

# ICA News Nouvelles de l'ACI

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International Cartographic Association

Association Cartographique Internationale



# ICA Executive Committee

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Cover: Entry of the ICC 1997 Children World Map Competition. Theme: Bridging for Friendship, by Liiu Xinjian, 10 years old, China.

# Dispatches

### Editorial

"Self-knowledge comes from knowing other men (Johann Wolfgang von Goethe, 1749-1832)."

This is a thought I agree with, and therefore, taking advantage of today's technology, I 'virtually' interviewed the new ICA president Milan Konecny for him to share with the ICA Newsletter readership his ideas about issues that deserve priority within the ICA, and ways in which ICA can play a more decisive role in global mapping initiatives. A Who's Who in the Executive Committee presents a short biography and research interests of the ICA's seven vice-presidents.

The planning of the ICC 2005 is going extremely well, with the calls for abstracts already issued. The website www.icc2005.org is constantly updated, so colleagues are reminded to periodically check it for the latest information about the conference. This issue includes the ICC 2005 conference themes and deadlines for abstract presentations, as well as information related to the ICA Travel awards and the Barbara Petchenik Children's World Map Competition.

Vice-President Vladimir Tikunov presents some practical steps for the realization of ICA's strategic plan, which resulted from discussions held by the Executive Committee and Commission Chairs at their January 2004 meeting in Prague.

As usual, Executive Committee Members and Commission Chairs report on recent activities and forthcoming commissions' meetings. The 'special feature' section focuses on the history of cartography, with an article by Ferjan Ormeling on the Dutch contribution to the cartography of the Americas (16th – 18th centuries).

Wishing a good summer break to our colleagues of the northern hemisphere, I continue to look forward to receiving your contributions, which are the essence of this Newsletter.

Graciela Metternicht Editor

### Congratulations

István Klinghammer, the Honorary member of the ICA (Rector of the Eötvös Loránd University, Budapest) became a member of the Hungarian Academy of Sciences. He is the first cartographer ever in Hungary in the national Academy.



### **Obituaries**

### Dr. Christoph Brandenberger

Dr. Christoph Brandenberger, Lecturer and long-time associate at the Institute of Cartography at ETH Zürich, passed away on January 14, 2004, after a long and severe illness.

Christoph Brandenberger was born on May 23, 1947 in Olten, Switzerland. After college, he studied surveying

engineer at the Swiss Federal Institute of Technology (ETH) Zurich and graduated with a thesis in cartography in 1972. After four years of work in a surveying office to become a chartered surveyor, he joined the Institute of Cartography at ETH under its director Prof. Ernst Spiess. Some years before, the Institute had installed one of the most advanced CAD systems by Applicon, including a Ferranti photoplotter. Christoph Brandenberger was part of the team dealing with the maintenance, programming and research using the system. He produced numerous map symbol layers and graticules for the ICAO map of Switzerland and the Swiss School Atlas.

The practical work on the School Atlas led him to the theme for his PhD dissertation "Co-ordinate Transformation for Digital Cartographic Data Using Lagrange and Spline-Interpolation". The method allows an efficient workflow to transform different map sources into one common projection. The work was widely known and cited in the international cartographic community. In a further publication, Christoph Brandenberger edited a compendium with different aspects and projections for world maps. The resulting software packages were later transferred to the follow-up system (Intergraph); today, they are also accessible on the web-site of the institute.

Christoph Brandenberger was a regular participant at the International Cartographic Conferences. He liked to travel and to present his work among the international colleagues. He was very happy to initiate the new ICA Commission on Map Projections at the last ICC in Durban.

We have lost a very warm-hearted, decent and helpful friend and professional colleague and we express our sincere condolences to his wife and his two daughters. We know that Christoph Brandenberger's personality and lifework will have an important influence even across the border of our profession.

Lorenz Hurni, ETH Zurich

### **Professor Oleg A Evteev**

Oleg A. Evteev, a well-known Russian geographer and cartographer passed away on the 18th December 2003. All his scientific and educational activities passed within the precincts of the Moscow State University, from which he graduated in 1950 with the specialty 'geographer-cartographer'.



'geographer-cartographer'.Oleg's areas of scientific interests were very wide.His Ph.D. thesis, defended in 1953, was devoted to the

history of cartography. The book, written on its base, hasn't lost scientific interest yet.

Widely known are the works of Oleg Evteev on population mapping. Amongst other achievements, he collaborated in the production of the firs map of population of the USSR (scale 1: 2,500,000), which showed real patterns of population's distribution and had fixed allocation of all settlements. This map was widely used

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### (From pg 1)

in researches on geography of population, and served as a tool for the development of a special line, that is the mapping of types of population's distribution.

Later on, he cooperated with other geographers to produce the "Population and types of settlements and distribution in USSR" (scale 1: 4,000,000). Thanks to his theoretical and practical works, Oleg Evteev became a leader of the school of population's mapping in USSR. Researches on complex mapping, based on works on complex regional atlases and maps for high school (1950s-1980s), occupied a special place in his scientific activity. After the death of Konstantin A. Salitshchev, Oleg Evteev headed works on creating pioneering series of maps for high school. These maps have been widely used not only for education, but for scientific purposes too.

Learner and follower of Salitshchev, Oleg Evteev has made his own contribution on development of ideas about geographical cartography. He presented reports at international conferences many times, and did everything in his power to promote the ideas of Russian cartography abroad.

During recent years his scientific interests led him to the area of ecological cartography, which is very relevant for our country nowadays. The monograph entitled "Complex ecological mapping" (1997), presenting original Ecology-geographical and Demo-ecological maps of Russia (scale 1: 4,000,000), as well as the first "Ecological Atlas of Russia" (2002) were published under his supervision.

Educational work took an important place in Professor Evteev's life. He taught a course on socio-economic mapping for many years. In 1999, the textbook "Projection and compilation of socio-economic maps", that incorporated Evteev's ideas on geographical cartography, with reference to socio-economic mapping, was published. From 1968 to 1991 Oleg Evteev was a member of the ICA Commission on Education. He brought up whole cohort of followers; many of them becoming prominent scientists.

Oleg Evteev was head of Laboratory of Complex Mapping of the Moscow State University for 25 years. Under his direction, the Laboratory became one of the leading centers of thematic mapping in Russia, where many epochal for our cartography works were made.

Oleg Evteev is author of more than 200 scientific papers, published not only in Russia, but in Germany, Hungary and USA. He was also honorary member of the National Committee of Cartographers, honorary member of the Russian Geographical Society, guiding the Commission of Cartography of the Moscow division for many years.

In memory of colleagues, learners and friends, Oleg Evteev stays as a talented scientist and pedagogue, wonderful hearty man.

Vladimir Tikunov

### Meeting Milan Konecny, ICA President 2003-2007

A new President and Vice-Presidents were elected at the 12th General Assembly of the International Cartographic Association, held last August in Durban. Their names and contact details were briefly introduced in the last issue of the ICA Newsletter, and therefore, for this issue I have prepared an interview to Prof Dr Milan Konecny, the incoming ICA President, for the Newsletter's readers to know more about him and his ideas on the present and future of Cartography and the ICA. With the view in mind, I have also prepared a Who'sWho within the Executive Committee. I hope you enjoy the reading.

