



19139 Geographic information – Metadata – XML schema implementation

This part of the ISO 191** Family of Standards provides a spatial metadata XML (spatial metadata eXtensible Mark-up Language (smXML)) encoding, an XML schema implementation derived from ISO 19115, Geographic information – Metadata. The metadata includes information about the identification, constraint, extent, quality, spatial and temporal reference, distribution, lineage, and maintenance of the digital geographic dataset.

ISO TS 19139 is designed to provide a common XML specification for describing, validating and exchanging geographic metadata. It is intended to promote interoperability, and exploit ISO 19115's advantages in a concrete implementation specification.

The implementation specification details the following:

- The XML schemas will be derived directly from the harmonized ISO 19100 UML model to ensure one common schema.
- The transformation of the ISO 19115 and related ISO/TC 211 abstract UML models into XML schema. For informative purposes, scripts for performing the transformation are referenced. This process follows the guidelines defined by ISO 19106.
- Provides dataset implementation and extension examples.
- Provides a conformance test suite.

Although this specification is directly intended to describe geographic metadata for datasets, the nature of the XML schema allows the schemas defined here to be applied to datasets, aggregations of datasets, geographic features, feature attributes, feature types, and feature attribute types, etc. While the specifics of non-dataset usage of the XML schemas defined here are outside the scope of this specification, these XML schemas are designed to support these types of implementations.

The standard is of particular relevance to the following sectors:

Sector	Of particular interest
Developers of GIS products	
Developers of GIS application systems	Yes
Producers/ suppliers of geographic data	Yes
Users of geographic data and GIS	
Developers of standards	

For further information on this standard and its implementation, please contact ISO/TC 211 secretariat via www.isotc211.org.