Report for 2003-2007

The Commission on Education and Training (CET) of the International Cartographic Association is the standing commission designated to help the improvement of cartographic education and training worldwide.

1. Terms of reference (2003-2007)

- To work for the general aims conceived in the ICA Statutes.
- To produce an ICA-sponsored Internet cartography teaching programme (modules), with regional workshops for training the teachers.
- To produce an ICA-sponsored Internet programme for continuing education, with regional workshops for teacher training.
- To support cartography and cartographic education in developing nations by holding seminars in developing nations.
- To promote integration by establishing linkage with the committees on education of sister surveying and mapping disciplines, by producing a list of institutions providing cartography course programmes, and interact as much as possible with other ICA commissions and working groups (organize joint meetings).
- To produce appropriate publications for dissemination of results of the above efforts and publish it in proceedings or on the CET website according to the IOF publication policy.

2. Membership

- **Former chairmen of CET**

1964-1972	Stephane **de Brommer**	*(IGN, France)*
1972-1980	Cor **Koeman**	*(Uniersity Utrecht, The Netherlands)*
1980-1987	Karl-Heinz **Meine**	*(Bodenkartierungsamt, Hannover, Germany)*
1987-1999	Ferjan **Ormeling**	*(University Utrecht, The Netherlands)*
1999-2003	Vladimir S. **Tikunov**	*(M.V.Lomonosov Moscow State University, Russia)*
2003-2007	**Zentai** László	*(Eötvös University, Budapest, Hungary)*

- **Actual membership**

CHAIRMAN
László ZENTAI Department of Cartography, Eötvös University, Budapest, HUNGARY

CO-VICE CHAIRS
David FRASER Department of Geospatial Science, RMIT University Melbourne, AUSTRALIA
Wolfgang MEISSNER (retired in 2006) Dortmund, GERMANY

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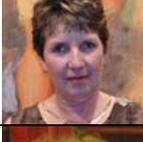
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		Vít VOZENÍLEK Palacký University, Olomouc, CZECH REPUBLIC
		Liu YAOLIN School of Resource & Environmental Science, Wuhan University CHINA

CORRESPONDING MEMBERS

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		Marion WERNER Institute of Cartography, Swiss Federal Institute of Technology (ETH) the represented country is GERMANY

3. Main activities

- *Development of the ICA sponsored Internet Cartography Teaching Programme*
  The idea of a web course on cartography was conceived by Prof. Ferjan Ormeling (ICA Secretary-General, 2003-2007), who was the chairman of the commission between 1987 and 1999. In the previous commission period the work on preparation of structure of the training course was carried out (chairman Vladimir Tikunov). According to the original plans, the proposed programme provides modules on cartography that can be delivered to remote locations; can be used to update existing courses; can be used as alternative delivery in existing courses; and that provides an international standard for cartography courses. The programme is aimed at encouraging individuals from around the world to be trained and educated in the mapping sciences, thus enhancing their ability to provide an efficient and effective service to their country, community and employer.
  A number of meetings and informal discussions have seen significant conceptual changes introduced so that the course could become a reality. Expectations of the voluntary ICA working team have been amended and a more workable arrangement has been worked out which takes into account the efforts of those who have already developed on-line resources.
  The following views have influenced the re-direction of the project:
    - It is not possible for members of the CET to produce, or even gather, all the modules of high quality into a form suitable as an on-line BSc Cartography programme.
    - It would require a massive effort over an extended period for the CET members to attend to all the tasks required to maintain such a programme.
    - Existing providers of on-line programmes in cartography were concerned that the ICA programme would compete with their offerings.
    - It was suggested that the ICA could provide accreditation of suitable on-line providers (universities).
    - Accredited providers would earn the right to use the ICA accreditation in their marketing material.