The Editor



Associate Professor Dr Milan Konecny is President of the ICA. He is active in spatial global projects such as GSDI, Global Mapping, Digital Earth and the United Nations Global Database. He participated in the World Summit on Sustainable Development 2002 in Johannesburg and a serving expert in the European INSPIRE initiative. Dr Konecny is an associate professor of Cartography and Geoinformatics teaching at the Institute of Geography, Masaryk University, Brno, Czech Republic and Director of the Laboratory on Geoinformatics and Cartography also in the Czech Republic. His research interests are in GI policy, digital cartography, GIS, mobile information and implementation of GI under the conditions of the Global Information Society. (Source: GIM International, May 2004).

### What is the kind of cartography you have been dealing with, and you are currently dealing with in your professional career?

It is digital cartography based on the Spatial Data Infrastructure (SDI). I see new horizons for cartography either in connection to SDIs or by application of the concepts of electronic atlases, which were developed in ICA several years ago. To realize it we need data infrastructures that could be visualized. I am also devoted to national atlas design in my country, and I invest a lot of energy on the formulation of the role of cartography and geographic information (GI) in the Information/Knowledge-based society.

# What is and has been your involvement with international societies related to cartography and/or geoinformation.

From the first days of my presidency I started to communicate with our sister organisations: ISPRS, FIG, IAG, IGU and IHO with which I signed the first Memorandum of Understanding. Since my time as vice-president, on behalf of ICA, I am actively involved into cooperation with several global spatial data projects, especially Global Mapping, Global Spatial Data Infrastructure (GSDI) and Digital Earth. There are topics common to all of them but also differences. I am investigating and propagating a proactive role of cartography in the realisation of these projects. Reference data, quality of data and mainly their visualisation are some of the key topics. SDIs are mainly about availability and access to the data under certain legislation

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rules, but cartography is also about visualisation. As a representative of the Czech Republic, I also participate in the new European legislation initiative INSPIRE (Infrastructure for Spatial Information in Europe) which enhances user approach towards data and develops new approaches to data using new kind of evaluation such as Impact Analyses.

On behalf of ICA I also participated in the World Summit for Sustainable Development (WSSD 2002) in Johannesburg and others United Nations activities: Early Warning II in Bonn, Global Navigation and Satellite Systems (GNS) in Vienna, being also part of selected FAO activities focused on SDI development.

#### What has been your involvement with ICA up to now?

Since the beginning of the 1980s I worked in several ICA commissions: education, map use, standardisation, theory of cartography, as well as organised several meetings for ICA or large international conferences with the participation of ICA (the last one was the Digital Earth symposium in Brno, Czech Republic) and in the last years I have concentrated on enhancing the role of cartography in connection to globally oriented projects, and clarifying the specific role of cartography within the GI world community.

### In your view, what is the role ICA can, or should, play in the international/global initiatives in the mapping field? How should we realize to have some decisive input there?

To participate in the main worldwide and regional /local initiatives means to be prepared and informed. A big motivation, perhaps ambitious, is to be part of the global efforts towards sustainable development; to define our role in it; and to prepare our members for the fulfilment of the tasks needed to this end by means of appropriate cartographic methods and tools. For instance, in connection with technological tools like GIS and GPS, cartography can finally realize one of its old dreams about being cognitive and individual. It could help solving many existing and potential problems with the support of newest technologies, delivering higher quality results. Moreover, the way people like decisive inputs means to know not only technology but also understand the wide consequences of the problems to be solved. For example, in the field of early warning the use of maps is requested at high political and management levels, but frequently these maps are not standardized, they lack legends for easy comparison amongst maps, and their content and knowledge are difficult to include in wider processes. Cartography has to be able to define its own position in the Information/Knowledge based society, adapt cartographic skills and knowledge to new conditions and come forward with its own solutions. It is very important in National Mapping Organisations or agencies to be oriented towards users, offering new digital cartographic products or user-friendly applications, often in cooperation with the private sector. ICA has several successful commissions like Cartographic Visualisation, Spatial Data Standards, Maps and the Internet, Incremental Updating, Cartographic Generalisation and the newly Ubiquitous mapping, which offer solutions for the everyday, let me say "cartographic life".

# What do you see as the most important conceptual or technological developments within Cartography over the coming 10 years?

It is the concept of sustainable development, global projects and their usage at local and regional levels, with the idea to develop a global sustainable information/knowledge society. It means improving the so far poor cooperation between information technologies and ecologically motivated requests to solve problems of the contemporary World (we have separate summits on Sustainable Development and Information Society). We have to have visions about what to do with our data and how to use our cartographic methods and skills to solve contemporary humankind problems. It is absolutely necessary to enhance cartographic approaches, complementing them with GIS, GPS and others, rather than changing them. Such techniques have to be integrated, as each of them is unique on their own way.

Technological development in Cartography requires integration of contemporary tools. For instance, I expect a very important influence of the EU Galileo project and its integration with existing projects Navstar, Glonass, etc. on the cartographic discipline. I also expect important influences of ambient technologies in cartography, and vice versa; that cartography in connection with SDIs will offer interesting solutions for environmental and others applications.

# The world is changing quite rapidly in many ways. How should cartographic education adapt to these changes?

It is crucial and nowadays a request. We have to be able to teach our users from all generations including fundamental school pupils how to analyse and truly interpret cartographic information in an attractive way. Our Secretary General, Ferjan Ormeling, several years ago said that school electronic atlases should be so attractive as computer games. We have now animated maps, interactive maps that we can combine several types of information like RS images, photogrammetric products or images of the different places together, but these combinations are not yet attractive enough. We have to ask why? One of the reasons is the inability to prepare interesting contents. We need technology, but technology by itself is not enough. I also see a big chance for cartographic education in the e-oriented processes. Many European countries are undergoing a process of installing Internet in every school. What a teacher should show to his pupils or students on the Internet? How will our cartographic inputs and outputs look like? Will we be able to prepare our students and users to create their own maps in Internet and a Web environment? We are working on it and I believe with good results. At the recent Map India 2004, I a saw very interesting film prepared by the Centre for Spatial Database Management and Solutions in New Delhi, showing how to map the surroundings of a school with assistance of new technologies (GPS, GIS, PDA). Another trend is to be able to create user familiar applications based on various SDIs or digital geographic databases or environmental databases. It is also important to teach our students how to create simple maps or to analyze data and come out with true results. I enhance the word "true" because many contemporary maps prepared by users uneducated in cartography are simply incorrect, and sometimes distort reality in a significant way.

