



(From left) Hasidah Baharuddin, Dr Teng Chee Hua, Prof Temenoujka Bandrova, Prof Milan Konečný, Hasan Jamil, Mohamad Kamali Adimin, Hj Ismail Mohd Yusoff at Special Seminar in Kuala Lumpur, Malaysia | Photograph courtesy of Milan Konečný

Participation at ICC 2013, Dresden, Germany

The CCEW&CM, in collaboration with the ICC 2013 Local Organizing Committee, organized morning and afternoon paper sessions devoted to early warning and crisis management on 30 August 2013. Milan Konečný opened the morning session with a brief introduction to the Commission's research agenda. It was followed by four papers:

- *Glacier Lake Outburst Floods, a Worldwide Threat for Alpine Areas* by M Buchroithner, J Peters and T Bolch, Austria / Germany
- *Mapping for Crises Management Standards* by T Bandrova and M Konečný, Bulgaria / Czech Republic
- *Cartography in the Communication of Stakeholders in Risk Situations, Disasters and in Civil Protection* by H Kremers, Germany
- *The Emergency Support System: Story of one project* by T. Rezník, Czech Republic

The afternoon session included detailed reports on the past, current and future activities of the Commission and highlighted its Terms of Reference. Both sessions were attended by 85 participants.

Colloquium in Berlin, Germany

In November 2013, the Berlin-Brandenburg branch of the German Cartographic Society organized a Cartographic Colloquium at the Technical University Berlin. Dr Christophe Lienert delivered a paper on *Methods and Applications in the Real-time Mapping*. Activities of our Commission were also discussed.

Workshop in Wuhan, China

The International Workshop of the ICA Commission on Cartography and Geoinformatics in Early Warning and Crisis Management was held in Wuhan, China, 3-5 December 2013 (sres.whu.edu.cn/ICA-Workshop/Home.aspx). The organizing committee was chaired by Prof Yaolin Liu, Vice President of the ICA,

with Milan Konečný, Li Jing and Christophe Lienert helping in the organization of the Workshop.

Two day program, opened by representatives of the Wuhan University, as well as central and local organizations, included several keynote addresses:

- *China Disaster Management System of Systems* by Li Deren, Academician of CAS and CAE
- *Research Agenda for Risk Management in Big Data Environment* by Milan Konečný, Christophe Lienert and Li Jing, CCEW&CM
- *ICT Applications and Real-Time Decision-Making in Earthquake Disaster Emergency Responses and SAR Operations* by Qu Guosheng, Vice President of TIEMS, China
- *Emergency Management with Information Communication Technology* by Victor Bai, President of IAEM Asia, China
- *Natural Disaster Risk Governance in China: Research and Practice* by Liu Lianyou, Director of Key Laboratory of Environment Change and Natural Disaster, MOE, China
- *Flood Monitoring and Risk Analysis Based on Spatial Model Base* by Li Jing, CCEW&CM

The second day featured a Round Table chaired by Milan Konečný, Liu Yaolin and Li Jing. The opening address was delivered by Christophe Lienert on *Real-Time Mapping Agenda*. An in-depth discussion followed with more than 100 attendees, mainly students from China. Papers from the Workshop are published in the Workshop Proceedings, registered with the Web of Science citation service. The Workshop concluded with an excursion to a government institute that employs 3-D approaches to urban planning in the city of Wuhan.

Workshop in Novosibirsk, Russia

The most prominent ICA event at the 10th International Exhibition and Scientific Congress InterExpo GeoSiberia 2014 held in Novosibirsk, Russia, 16-18 April 2014 (see report on p 18), was the 5th International Workshop *Early Warning and Crises Management in the Big Data Era* organized by the ICA CCEW&CM, Siberian State Academy of Geodesy (SSGA) and International Society of Digital Earth (ISDE) in cooperation with International EuroAsian Academy of Science (IEAS), International Society for Photogrammetry and Remote Sensing (ISPRS) and International Federation of Surveyors (FIG).

