

Mapping the World of Standards

The ICA Spatial Data Standards Commission, active since 1991, is one of ICA's most productive commissions. It has addressed a number of specific issues since its formation, including transfer formats, national standards and metadata. Its most recent publication is the book *World Spatial Metadata Standards* (Elsevier 2005, ed. H. Moellering, ISBN: 0-08-043949-7).

In collating this book the Commission has developed an exhaustive set of scientific and technical characteristics by which every spatial metadata standard in the world can be assessed and understood. It has also addressed profiles, operational subsets of a main metadata standard usually applied to a specific thematic spatial data subset such as satellite imagery, geology, biology and demography.

Every facet of the metadata characterisation process had to be completely understood so that the characteristics could be specified and understood by later users. Thus Commission members devoted three years to assessing their own national/international metadata standard and the standards of other organisations in order to ascertain how most effectively to specify these scientific and technical characteristics. The characteristics were also field-tested.

The result is an exhaustive, internationally agreed set of twelve broad primary-level characteristics, along with 58 secondary and more than 278 tertiary characteristics. Also included are Obligation Parameters specifying whether a characteristic is Mandatory, Conditional or Optional. No single national or international standard possesses all of these characteristics, but they have been specified and tested to facilitate understanding of individual metadata standards, and to assist in comparison.

This book represents many years of work, with more than fifty authors throughout the world analysing each spatial metadata standard in its native language. In addition to an explanation of the meaning and definitions of metadata terms and characteristics used in the book, a set of regional summary chapters provide help for the reader in understanding the standards milieu for each continent. The largest part of the book contains 22 chapters, each written by an active Commission member and offering an assessment of every major national and international spatial metadata standard in the world. Each also contains representative subject-matter profiles derived from a major standard. There is a large graphical matrix presenting these 22 spatial metadata standards by seventy of the most important characteristics. This table is an ideal start for any process of standards evaluation.

It should be noted that this book has been purposely designed to serve as a companion working volume to the Commission's 1997 book, *Spatial Data Transfer Standards* (Pergamon, eds. H. Moellering & R. Hogan, ISBN: 0-08-042433-3).

More information on the new book and on the work of the ICA Standards Commission can be found at the public website: <http://ncl.sbs.ohio-state.edu/ica>.