### What you see as ICA priorities, or most relevant issues, in the next 10 years?

These are formulated in the ICA Strategic Plan, which was discussed under the leadership of the former president Bengt Rysted, with support of important ICA members like Michael Wood, David Rhind and Joel Morrison and wide cartographic community. We are feeling as the world authoritative body for cartography and we want operate in four fields: science, education, society and professional life. The ICA Executive Committee (EC) would like to integrate interests of our members, ranging from researchers to producers of the maps. We have also to discuss a new organisational scheme. There are strong requests for changing the number of vice-presidents, and may be to professionalize some positions in ICA as permanent ones. However, we should not expect too radical changes, as big organisations like ICA need time for decisions and the adoption of new approaches. One of the first discussions in front of us is about the name and subtitle of ICA, which begun before and through the Durban International Cartographic Conference. The subtitle (society or association for...) geographic information science or only geographic information has attracted many friends as well as strong opponents.

#### Is the current organisational structure of ICA still appropriate, considering the requirements of a present world in which globalisation, Internet access, and professional flexibility are assuming a key role?

The Executive Committee is trying to prepare and realize changes and make the organisation more dynamic. In our first meeting, which took place in Prague in January 2004, we begun implementing ideas of the Strategic Plan and requests forwarded by our members. We named members of the EC for roles integrating interests of ICA in the abovementioned fields of our activities, from science to professional life. Over a short period of time we had two common fruitful meetings with commission chairs. Successful implementation of our plans depends on the people, from president and members of Executive Committee to Commission Chairs and vice-chairs, as well as commission

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members. ICA is an organisation of enthusiastic people, but if someone compromises to serve the ICA we need to control it, and ask our representatives for continuous activities. I see as our urgent task the practical implementation of these ideas, and I will inform our members about successes or failures accompanying this effort. Another important aspect of our work is to be visible on the international scene and everyday life. Recently, I made an agreement with the well-known GIM International Magazine to open an ICA column in every issue, so that we can disseminate best practices of the ICA. ICA will also take patronage of the "Tourmap" part of the Tourfilm festival to be held in Karlovy Vary, in the Czech Republic. Furthermore, we are also discussing with appropriate partners the opening of some new activities similar to the Barbara Petchenik Childrens Map competition in new fields of cartographic activities.

Members of the ICA EC are trying to be closer to our national members. As such, I recently participated in the Czech and Slovak Cartographic Conference in Banska Bystrica, meeting German cartographers and granting Prof. Ulrich Freitag an ICA Award in Berlin; and in the National Cartographic Congress of Brazil, held in Belo Horizonte. I also assisted to the Map India 2004 (New Delhi), the Global Spatial Data Infrastructure meeting in Bangalore, and a cartographic meeting in Krakow (including the handling of ICA awards to Prof. Andrzej Ciolkosz in Varsaw). Furthermore, I visited the Pan American Institute of Geography and History (PAIGH) headquarters in Mexico City, and participated in a meeting of the ICA Commission on Spatial Data and Standards in La Habana, where I also gave a keynote address at the Geomatica conference. Likewise, past ICA president Rystedt participated in the Indian Cartographic Congress and Secretary General Ormeling represented ICA at the Geographic Name event hosted by U.N. in New York. Under the leadership of Graciela Metternicht, vice-Chair of the ICA Commission on Mapping from Satellite imagery, ICA realized a successful workshop for mid-level management staff of the Land Development Department of Thailand. We can see also several multicontinental activities, especially Commissions of Maps and the Internet, Standardisation and Incremental Updating, and other events such as Ubiquitous Mapping are coming. Some commissions have a lesser degree of activity. EC is prepared to undertake changes in non-active commissions sooner than at the time of the next General Assembly. On the other hand active commissions have our full support.

### It has been frequently said that it's difficult to attract young, dynamic people into ICA. How do intend to interest young professionals into ICA?

There are several, varied ways. Researchers of several ICA Commissions are asking for more topics to help them in research development, NMOs are building blocks of ICA together with national cartographic associations, who wish to share information from application fields of cartography, are also open to young professionals. EC is very flexible to implement requested changes or to begin new working groups, but our tendency is to limit the amount of commissions. Working Groups created within commission can offer new topics to interested members. The most fundamental task that has to be solved is to speed up exchange of information and best practices between our members, helping them to be highly competitive in their countries and/or continents.

### A final comment that you would like to share with the ICA Newsletter readership....

The world is changing and ICA has to respond to it. New concepts and tasks especially connected with sustainable development problems are emerging. Many processes are global with local influence. Cartography is a science, may be the oldest one, which was able to accept and assimilate new technological but also conceptual trends through centuries. I have no doubts that cartography will enhance its influence in the SDIs, and new technologies world, helping users of spatial information to understand them through cartographically based visualisation using convenient tools such as Internet. I everyday think about ways to help ICA members to be on top of developments, and to improve their chances in the public and private business activities, and on how to offer the results of our cartographic community to the wider IT community. I wish good luck to all of us, every cartographer over the World, and I also wish all the best to a world famous, skilled and knowledgeable organisation as the International Cartographic Association.

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### Who's Who in the ICA Executive Committee

### William Cartwright, ICA Vice-President, Australia

William Cartwright is an Associate Professor of Cartography and Geographical Visualization in the School of Mathematical and Geospatial Sciences at RMIT University, Melbourne, Australia, where he specialises in the application of New Media technologies to Cartography. He joined the University after spending a number of



years in both the government and private sectors of the mapping industry. He has held positions as National President and Councillor of the Mapping Sciences Institute, Australia; he is a member of Editorial Board and Editor for the Pacific Rim for The Cartographic Journal and a member of the Editorial Board for Transactions in GIS. William holds a Bachelor of Applied Science, a Diploma of Applied Science, four Graduate Diplomas: in Education (Tertiary), Media Studies, Information and Communications Technology and Graphic Communication; a Doctor of Philosophy; and a Doctor of Education.

He lectures in both graduate and undergraduate programmes and currently supervises three Master of Applied Science (Research) candidates and five PhD candidates. All candidates are undertaking research into areas that apply New Media to geography and geographical visualization. The focus of his research and teaching has been on the application of New Media to the visualisation of geographical information and the development of different tools and methods for (geo)information delivery and use.

William has worked on ICA activities with various Commissions and Working Groups, being currently member of the Commission on Visualization and Virtual Environments; and Maps and the Internet. He served as member of the ICA Commissions on New Technology (1991-1995); Map and Spatial Data Use (1989-1991); being also convenor of the ICA Working Group on Multimedia (1989–1991); and co-convenor of the ICA Commission on Maps and the Internet workshop on mapping products for the Web, held in Havana, Cuba (2002), the Seminar on Teaching Animated Cartography and a joint programme of the ICA Commission on Map and Spatial Data Use, the ICA Working Group on Multimedia, the ICA Working Group on Temporal Aspects of GIS and the ICA Commission on Education and Training, Madrid, Spain, 1995. Dr Cartwright has also participated in an international survey on the marketing of Digital Spatial Data on behalf of the ICA Working Group on the Marketing of Spatial Data, 1990-1991.

