



19103 Geographic information – Conceptual schema language

This standard is concerned with the adoption and use of a conceptual schema language (CSL) for developing computer-interpretable models, or schemas, of geographic information. Standardization of geographic information requires the use of a formal CSL to specify unambiguous schemas that can serve as a basis for data interchange and the definition of interoperable services. An important goal of ISO 191** Family of Standards is to create a framework in which data interchange and service interoperability can be realised across multiple implementation environments. The adoption and consistent use of a CSL to specify standardized geographic information is of fundamental importance in achieving this goal. There are two aspects to this part. First, a CSL must be selected that meets the requirements for rigorous representation of geographic information. This part identifies the combination of the Unified Modelling Language (UML) static structure diagram, together with data type definitions based on ISO IDL basic types, and UML Object Constraint Language as the conceptual schema language for specification of the normative parts of ISO 191** Family of Standards. Second, this part provides guidelines on how UML should be used to create standardized geographic information schemas that are a basis for achieving the goal of interoperability. An ISO Technical Specification has been developed to provide guidance on this.

The standard is of particular relevance to the following sectors:

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

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