

**12<sup>th</sup> CHRIS MEETING**  
**Valparaiso, Chile, 23-25 October 2000**

**Report on Activities of the**  
**ICA SPATIAL DATA STANDARDS COMMISSION**  
*(by Michel Huet, IHB)*

The ICA Spatial Data Standards Commission held its 2000 Summer Meeting on 5-9 June 2000 at the International Hydrographic Bureau, Monaco, under the Chairmanship of Prof. Harold Moelling, State University of Ohio, USA. The thirteen attendees, from Czech Republic, Denmark, Germany, Israel, Netherlands, Russian Federation, South Africa, USA and the IHB, were welcomed by RAdm Giuseppe Angrisano, IHB President, who stated that the IHB was most pleased to host for the first time an ICA Commission Meeting and that the work of this Commission, in regard to Metadata Standards as well as Spatial Data Infrastructure (SDI), was of particular interest to the IHO. The main points of the Meeting are summarised below.

**Metadata Standards.** Since 1996, the Commission has undertaken a global study of existing Metadata Standards, at national, regional and international level. First, a set of characteristics enabling the assessment of Metadata Standards was established. Then an inventory of all such standards in force worldwide was carried out, with particular mention of the Metadata Standard developed by the International Organisation for Standards (ISO/TC211). Finally, every standard has been assessed against the agreed characteristics.

The results of the Commission work will be contained in an ICA Metadata Book which has been structured as follows:

- Part I - Introduction to World Spatial Metadata Standards;
- Part II - Regional Metadata Summaries (at least: Europe, N. America, Asia / Pacific, Africa & Middle East, and ISO/TC211);
- Part III – Scientific and Technical Metadata Characteristics;
- Part IV - Assessments and Full Descriptions of Metadata Standards (at least: Australia & New Zealand, Canada, China, Denmark, Finland, Hungary, Israel, Japan, Rep. of Korea, Netherlands, Russia, South Africa, Spain, Sweden, USA, CEN/TC287 and ISO/TC211); and
- Part V – Crosstable (between Metadata Standards and a selection of the major characteristics).

Several chapters of the book were reviewed and finalised by the Meeting. It was agreed that the remaining work on this book would be completed by correspondence before the end of July 2000, except for Part V which cannot be finalised until all other chapters are finished. The most important section of the book will be Part IV where description of each Metadata Standard should take 10-15 pages. Publication of the ICA Metadata Book is expected in 2001.

**Spatial Data Infrastructure (SDI).** At the 1999 ICA Conference (Ottawa, Canada), a new item on SDI was included in the Terms of Reference for the Commission, as follows:

*To plan a new task on the Spatial Data Infrastructure (SDI) working in the areas of science, technology and standards, at the Global, Regional and National levels, and to participate at the scientific level in several organisations active in that area. This work will be closely co-ordinated with the ICA Executive Committee.*

However, the Commission is aware of developments on this issue by other organisations, in particular the Global Spatial Data Infrastructure (GSDI) and it has been decided that the Commission must do something distinctive, scientific, and that is not duplicated elsewhere. A white paper on SDI was prepared by a sub-group of the Commission, which listed a number of topics that could possibly be addressed by the Commission. In regard to GSDI, the following was noted:

- The organisational model recommended for the GSDI is the global umbrella organisation, which brings together regional committees, national committees, and other relevant international institutions e.g. ISO, OGC, ISGM, ISPRS, ICA, etc in the context of principles of flexibility, inclusivity, simplicity and subsidiarity.
- GSDI recommends that the standards for Geomatics/Geographic Information and Services now being developed through ISO/TC211 and the Open GIS Consortium (OGC) be supported, and that participants encourage organisations in their countries to actively participate in the development, implementation and maintenance of these standards and of compatible regional and national profiles.
- GSDI started as a Conference, and seems to be moving towards as an organisation. South Africa is the current Secretariat (Through the next meeting, in Colombia).
- GSDI Technical Working Group is the closest fit to the ICA Standards Commission. This TWG is developing a SDI “Cookbook” which will be made available on their website (<http://www.gsdi.org>).
- Internet Mapping is of high importance to GSDI in meeting their primary goal of “delivering data”.

After discussion, it was agreed that two sub-groups would develop papers for Commission discussion and presentation at the ICA Conference in Beijing, China, August 2001, on the following topics:

1. Publish Descriptions and Assessments of SDIs around the world, at the global, national, and regional levels, giving for each at time of publication: a brief history, their scope, the status, description of the content, funding mechanisms, and contact details.
2. Develop principles for defining the characteristics / concepts of appropriate data sets for SDI applications: truth in labelling, verification / validation / certification of data sets, determining fitness for use for application, and quality for SDI data sets.

Another possible action for the Commission could be to identify and research the gaps, in terms of relevance for SDIs, of the standards being developed by ISO/TC 211 and the OGC. In any case, the commission work should not conflict nor duplicate the GSDI TWG “Cookbook” development. In addition, it was agreed that formal liaison agreements should be initiated, through the ICA Executive Committee, between the ICA Commission on Spatial Data Standards and organisations addressing the research and development of SDIs, like GSDI. The following items, identified in the above white paper, will also be referred to the ICA Executive Committee for further consideration and/or action:

- Develop curricula, educational programs and professional training to build an information resource management capacity for managing digital spatial information libraries;
- Develop alternative strategies for increasing public access to government information, using digital and other emerging dissemination and retrieval technologies as a basis;
- Experiment with collaborative projects that are based on local knowledge and incorporate various types of information to support public awareness and enhance decision-making processes; and
- Develop guidelines for increasing public participation in the identification, creation, use and exchange of relevant spatial information resources to inform community decision making.

The matter of whether this new Commission work on SDI will result in another book or only in paper presentations in appropriate forums, will be resolved later. The next meeting of the Commission will take place in China, 30 July – 3 August 2001, in conjunction with the 2001 ICA Conference.

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