### Kirsi Virrantaus, Vice-President, Finland

Professor Kirsi Virrantaus is Head of the Institute of Cartography and Geoinformatics, and professor of cartography and GIS at the Department of Surveying at Helsinki University of Technology (HUT), where she also leads the curriculum of Cartography and GIS.



Dr Virrantaous graduated in 1977 as an architect and then made her licentiate thesis on the use of GIS in land use planning. In 1984, she completed her PhD at the Department of Surveying, Helsinki University of Technology on the topic "On semantic approach to the design of urban land information systems". She has worked in various public and private enterprises since 1982 mainly as a systems (GIS) designer or GIS expert.

Since 1988 she has participated in several GIS projects mostly as GIS-expert consulting in preparing and evaluating call for tenders for

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municipalities, giving statements and evaluating GIS strategies. Most important projects during the latest years are the evaluation of GIS strategy of Espoo City and acting as GIS expert in the Finnish Land Parcel GIS -project of the Ministry of Agriculture. She has also experience in working abroad and in foreign projects: during 79-80 she worked as a research fellow at Delft University of Technology and also took part in the Cairo underground map development project with Soil and Water in 1987.

Professor Virrantaus has also worked as an EU evaluator in the GI 2000 projects. On the academic sector, she filled the GI professorships at Luleå Technical University as well as in Uppsala University.

Professor Virrantaus is serving as ICA Vice-President for a second term, in addition to serving as Vice Chair of the Education Commission (1993-1998) of the International Federation of Surveyors (FIG); Co-Chair of the Working Group 1 (1992-1996), and member of Cartography Commission of the International Federation of Photogrammetry and Remote Sensing, ISPRS; and being a member of the ICA Commissions on "Map and Spatial Data Use" and "Gender and Cartography". Professor Virrantaus has been appointed Chair of the newly created ICA Commission on "Uncertain and imprecise geographic information", at the last ICA General Assembly.

### Haggai Nyapola, ICA Vice-President, Kenya

Since 1999, Haggai Nyapola is the Director of Surveys of Kenya. In addition to being elected ICA Vice-President, Mr Nyapola is also the Chair of the newly created ICA Commission on Mapping Africa for Africa, serving also as Chairman of the Land Surveyors Board of Kenya; and the East African land Survey Examination Board.

Examination Board. As member of the International Steering Committee for Global Mapping (ISCGM), and technical member of Regional Centre for Mapping for Resources Development, he has developed a keen interest in the development of the Global Map initiative in Kenya the sub-Saharan countries. In a recent paper Haggai reviews the progress in the development of Global Map in Kenya, addressing the difficulties developing countries in Africa, particularly sub-saharan countries, experience undertaking this initiative, looking also into the priority settings of most of these countries which have hindered many of these countries to participate fully in the development of Global Map initiative. To this end, Haggai has analysed different ways to bring on board these countries within the sub-saharan region of Africa, to participate effectively in the development of Global Map relevant to their individual countries as well as the activities of the ISCGM.

Haggai Nyapola was one of the keynote speakers of the opening ceremony of the 21st International Cartographic Conference, held in Durban on August 2003. His presentation entitled 'Towards the entrenchment of the spatial data infrastructures in Africa' addressed some of the weaknesses in the development of geo-spatial information in many of the African countries.

### Vladimir Sergeevich Tikunov, ICA Vice-President, Russia

Vladimir is full Professor at the Department of Cartography and Geoinformatics, and Head of Laboratory of Integrated Mapping and Centre for Sustainable Development of Territories, of the Faculty of Geography, Moscow State University. Professor Tikunov is a specialist of cartography



and geoinformatics. He published more than 360 articles including 11 monographs and textbooks in Russia and abroad (Australia, Belgium, Canada, China, Czechoslovakia, Czech Republic, Denmark, England, France, Germany, Hong Kong, Hungary, India, Italy, Japan, S. Korea, Mexico, The Netherlands, New Zealand, Poland, Portugal, Singapore, Slovakia, Spain, Taiwan, UAE, and the USA in Russian, English, French, German, Italian, Armenian, Czech, Slovak, Polish, Korean, Chinese, Arabic and Japanese languages. His current interests are mathematical-cartographic model-ing, geoinformatics, applied mapping, and sustainable development. He delivered lectures in the universities of Brno (Czechoslovakia), Irkutsk (USSR), Buffalo and Santa Barbara (USA), Wageningen and Enshede (The Netherlands), Cambridge (UK), Johannesburg (South Africa), Guangzhou (China), Santiago de Chile (Chile), Havana (Cuba), Sevastopol (Ukraine), Yaroslavl (Russia) and Penza (Russia).

Professor Tikunov is an academician of Russian Academy of Natural Sciences and the International Eurasian Academy of Sciences; member of the Geographical Society of Russia, the Society of Geographical Education, Russia, the Geographical Information Sciences Commission of the International Geographical Union. He also serves in the Editorial Boards of "Vestnik Mosk. un-ta. Geogr.", "GIS-Obozrenie", "The International Journal of Geographical Information, Analysis, Theory and Decision", "GIS Asia/Pacific", and "GeoInformatica: an International Journal on Advances of Computer Science for Geographic Information Syatems". His research interests extend to the areas of geographical information systems, environmental mapping, mathematicalcartographic modelling, and sustainable development.

### Ramón M. Lorenzo Martínez, Vice-President, Spain

Since 1996, Ramón Lorenzo Martinez is the President of the Spanish Association of Cartography, Photogrammetry and Remote Sensing. Likewise, since 2001 he is president of the Spanish Geographical Engineers Association and of the Association of the Civil Service Corps of Geographical Engineers. He has been



honoured by the International Cartographic Association with the responsibility of organising the 22nd International Cartographic Conference in 2005 in the city of A Coruña.

Ramón's has fulfilled the position of Director of the National Geographic Information Centre (1989-1998), promoting a wide-range project for the implementation and use of the new geographic information technologies in both the public and private sectors. During these years he held the institutional positions of: Member of the "European Committee of Official Cartography Representatives" (CERCO), 1990–1998; Member of the "Geographic Institutes' Directors Committee for South America, Spain and Portugal", 1992–1998; Member of the MEGRIN group, comprising 19 European Geographic Institutes, 1993–1998; Member of the Board of Directors of the "French International Geographic Institute", 1994–1998.

During 1998 and 1999, he was part of the Spanish delegation to the European Commission for the development of the Galileo project for a European Satellite Navigation System and participated in numerous meetings of its Steering Committee in Brussels. Since 2000, he has held the post of Director of the Publications Office at the Spanish Ministry of Public Works, with a wide activity in cartographic material as he is responsible for the Official Road Map of Spain, published in CD-ROM and printed book formats, of which 150,000 copies are published every year.

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Ramón has published articles in magazines specialising in geographic information, as well as articles on map-making in a number of print media and on radio and television. In 2001, through the CIE-Dossat publishing company, he produced a book on cartography named "Cartography: Urban Planning and Property Development". He was appointed to the Spain's Order of Civil Merit as a Knight Commander in 1982; and to the Spain's Order of Isabel La Católica as Knight Comander, in 2004.

