ISO/TC 211 Geographic information

ISO/TC 211 58th Plenary Meeting Week, London

Peter Parslow, chair
peter.parslow@os.uk
26th June 2024
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
Standardization in the field of digital geographic information.
30 years of ISO/TC 211

1st plenary, Oslo, November 1994
- 1st resolution: Olaf Østensen as chair
- 19 P members; 13 O members
- 4 external liaisons; 2 internal (+2 TBC); CEN
- 16 ideas input from four ‘ad hoc working groups’

58th plenary, London, June 2024
- 4th chair
- 38 P members; 35 O members
- 39 external liaisons; 26 internal
- 35 current projects across seven working groups
Different success stories

ISO 19115 Metadata
• Was ISO 15046-15
  • first draft expected 1996-03 for publication 1999-06
  • Based on FGDC
  • >1500 comments!
• Published 2003-05

ISO 19125-2 Simple feature access – SQL option
• 1998: comments to & discussion with the JTC1 SQL committee
• 1999: accepted as TC211 work item
• published 2004
• withdrawn 2018
  • “mainstream” in ISO/IEC 13249-3:2016 Information technology - Database languages - SQL multimedia and application packages - Part 3: Spatial
Domains: INSPIRE, IHO, WMO, etc

Geo standards: TC 211, OGC

IT standards: W3C, IETF, ISO/IEC
Figure 3: The Framework is anchored by nine strategic pathways and three main areas of influence. Once implemented, the strategic pathways realize many benefits.
Standardization in the field of digital geographic information.

TC 211

INSPIRE

OGC

UPU

IAG

FAO

etc
Modernising

- ISO
  - Online Standards Development
  - ISO SMART – *standards (that are) machine applicable, readable and transferable*
    - Terminology: GeoLexica
    - Data models
    - Data validation

- IT
  - Geolexica
  - OpenAPIs (with OGC)
  - Web ontologies
  - JSON

- Domains
  - Intelligent transport
  - Digital twins
  - Analysis ready data
Scope of standardisation for GI

Standardisation

Reference models
Modelling languages
Terminology
Conformance and testing

OGC Abstract Specs
OGC Modular Spec

Web services
Location based services
Positioning services
Data transfer

Originated in OGC

OGC Abstract Specs

OGC Modular Spec

Georeferencing

Referencing by coords
Geodetic codes and parameters
Geographic identifiers
Gazetteers

Models (schemas)
Data specifications
Feature cataloguing
Quality
Metadata

Data content

Data Access

Data specifications

OGC standards use these
Other TC211 resources and transparency

- ISO Online Browsing Portal – some free content
- Committee website – do read the “good practice” pages and project lists
- TC211 wiki (hosted by International Cartographic Association)
- UML Models
- TC211 on GitHub (some resources, and for reporting issues)