The main themes discussed at the Workshop were: Big Data Theories and Applications in Early Warning and Crisis Management; Emergency Management Information Systems; Modelling and Simulation Based on Multimedia Data; Information Acquisition and Fusion of Big Data; Analytical Modelling and Simulation; Ubiquitous, Adaptive and Context-based Mapping; Determining and Estimating Future Threats; Foresight, Planning, and Risk Analysis

Integration; and Media Effectiveness Analysis of Crisis Response.

The full day Workshop attracted over 60 participants, mainly university students, and delivered 18 presentations. Some of more prominent papers included:

- *Research Early Warning and Crises Management Agenda in Big Data Era: How to Improve Geoinformatics and Cartography Influence for Better Solutions?* by Milan Konečný
- *Big Data Era: Big Data in Geoinformation Environment* by Iryna Wetzels, Hexagon Geospatial
- *Geoinformation Support for Demographic Risk Studies* by Vladimir S Tikunov, MV Lomonosov Moscow State University, Russia
- *Modelling Tsunami Inundation Sensitivity to Land Use and Structural Elements – Phase I* by Ammatzia Peled and Adi Neuman, University of Haifa, Israel
- *Big Data For Effective Crisis Management* by Stanislav Yu Katsko, SSGA
- *GIS-based Analysis of Possible Flooding in Ho Chi Minh City Territory* by Dmitry V Lisitsky and Nguen An Tai, SSGA

Some papers are published in the InterExpo GeoSiberia 2014 Proceedings edited by Milan Konečný, Dmitry V Lisitsky, SS Dysljuk, AV Dubrovskij and EL Kasjanova.

Participation at GeoForum, Geneva, Switzerland

The Commission was invited to participate in the Geospatial World Forum, Geneva, Switzerland, 5-9 May 2014, organized by Geospatial Media team lead by Sanjay Kumar. Commission members Milan Konečný, Monika Rusnáková, Barbara Gajdošíková, Temenoujka Bandrova prepared a paper on *Discovering of Children Needs and Potentials: Map Support in Emergency Situations*.

Milan Konečný | Chair | ICA Commission on Cartography in Early Warning and Crisis Management | Czech Republic ●

Digital Technologies in Cartographic Heritage

xeee.web.auth.gr/ICA-Heritage/

Strategic Partnership

The European Map Librarians and Map Curators group – Groupe des Cartothécaires – was, until recently, operating within the Association of European Research Libraries (LIBER). At its 19th Conference held at the National and University Library of Slovenia in Ljubljana between 22-24 May 2014, the Group decided to reorganise its structure and work, change its name and join the ICA Commission on Digital Technologies in

Cartographic Heritage. Evangelos Livieratos, Chair of the ICA Commission, participated in the decisive Ljubljana Conference, highlighting the synergies between both groups.

Our Commission received a proposal from the Groupe des Cartothécaires Board to join the Commission with great pleasure. This proposal seemed to be a natural consequence of a long and fruitful collaboration between our respective groups and their members. In addition, the Commission's Terms of Reference encourages and supports close collaboration between our members and map librarians and curators, particularly in Point 2: "Development of methodologies and standards applied on proper two- and three-dimensional digitization of Cartographic Heritage objects, materials and documents", and Point 4: "Digital map libraries and map collections: Archiving, matching, management, networking and accessibility in-situ and in the web".

The Groupe des Cartothécaires, representing Map Librarians and Map Curators from Belgium, Croatia, Czech Republic, Estonia, France, Germany, Hungary, Latvia, Netherlands, Russia, Serbia, Slovenia, Spain, Sweden and the United States, decided to become an international group attracting members from around the globe, including all countries represented in the ICA. They reconsidered and refocused their plans, especially in the area of digital technologies, and changed their name to become the Map and Geoinformation Curator Group, MAGIC in short. They now operate within the ICA Commission on Digital Technologies in Cartographic Heritage, which provides all the possible technical assistance and cooperation and looks forward to organising joint activities in the future.