### David Fairbairn, ICA Vice-President, United Kingdom



Dr Fairbairn has worked at the University of Newcastle upon Tyne for 25 years, teaching and researching in all areas of cartography in a Department that was originally called 'Surveying', then 'Geomatics', and now forms

part of the wider School of Civil Engineering and Geosciences. He previously worked as an atlas editor with George Philip and Son in London, having graduated from the University of London and studied at ITC, in the Netherlands.

The progressive, international nature of the latter institution made a deep impression on David, and has ensured his convincement of the global importance of cartography. Dr Fairbairn's nomination statement mentioned a number of important issues for ICA, which he hopes the new Executive Committee can successfully address: the internationalism of ICA should not be overwhelmed by a passive acceptance of Anglophone communication; new membership categories (such as 'individual' or 'corporate') need to be addressed carefully; the publishing commitments of ICA, including its website, are vitally important and must remain high quality; the core concepts of cartography include visualisation and associated data exploration and analysis, and consequent issues related to geographic information (GI) must be embraced by ICA; there must be a continuing intellectual driving force, originating from Executive Committee, but incorporating the accumulated wisdom of the many Commission Chairs and former office holders who willingly contribute to the cartographic discipline.

David's research interests relate to mobile mapping, visualisation, environmental remote sensing and GIS in local government. However, the broader scope of ICA is exciting and the next few years, addressing the issues mentioned above and many others, promises to be a stimulating journey.

### Robert B. McMaster ICA Vice-President, USA

Robert McMaster is a professor of geography and Associate Dean for Planning in the College of Liberal Arts, at the University of Minnesota. He received a B.A. (cum laude) from Syracuse University in 1978 and a Ph.D. in Geography and Meteorology from the University of Kansas in 1983. He has held previous appointments at



UCLA (1983-1988) and Syracuse University (1988-1989).

At the University of Minnesota, Robert's research interests include automated generalization (including algorithmic development and testing, the development of conceptual models, and interface design), environmental risk assessment (including assessing environmental injustice to hazardous materials, the development of new spatial methodologies for environmental justice, and the development of risk assessment models), and the history of U.S. academic cartography. He teaches courses in cartography, geographic information science, quantitative methods, and research methods and is Co-Director of the Master of Geographic Information Science (MGIS) Program. He has published two books on generalization: Map Generalization: Making Rules for Knowledge Representation (co-edited with Barbara Buttenfield) and Generalization in Digital Cartography (co-authored with K. Stuart Shea). His papers have been published in The American Cartographer, Cartographica, The International Yearbook of Cartography, Geographical Analysis, Geographical Systems, Cartography and GIS, The International Journal of Exposure Analysis, and several conference proceedings, including Auto-Carto, and Spatial Data Handling.

Professor McMaster has also served as editor of the journal Cartography and Geographic Information Systems from 1990-1996, and the Association of American Geographers (AAG), Resource Publications in Geography. He served as Chair of both the AAG's Cartography and Geographic Information Systems Specialty Groups, served three years on the National Steering Committee for the GIS/LIS '92, '93, and '94 conferences, was Co-Director (with Marc Armstrong) of the Eleventh International Symposium on Computer-Assisted Cartography (Auto-Carto-11), served on the U.S. National Committee to the International Cartographic Association, and as a member of the Advisory Board for the Center for Mapping at Ohio State University. He also served as President of the United States' Cartography and Geographic Information Society and both Chair of the University Consortium for Geographic Information Science's (UCGIS) Research Committee and UCGIS Board Member. In 1999, he was elected as a Vice President of the International Cartographic Association, and was re-elected in 2003.

### Ferjan Ormeling, ICA Secretary General

Ferjan Ormeling holds the chair of cartography at Utrecht University, Netherlands, since 1985. Prior to that he worked in Atlas cartography (1961-1968) and from 1969 onwards at Utrecht University. He was editor of the Dutch cartographic journal Kartografisch



Tijdschrift 1972-2003, has been a president of the Netherlands cartographic society and a long –time member of its board before it merged in 2004 into the new Geo-Information Netherlands society, of which he is a honorary member now.

Professor Ormeling has been engaged in ICA activities since 1967 when he helped with the organisation of the ICA conference in Amsterdam. He was engaged in the activities of the Standing Commission on Education and Training (CET) from the early seventies onwards, was documentalist of the joint ICA-IGU working group on environmental atlases, chaired CET from 1987-1999, and was elected Secretary-General in 1999.

# ICC 2005 'Mapping approaches into a changing world'

# ICC 2005 'Mapping approaches into a changing world'

### **Important Deadlines**

Call for abstracts: March 1st, 2004. Deadline for submission of abstracts: November 1st, 2004 Notification of authors: 15 January 2005 Deadline for submission of full papers: 30 April 2005 Deadline guaranteed hotel reservations: 15 June 2005

### **Call for abstracts**

Authors wishing to present a paper in the course of the Conference must submit in advance, as a requirement for acceptance, a summary of the proposed content with a maximum extension of 400 words, setting out the general interest of the paper for the participants at the conference, describing the contents of the presentation, its contribution to the development of cartography, characteristics of any research that may have been undertaken together with any arguments considered pertinent for the selection of the submitted paper, regarding its originality and innovation. ICA Commission chairs will be part of the Scientific Committee, will review the abstracts and take part in the selection.

Abstracts can be submitted from March 1st 2004 until November 1st 2004. Abstract submission forms can be downloaded from: http://www.icc2005.org/html-eng/frameforms.html

### Themes proposed for ICC 2005:

- Theoretical Cartography.
- Map Projections.
- Map Design and Production.
- Education and Training in Cartography. Internet courses.
- Digital Cartography and GIS for Sustainable Development of Territories
- Cartographic Generalization of Spatial Databases.
- Cartography and Satellite Imagery for the Management of Natural Resources and the Environment.
- Maps and the Internet.
- Tourist Cartography.
- National and Regional Atlases. Electronic atlases. Thematic Cartography
- · Multimedia Cartography and electronic maps.
- Virtual models, Visualisation, Animation and Cartography.
- Internet, Location-Based Services, Mobile Mapping and Navigation Systems.
- Spatial Data Infrastructures. Standards, Prices and Copyright.
- Data Capture and Quality Assessment of Spatial Data.
- History of Cartography.
- World Cartography and Military Mapping.
- Mountain Cartography.
- Cartography and Children. Educational Products.
- Gender and Cartography.
- Marine Cartography.
- Maps for the Blind and Visually Impaired.
- Planetary Cartography.
- Research and Development: New products and Cartographic Systems.
- Other possible themes: Cartography and Advertising, Maps in the Media, Census Cartography, Cadastral Maps, Three dimensional Mapping, New concepts in Cartographic Symbology, Space and Time in GIS, Toponymy.
- History of Colonnial Cartography in the 19th and 20th centuries.

