



- ❑ Developing conceptual models of SDIs.
- ❑ Explore research in the area of spatial semantics, ontologies and standards.
- ❑ Representing the ICA as a Category A Liaison to ISO/TC211, *Geographic Information/Geomatics*.

- ❑ On 13 November 2009, in collaboration with SNIT, members of the Commission (Dominique Laurent, Joselyn Robledo Ceballos, Giannina Reyes Gática and Antony Cooper) made presentations in a seminar for cartography students at Universidad Tecnológica Metropolitana del Estado de Chile (UTEM), before the Commission meeting in Santiago, Chile.
- ❑ Full Commission meetings were held at UTEM in Santiago, Chile, on 13 and 14 November 2009; at Wrocław University of Environmental and Life Sciences in Wrocław, Poland, 30 August to 1 September 2010, and at the International Hydrographic Bureau in Monaco, 27 to 29 June 2011.
- ❑ Mini meetings of the Commission were held at several meetings of ISO/TC 211 and at the Global Spatial Data Infrastructure Conference (GSDI-11): 30 October 2007 in Xi'an, China; 28 May 2008 in Copenhagen, Denmark; 4 December 2008 in Tsukuba, Japan; 28 May 2009 in Molde, Norway; 17 June 2009 in Rotterdam, The Netherlands; 4 November 2009 in Québec, Canada; 26 May 2010 in Southampton, United Kingdom; and 8 December 2010 in Canberra, Australia.

Preparing for the seminar at UTEM, 13 November 2009

Commission meeting in Wrocław, 30 August 2010

The high-level UML classes of the enterprise viewpoint of an SDI.

- ❑ Hjelmager J, Moellering H, Cooper AK, Delgado T, Rajabifard A, Rapant P, Danko D, Huet M, Laurent D, Aalders HJGL, Iwaniak A, Abad P, Düren U & Martynenko A, October 2008, “An initial formal model for spatial data infrastructures”, International Journal of Geographical Information Science (IJGIS), Vol 22, No 11&12, pp 1295-1309.
- ❑ Cooper AK, Moellering H, Hjelmager J, Rapant P, Laurent D, Abad P & Danko D, 18 November 2009, “Detailed Services in a Spatial Data Infrastructure from the Computation Viewpoint”, 24th International Cartographic Conference, Santiago, Chile.
- ❑ Cooper AK, Rapant P, Hjelmager J, Laurent D, Iwaniak A, Coetzee S, Moellering H and Düren U, “Extending the formal model of a spatial data infrastructure to include volunteered geographical information”, 25th International Cartographic Conference, Paris, France, 4-8 July 2011.
- ❑ Reports on the Commission’s activities in the ICA News of December 2007, June 2009 and December 2009.
- ❑ Reports of the activities of ISO/TC 211 in the ICA News of December 2007, December 2008 and December 2009.
- ❑ Submitted a liaison report from the ICA to the 25th Plenary of ISO/TC 211, Xi’an, China, 1-2 November 2007. ISO/TC 211 document 211n2349.

A direct benefit of the collaboration in the Commission is that members Serena Coetzee, Antony Cooper and Adam Iwaniak secured a Joint Research Grant from the South Africa/Poland Agreement on Cooperation in Science and Technology to fund the project, “*Volunteered Geographical Information (VGI) for Spatial Data Infrastructures (SDIs) and Geoportals*”.

- ❑ *Commission on Geoinformation Infrastructures and Standards*
- ❑ *Commission sur les infrastructures et les normes de géoinformation*