For information about MAGIC, please contact Carme Montaner (carme.montaner@icc.cat), Renata Šolar (renata.solar@nuk.uni-lj.si) or Evangelos Livieratos (livier@auth.gr).

Institutional Support

A number of institutions are closely following and supporting the work of the Commission by keeping in touch with members, actively participating in the Workshops, and publishing in *e-Perimetron* (www.e-perimetron.org), the web journal on science and technology affined to the history of cartography and maps. The supporting Institutions are:

- Institut Cartogràfic i Geològic de Catalunya, Map Library of Catalonia, Barcelona, Spain
- Università IUAV di Venezia, Sistemi dei Laboratori, CIRCE Laboratorio di fotogrammetria, Venice, Italy
- National Library of Scotland, Map Collections, Edinburgh, United Kingdom
- Eötvös Loránd University, Department of Cartography and Geoinformatics, Budapest, Hungary
- Aristotle University of Thessaloniki, School of Rural and Surveying Engineering, Depart-



The Ljubljana Conference participants of the former Groupe des Cartothécaires in front of the National and University Library of Slovenia | Photograph courtesy of Evangelos Livieratos

ment of Cadastre, Photogrammetry and Cartography, Thessaloniki, Greece

In May 2014, the History Department at the Ionian University in Corfu became the newest supporting institution. Any institution interested in joining is welcome.

Workshop in Budapest

The tradition of the Commission's annual International Workshops *Digital Approaches to Cartographic Heritage* continues in 2014 with the ninth in the series to be held in Budapest, Hungary, 4-5 September. It will be hosted by the National Széchényi Library in cooperation with the Department of Cartography and Geoinformatics, Eötvös Loránd University.

The Workshop sessions address items relating to the Commission's Terms of Reference (2011-2015), such as the concept of cartographic heritage and its multidisciplinary dimension; the transformation of old maps, globes and other cartographic documents into digital form including the critical issue of digitization, and comparison of scanning methods and techniques; state of the art and perspectives of the scanning market; georeferencing and standardization; use of digital techniques for cartographic research, analysis and interpretation of old maps and their geometric and thematic content; testing of analytical processes and visualization; development, management and accessibility of digital map libraries and discoverability by the general public; digital tools to assist networking between map curators, map libraries, archives and collections, as well as in-situ and remote virtual access to cartographic materials; digital support for preservation and restoration of old maps, atlases and globes; the use of ICT, geoinformation and the web for teaching and diffusion of cartographic heritage and maps to the general public. For further information visit the Workshop website at xeee.web.auth.gr/ICA-Heritage/2011_2015/Budapest2014/.

Future Plans

The 10th International Workshop on *Digital Approaches to Cartographic Heritage* will be held at Corfu, the UNESCO protected capital city of the historical island in the Ionian Sea. The Workshop is organized in cooperation with the Ionian University at Corfu in the last week of May 2015.

Evangelos Livieratos | Chair | ICA Commission on Digital Technologies in Cartographic Heritage | Greece ●

Education and Training

lazarus.elte.hu/cet/

Commission Activities

The ICA Commission on Education and Training (CET) took part in significant outreach activity in Wuhan, China, recently in May 2014. As the education commission of ISPRS (ISPRS Commission VI) held its mid-term symposium in Wuhan from 19 to 21 May, the CET considered this an excellent opportunity to engage with ISPRS colleagues and associate an informal CET meeting with the formal structure of Commission VI.

The Chair of the symposium was Prof Jianya Gong, Head of the LIESMARS research unit at Wuhan University, academician of the Chinese Academy of Sciences, and President of ISPRS Commission VI. Prof Gong is a member of CET, and we are grateful to him for his willingness to incorporate ICA activity with the symposium. He was assisted greatly by the outstanding organisational work of his colleague Prof Peng Yue and an excellent team of administrative assistants and keen students. A full programme of keynote speeches, plenary sessions and parallel sessions filled the three days. At the opening, welcomes to ICA were made by ISPRS Secretary General Prof Christian Heipke, and Jun Chen, ISPRS President. Prof Yaolin

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