### **Registration Fees Categories**

	By 30 april 2005	After 30 april 2005
Full participant	460€	520€
Students/Senior	230€	260€
Accompanying person	140€	160€

Further information can be obtained from: Global Congresos c/Torreiro, 13-15 · 6°D La Coruña 15003 España Email: secretary@icc2005.org Website: www.icc2005.org

### **ICA Travel Awards**

A limited number of travel awards to the International Cartographic Conferences of the International Cartographic Association will be made to young cartographers who are nationals from developing countries. ICA generally uses the United Nations definition of developing country, which can be found in the U.N. Statistical Yearbook. Recent definitions include all countries in Africa, South and Central America including the Caribbean, and much of Asia and Oceania.

Applicants must be giving a paper at the ICC for the first time and be 35 years old or less. They must send a full copy of the paper as well as abstract to the Conference Secretary and to the ICA Secreatry General in time to arrive **by 15 December 2004** for the A Coruña Conference. In addition, applicants must arrange for a letter of support from a recognized cartographer from the home or other country (due at the same time as the paper; the writer sends it to the Secretary General). With both copies of the paper, he applicant must submit a separate sheet with the following information:

- Applicant's name, address, fax number (if possible), email address (if available), nationality, passport number
- Paper title
- Education beyond high school
- Date of birth (month, year)
- Gender
- · Name and address of person submitting letter of support
- Estimated cost of transportation to the conference place
- Number of days the applicant will be at the conference
- Previous work for ICA, if any (involvement in commission or working group, for example)
- Intended future involvement in ICA (commission or working group interest especially)

Applicants should have at least a certificate beyond their high school education. Papers must be original and clearly written with appropriate citations and credits. Papers should be reports on research studies or other Cartography and/or Geographic Information Science-related projects. Co-authorship is acceptable if the applicant is principal author and will be the presenter. Awardees will be expected to be at the conference a minimum of four days and are encouraged to be there for the entire conference and are expected to attend the opening ceremony. They are also encouraged to participate in at least one commission or working group meeting during the conference.

Awards will cover transportation (economy excursion ticket) and registration at the conference. The Executive Committee will make an effort to spread the awards regionally and to include both men and women. Up to 15 awards will be made depending on number and quality of submissions. Preference may be given to applicants from member countries in good standing but the competition is open to young cartographers in all developing countries. Notification of awards will be provided by January 31, 2005.

Travel Awards submission forms can be downloaded from: www.icc2005.org as a PDF file.

ICA Secretary General	Conference Secretary A Coruña
Ferjan Ormeling	Global Congresos
International Cartographic Association	Technical Secretary ICC2005
PO Box 80115	C/Torreiro 13-15, 6D
3508 TC Utrecht, The Netherlands	15003 A Coruña
Fax: +31 30 2540604	Spain
Email: f.ormeling@geog.uu.nl	Email: secretary@icc2005.org

# Barbara Petchenik Children's World Map Competition

### Barbara Petchenik Children's World Map Competition

The Barbara Petchenik Award was created by the International Cartographic Association in 1993 as a memorial for Barbara Petchenik, a past Vice president of the ICA and cartographer who worked through her life with maps related to children. The aim of the contest is to promote the creative representation of the world in graphic form by children.

The awards are given every two years during an ICA conference or an ICA general assembly, preferably at least one for each continent, with special consideration to the age of the child producing the drawing. The awarded drawings are submitted to UNICEF for consideration as greeting cards. Participating nations are encouraged to report on the ways they have used for collecting drawing (video report, etc.) and to collect and archive maps for further research.

### Rules of the competition

ICA member nations will collect maps, on the theme "Many lands one world", produced by children under 16 years of age. This is the theme for the next two conferences. The international judging will focus on three criteria: 1) a recognizable message, 2) cartographic content, and 3) the quality of execution.

- The maximum size of a map must not exceed A3 (420 mm x 297 mm or 17 x 11 inches). Any number of "systems of projection" can be used to generate the coastlines and other base material (e.g., international boundaries and graticule). These can include tracing or copying an existing world map or using a computer program.
- Each map must have the following information on a label attached to the back side of the representation: the name, age, school address and country of its author, and the title in either English or French as well as in the author's language.
- The winning entries will be submitted to the UNICEF International Art Committee by the ICA Executive for consideration as greeting card designs. ICA may use them as well. Any participant agrees that his/her representation may be reproduced by ICA or UNICEF or scanned for publication on the Internet by Carleton University without consultation or copyright fees.
- Competition maps are archived at Carleton University's Map Library and are being prepared for web viewing (see http://collections.ic.gc.ca/children).

# National coordinator's guidelines for handling the competition

- Each member nation must nominate a coordinator to run the contest in his/her country.
- The name of the coordinator must be received by the ICA Secretary General at least one year prior to the submission date of map entries. Countries in which no national coordinator is identified may participate provided that the Executive receives the name of a country member willing to act as the coordinator for that country.
- Each national committee will select a maximum of five maps to be forwarded to the ICA Secretary General. For the purposes of the national competition, criteria other than those used for the international competition may be considered. The maps selected by the national committees must be sent to the ICA Secretary General and not to the Conference site. They will be displayed during the 22nd International Cartographic Conference of the International Cartographic Association in A Coruña, July 9 – 16, 2005.
- When submitting their selected entries to the ICA Secretary General, national bodies are requested to include a letter which, for each submission, gives the following information: the name, age, school address and country of its author, and the title in either English or French (the ICA's official languages) as well as in the author's language.
- All entries to the ICA Secretary General must have a label attached to the back side of the representation which includes the name, age, school

address and country of its author, and the title in either English or French (the ICA's official languages) as well as the author's language.

\* The maps and accompanying letter should be sent so as to arrive by **June 1, 2005** for the A Coruña conference to:

ICA Secretariat c/o Faculty of Geographic Sciences

Utrecht University

P.O. Box 80115

3508 TC Utrecht

- The Netherlands
- National bodies are responsible for distributing the certificates awarded by the ICA Executive. These certificates will be produced and provided by the ICA Executive.
- Participating nations are encouraged to collect and archive all of the entries in their national competitions and to report to the Commission on their methods of announcing the competition, establishing any other judging criteria, and the selection process used. This information will be of value in evaluating the success of the Competition and in making adjustments in the future.