  The first stage (version 1) is available on the website. The primary aim of this version is to establish a presence on the website. No attempt has been made at this stage to integrate the modules beyond grouping them under generic headings. Modules will vary in design and content depth. In most cases this website will provide the user with a pathway to existing resources developed and managed by other providers.
  One primary task associated with future versions is to provide self assessment tasks for each of the modules that have been created to a common set of standards.
  The initial set of on-line modules and printed resources has been compiled from the following sources: Swiss Virtual Campus, The University of Melbourne, International Cartographic Association, ESRI, ICA - hardcopy books, test modules.
  One of the original sample modules (which were intentionally created for the CET course from an existing teaching material) has been partly re-constructed to a real webcourse by the author (Ferjan Ormeling).

- *Cartography courses worldwide*
  The Commission has a project to continuously monitor the cartography courses in higher education all over the world. Analyzing this collection can give an impression

of the diversity of different curricula, which can make it difficult to compare the courses offered in the countries.

Whereas educational systems are primarily the responsibility of governments, the educational structures and content are that of higher education institutions. As a result of the Bologna Declaration, the educational systems in most of the European countries are either in the process of reforming or the transformation has just been finished. This is the direct effect of the political decision to converge the national systems in Europe. The full and regularly updated list is available on the commission website.

- *New opportunities for the collaborative work:*
    - o Improved website (contact details of members, information on activities)
    - o Internal mailing list
    - o Newsletter
    - o Connection to sister societies

4. Meetings, other activities

ICA Executive Commission Meeting with Commission Chairs
Prague (Czech Republic), 24-25 January 2004

Seminar on Cartographic Education and Training,
Vilnius (Lithuania), 28-29 June 2004
(together with the Commission on Theoretical Cartography) – CET yearly meeting

Joint ICA Commissions Seminar
"Internet-Based Cartographic Teaching and Learning: Atlases, Map Use, and Visual Analytics"
Madrid (Spain), 6-8 July 2005
(together with Commission on Cartography and Children, Commission on National and Regional Atlases, Commission on Maps and the Internet, Commission on Visualization and Virtual Environments) – the Seminar was organized and the proceeding was edited by CET.

CET meeting – ICC 2005
A Coruña (Spain), 14 July 2005
There were 5 sessions on education and training with 14 oral presentations on ICC 2005.

FIG eGovernance workshop: Knowledge Management and eLearning
Budapest (Hungary), 28 April 2006
The CET represented itself with a presentation on ICA CET activities: Development of the ICA-sponsored Internet Cartography Teaching Programme.

Digital approaches to cartographic heritage workshop
Thessaloniki (Greece), 18-19 May 2006
CET has sponsored the workshop organized by the ICA Working Group on Digital Technologies in Cartographic Heritage together with some other ICA Commissions.

InterCarto-InterGIS Conference
Berlin (Germany), 29 August 2006
CET yearly meeting

Berlin Colloqium
Berlin (Germany), 3-4 August 2007
Presentation of CET activities.

5. Future of CET

The General Assembly in Moscow will vote on the commission chairs and the terms of reference for the period 2007-2001.
David Fraser (Australia) is nominated for the commission chair. He was not only one of the co-vice chairs of the commission, but he was also the co-ordinator of the most important CET project, the Internet Cartography Teaching Programme.
The proposed Terms of Reference:
  o To work for the general aims conceived in the ICA Statutes.
  o To develop the existing ICA-sponsored Internet cartography teaching programme (modules), with regional workshops for training the teachers.
  o To produce an ICA-sponsored Internet programme for continuing professional development, with regional workshops for training the teachers.
  o To support cartography and cartographic education in developing nations by holding seminars in these nations.
  o To promote integration by establishing linkage with the committees on education of sister surveying and mapping disciplines, by maintaining the list of institutions providing cartography course programmes, and interact as much as possible with other ICA commissions and working groups (organize joint meetings).
  o To produce appropriate publications for dissemination of results of the above efforts and publish it in proceedings or on the CET website according to the IOF publication policy.
  o To promote joint project cooperation between participating nations represented on the commission.
  o To contribute to international forums where applicable.
  o To develop mapping awareness competitions.
  o To investigate the role of emerging technologies for use in education and training.

Budapest, 25 July 2007

László Zentai
Chairman of the Commission on Education and Training