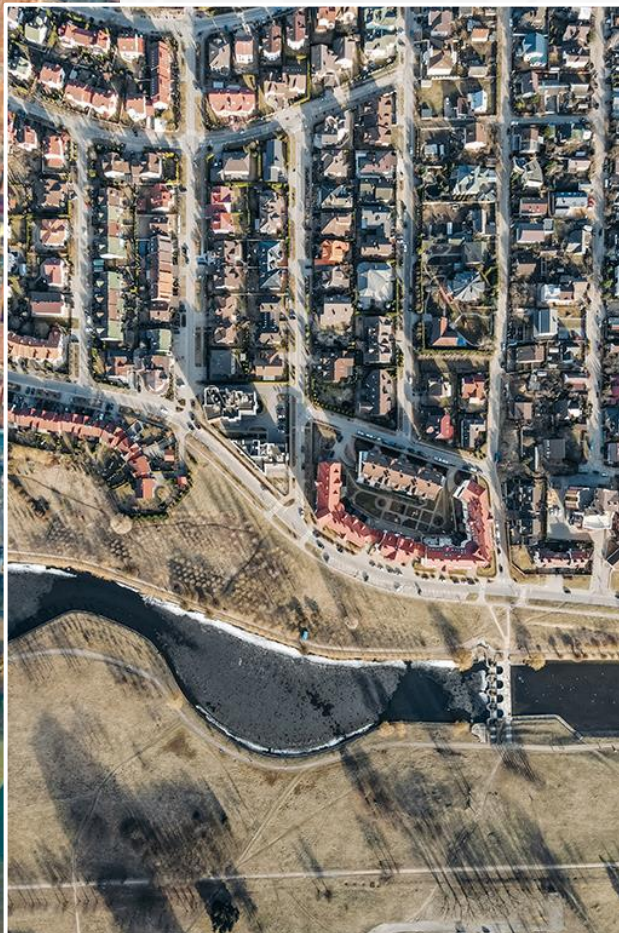


Geo standards:
TC 211, OGC



IT standards: W3C,
IETF, ISO/IEC





INSPIRE

etc

OGC

TC 211

FAO

UPU

IAG

Modernising

- ISO
 - ISO SMART – *standards (that are) machine applicable, readable and transferable*
 - Terminology: GeoLexica
 - Data models
 - Data validation
 - Online Standards Development
- IT
 - Geolexica
 - OpenAPIs (with OGC)
 - Web ontologies
 - JSON
- Domains
 - Intelligent transport
 - Digital twins
 - Analysis ready data

TC 211/OGC common foundation

	ISO Standard	OGC Abstract Topic	
Conceptual schema language	ISO 19103	-	how we use UML
Application schema	ISO 19109	Topic 5 contains an older version	how to model the geo data for a domain
General Feature Model & Coverage Model	ISO 19109 & ISO 19123	Older version of Topic 1 Topic 6	is your world discrete features or a measured surface?
Registers	ISO 19135	-	well managed (reference) data
Coordinate reference systems	ISO 19111 & ISO 19127	Topic 2	places the world as numbers
Spatial schema	ISO 19107	-	how to model geo shapes

Joint OGC Activities

- **Fast tracking OGC APIs (ISO 19168-x)**
 - **Revising “Observations & Measures” (ISO 19156; will include sampling)**
 - **OGC as register manager for Data Quality measures (ISO 19157-3)**
-
- **Common work on:**
 - **Automating document production**
 - **Publishing vocabularies etc**
 - **Managing dependencies**

INSPIRE use of ISO/TC 211 standards

Technical guidelines	ISO Standard	
Metadata	ISO 19115:2003 & ISO 19139:2007	ISO 19115-1:2014 & ISO 19115-3:2016, <i>but GeoDCAT etc!</i>
Download services	ISO 19142:2010 & ISO 19143:2010	<i>See OGC API Features / ISO 19168</i>
View services	ISO 19128:2005	<i>See OGC API Maps & OGC API Tiles (to become ISO 19177)</i>
Data specifications depend on...	ISO 19111:2007	Several amendments published
	ISO 19109	<i>Under revision</i>

Note: I have probably missed some!

We would welcome more EC / INSPIER input when we revise the standards you use

probable ISO/TC 211 projects of interest to INSPIRE

- AHG10 Input to EU Data Spaces
 - Leader: Jari Reini, Finland;
 - Participants from: France, Norway, Sweden, Germany, Denmark, Netherlands, Finland, Spain, USA, UK
- ISO 19115-4 Metadata – JSON schema implementation
 - Leader: Paul Janssen, Netherlands
 - Participants from: Australia, Canada, France, Germany, Japan, New Zealand, Norway, USA
- ISO 19177 Geospatial API Tiles, fast tracking OGC API Tiles
- Public reviews soon:
 - ISO 19135 revision, *Registries*
 - ISO 19157-3 Data Quality measures register
 - ISO 19144-3 Land Use Meta Language

Upcoming ISO/TC 211 plenary weeks

- New Delhi, India, December 4-8 2023

Liaison representatives always welcome, either “face to face” or online (Zoom)!

- See <https://committee.iso.org/home/tc211>

Thank you

Contact us

Useful links:

<https://committee.iso.org/sites/tc211>

GeoLexica: <https://isotc211.geolexica.org/>

Resources (UML, XML, ...):

<https://committee.iso.org/sites/tc211/home/re.html>

SDG case studies:

<https://committee.iso.org/sites/tc211/home/standards-in-action/united-nations.html>

Route information service video:

<https://youtu.be/eCVOKjwAQwE?t=0>



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