Past competition entries can be viewed at http://collections.ic.gc.ca/children/; The 2003 prizes at http://www.icaci.org/petchenik2003/files/prizes.html; The 2003 submissions at http://www.icaci.org/petchenik2003/; and The 2001 submissions also at http://www.icaci.org/children2001/

### ICA Guidelines for coordinating the competition

- The ICA Executive will send a copy of the Rules of the Competition to each national coordinator.
- The ICA Executive will acknowledge receipt of each country's submission.
- Prior to both conferences, the ICA Executive will establish a judging committee, of optimally five members, made up of representatives of the Cartography and Children Commission, the ICA Executive, and the Local Organizing Committee.
- The ICA Executive will make available to the judging committee a copy of the letter submitted by each national coordinator that accompanied and described his/her country's submission.
- From five to fifteen awards will be given, with a maximum of one per country. Preferably one award will be given to each continent and at least one to children in each of the three age groups; under 9 years, 9 to 12 years, and 13-15 years of age.
- If the ICA Conference Organizing Committee is interested in having and advertising a public vote on the Competition entries they should be allowed to do so on three conditions:
- that the public vote will not be a criteria for or influence on the ICA judges because the voting public will likely have no knowledge or appreciation of the Competition rules and guidelines;
- 2. that the voting slip design be adjudicated by the Cartography and Children Commission, on behalf of the ICA Executive, so that its intent is clear; and
- 3. that the Local Organizing Committee be responsible for producing the Public Award certificate.
- The results of the judging should normally be conveyed to the ICA Executive on the last day of the paper sessions.
- The production of the awards certificate and its distribution to the appropriate national representatives is the responsibility of the ICA Executive. The national representatives are, in turn, responsible for conveying the certificates to the awardees.
- The work of each national coordinator should be acknowledged by a letter from the ICA Executive.
- Following competition, all the displayed national maps will be deposited by the ICA.



# ICA Statutes and some practical steps for the realization of the Strategic Plan

# ICA Commission Chairs and Executive Committee Meeting, Prague, January 24-25, 2004

Cartography has come across number of serious hardships through the last decade. The number of students and cartographic courses in universities decreases, cartographic (though geographic) laboratories, departments and faculties are renamed; cartographic themes become unimportant for many scientific conferences and so on. Some doubts about the necessity of cartography as a separate scientific branch arise. All this, as many think, leads to decreasing the prestige of cartography, and that is repeatedly confirmed even in the strategic plan of ICA. Consequently, there is a need for investigation to preserve traditions and accumulated experience, so that the current situation can be improved.

Above all, it is useful to check whether ICA meets the contemporary situation. Firstly lets investigate ICA's structure comparatively with other sister societies. To do this we have analyzed the structure of a few tenths international organizations. Amongst them:

- International Cartographic Association
- International Geographical Union
- International Association of Geodesy
- International Astronomical Union
- International Society for Photogrammetry and Remote Sensing
- International Association of Meteorology and Atmospheric Sciences
- International Association of Geomagnetism and Aeronomy
- International Association of Hydrological Sciences
- International Association of Meteorology and Atmospheric Sciences
- International Association for the Physical Sciences of the Oceans
- International Association of Seismology and Physics of the Earth's Interior
- International Association of Volcanology and Chemistry of the Earth's Interior

We drafted a model structure (taking into account originality of every organization and subjectivity of generalization):



The current structures of ICA displayed graphically here:



Comparing the ICA structure with the structure of other sister societies, and taking into account other information we may suggest the next organizational structure:



- 1) The president is elected for four years and could not be reelected for the next period;
- 2) The position of the first Vice-president is introduced. He / she will take place of the President automatically in a case of reelection. In other cases, he/she should be a first candidate for the President's position. This model provides succession in administration, because if all the administration body is reelected simultaneously it is possible that all posts will be occupied by new people;
- 3) The number of vice-presidents is reduced to four persons; everyone is responsible for one of the main ICA activities;
- 4) The Secretary-General is elected for four years, reelections are possible and useful;
- 5) A new body Council of Presidents is introduced. It consists of all former ICA Presidents. The immediate Past-President is the chief of the Council. The functions of the body are approval of basic changes into ICA, elaboration of strategic plans, approval of current activity.
- 6) It needs to analyze all levels of ICA. We should analyze the statutes of ICA including the role of commissions, working groups and their chairs and suggest some proposals for the General Assembly.

# ICA Statutes

### Another practical steps

Four operational environments were marked in the strategic plan of ICA: Science (and technology), Education, Professional Practice, Society (social and organizational). In our opinion, activities should be conducted in all these fields.

Science: regarding scientific activity, ICA should assume the role of coordinator in international projects (in the field of cartography). Some projects may be developed under the umbrella of ICA. It enables our organization actually taking part in practical work and receive additional financing. It also allows using of the ICA members professional skills, and as result, the participation in the ICA gets more attractive.

Education: as for education, realization of educational programs under the umbrella of ICA with the issuing of a diploma may be one of the most important actions in this field. This will allow to use in practice abundant experience and knowledge accumulated within the organization, to increase the number of professional cartographers, to receive additional financial resources and to increase prestige of the ICA. International cartographic and GIS-science textbooks, manuals and programs elaborated by the ICA subdivisions (for example, by Commission on Education and Training) may be used for these purposes. Some of them have been already successfully used.

We may also organize workshops on programs earlier approved by ICA with subsequent certificate issuing. But this will demand high level of teachers' professionalism and developing distance education programs. It should be mentioned, that sister societies, for example the Urban and Regional International Science Association, have already undertaken similar programs in field of GIS-science (see the box below).

### **URISA** certification program

#### The GIS Certification Institute

(GISCI, www.gisci.org) is pleased to announce that the GIS Certification Program will "go live" on January 1, 2004.

#### History

URISA's Certification Committee was formed in 1999 and following several years of discussion and thousands of hours of work, including a comprehensive Pilot Program, the Committee members finalized its portfolio-based certification program in the summer of 2003.

#### The Program

The portfolio-based program requires minimum levels of achievement in three areas:

- 1. Educational Achievement
- 2. Professional Experience
- 3. Contributions to the Profession

#### The Process

Applicants are encouraged to familiarize themselves with the program and begin collecting necessary documentation for their portfolios.

#### **GIS Professionals**

The first individuals to meet the minimum standards for ethical conduct and professional practice as established by the GIS Certification Institute for recognition as Certified GIS Professionals (GISPs) were presented during URISA's 2003 Annual Conference in Atlanta, Georgia.

In our case, this scheme may be modified in the following way (see the box next column):

### Establish ICA Education Program on Cartographic Principles of GISystems and GISciences

(developed jointly with Alexander Simonov)

#### PURPOSE:

The purpose of the ICA Education Program is to improve professional cartographic knowledge and mapping skills of practitioners who work in the field of Geographic Information Systems.

- 1) Benefits of the ICA Education Program for GIS practitioners:
- 2) Definition and protection of an area of professional cartographic knowledge and mapping skills which are necessary to learn and apply in GIS project development and implementation.
- 3) Establishment and maintenance of high standards of cartographic knowledge and mapping skills needed in GIS activities.
- Encouragement for cooperation between Cartographers and GIS Specialists in the field of Geoinformatic's studies and GIS projects development and implementation.
- 5) Establishment and maintenance of links to National and International Geographic and GIS educational bodies.
- 6) Development of cooperation between ICA and companies producing GIS software and Geospatial Data.
- 7) Forms of activity:
- 8) Developing and Enhancing of ICA Education Courses for different groups of professionals involved in the GIS industry.
- 9) Promoting the Teaching, Training and Certification of individuals.

10) Promoting ICA Education Initiatives.

#### BACKGROUND:

Development and permanent improvement of industrial GIS Software and Tools require professional knowledge and skills in Computer Sciences to apply them for GIS projects development and implementation. Taking into account the limited duration of university professional education programs the mastering of GIS sometimes takes place to the detriment of Geographic and Cartographic knowledge and Mapping skills. This is particularly observed in developing countries.

