



### 19123 Geographic information – Schema for coverage geometry and functions

Definition of a standard conceptual schema for describing the spatial characteristics of coverages.

The goal of this work item is to produce a conceptual schema for the spatial characteristics of coverages. Conceptual schemata describe models of data structures and provide the basis for further standards development. ISO 19107 provides a standard conceptual schema for vector based feature geometry, which supports the description of sets of individual features, each associated with specific attribute types. Coverages are mappings from a spatial domain to attribute values where attribute types are common to all geographic positions within the spatial domain. A spatial domain consists of a (usually infinite) collection of points in a coordinate space. Examples of coverages include rasters, triangulated irregular networks, point coverages, and polygon coverages. Coverages are the prevailing data structures in a number of application areas, such as remote sensing, meteorology, and bathymetric, elevation, soil, and vegetation mapping. This work item will satisfy in part the new work identified in PDTR 16569 on imagery and gridded data.

A standardized conceptual schema for coverage geometry will increase the ability of geographic information to be shared among applications. The schema will be used by geographic information system and software developers and users of geographic information to provide consistently understandable spatial data structures.

This project will be conducted in cooperation with the Open GIS Consortium (OGC). Part 6 of the OGC Abstract Specification: The Coverage Type and its Subtypes (OGC 98-106R2) will be used as the base document. Work can begin immediately; completion will be necessary to support the final development of other geographic information standards.

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	

For further information on this standard and its implementation, please contact ISO/TC 211 secretariat via [www.isotc211.org](http://www.isotc211.org).