At the same time, more and more frequently GIS practitioners are facing problems of search and evaluation of different map sources for cartographic databases creation, as well as problems of map visualization and production of GIS-based thematic maps. Thus the lack of professional cartographic knowledge and mapping skills decreases the quality and efficiency of a GIS project development and the use of its outcomes.

#### **OBJECTIVES:**

- To study existing continuing education courses in GIS and Cartography/Mapping;
- To study the education market in the field of professional cartographic knowledge and mapping skills acquisition, to segment it for different groups of practitioners, purposes, national features, etc. taking into account first of all the needs of developing countries;
- To develop programs and learning materials for ICA Education courses;
- To develop the concept of Certification for graduates of ICA Education courses;
- To organize the training of teachers for ICA Education courses;
- To adapt learning materials to basic Languages (optional).

#### Close organization step:

- to discuss and make an initial decision;
- to organize a working group to study problems and issues concerned with the establishment of an ICA Education Program;
- to develop an Internet site to discuss issues of ICA Education courses in all aspects (further to transform this internet-resource into the site of ICA Education courses support).



We should promote the certification of cartographic components in international and national Educational programs (UNIGIS for example), some technologies of cartographic services and graduate programs.

At last, ICA should pay more attention to publishing, advertising of cartography and progressive knowledge in this field. We may attain these through popularization of the most successful books and textbooks published with the ICA logo, translating them into another languages, reviewing scientific publications.

Practice. Under certain conditions, when the necessity of cartography as a separate science is doubted, it is strongly needed to advertise its practical meaning in all fields and activities. In particular, one of the most promising fields of its practical application is providing decision-makers with high quality geospatial information. For example, cartographic data analyzed in a GIS-environment was the fundamental source of information for decision-making in Angarsk-Dacin oil pipeline construction project, which costs 5 billion dollars. We should prove in the face of people that cartographic substantiation should be an integral part of large-scale projects, such as, for example, ecological expertise.

At last, it should be highlighted that we need to pay more attention to, as it seems obvious matter, the prestige of ICA, mentioning the ICA in scientific publications of its members, a thing that it is often forgotten.

#### Conclusion

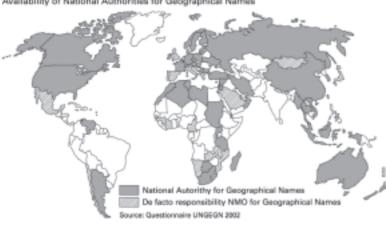
We must from time to time analyze the structure of ICA and list of commissions; we need to update a range of rules and duties of commissions (including the role of chairpersons). It may be one of the tasks for the Council of Presidents.

As a first practical steps I can suggest:

- To develop ICA educational program
- To create the database with information on cartography and GIS courses (curriculums, number of students, staff, language, etc) in Universities of Europe, USA and Australia (as a first step) with spreading this work for whole world. This project may be financed by TEMPUS for example.
- We can certificate the cartographic components of some educational courses (UNIGIS for example).
- We can certificate some techniques of National cartographic Services (Surveys).

#### Vladimir Tikunov, ICA Vice-President

Availability of National Authorities for Geographical Names



### 22nd Session of the UN Group of Experts on Geographical Names

The ICA was represented at the 22nd UNGEGN meeting in New York at the UN headquarters; these sessions are preparatory meetings for the UN Conferences on the Standardization of Geographical Names, held every five years. The next conference will be held in 2007. During the 22nd Session the following items were raised (apart from the reports on names standardization given by the participating 63 countries or 21 linguistic divisions that combine the experts on a regional basis):

- The production of databases on exonyms (Cuba, France, Hungary, Italy, Netherlands)
- Collection of indigenous or minority geographical names (Australia, Canada, Netherlands, United Kingdom, Vietnam)
- Collection of (micro) toponyms as part of the care for our cultural heritage.(Austria, Netherlands, Sudan)
- Place name legislation (China, Ireland, Netherlands, Norway, Sweden, Turkey)
- Unauthorized changes in geographical names (Serbia)
- Training courses (Algeria, Australia, Indonesia, Iran, Mozambique, Sudan,)
- Gazetteers (Germany, Hungary, Iran, Japan, Latvia, Norway, Sri Lanka, Sweden, Thailand
- Toponymic guidelines (Poland)

A new de facto Working Group on Toponymical Guidelines was initiated, chaired by Dr Isolde Hausner from Austria. This working group will coordinate the production of toponymic guidelines (a series of publications that is very important for cartographers) by individual countries. The Working Group on Romanization Systems (chaired by Peeter Päll) reported on updates in the UN-accepted romanization rules (see http://www.eki.ee/wgrs/), a most important and cartographically relevant work. A first report was given by the newly established Working Group on Pronunciation. The Working Group on Training Courses in Toponymy (see http://toponymycourses.geog.uu.nl ) reported on courses held the last two years (Khartoum, Quito, Alger) and upcoming courses (Maputo, Sydney, Santo Domingo in 2004, Indonesia 2005 and Vienna 2006). Its convenor also described new teaching material that was becoming available in 2004 and 2005: the United Nations is translating a manual on the collection and processing of geographical names in all 6 UN languages, which might be available in a preliminary version in 2004, but will be in its final version in 2005; the German Bundesamt für Kartographie und Geodäsie will print the proceedings of the toponymy course it organised together with ITC, Netherlands, in summer 2004. Apart from the ICA-produced English-language web course module on toponymy mentioned below, Canada announced the availability of an introductory toponymy web course

#### (http://www.toponymie.gouv.qc.ca/formation/)

Indonesia had launched a specific programme on the naming of islands, as about 10 000 of the 17 000 islands in the archipelago do not bear official names as yet.

The name of the body of water between Korea, Russia and Japan remained a contentious issue.

About 110 papers were presented during the session; most of them will be available from the UNGEGN website,

http://unstats.un.org/unsd/geoinfo/default.htm

We should promote the certification of cartographic components in international and national Educational programs (UNIGIS for example), some technologies of cartographic services and graduate programs.

At last, ICA should pay more attention to publishing, advertising of cartography and progressive knowledge in this field. We may attain these through popularization of the most successful books and textbooks published with the ICA logo, translating them into another languages, reviewing scientific publications.

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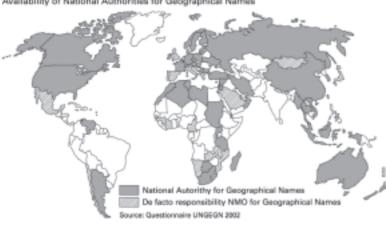
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- Gazetteers (Germany, Hungary, Iran, Japan, Latvia, Norway, Sri Lanka, Sweden, Thailand
- Toponymic guidelines (Poland)

A new de facto Working Group on Toponymical Guidelines was initiated, chaired by Dr Isolde Hausner from Austria. This working group will coordinate the production of toponymic guidelines (a series of publications that is very important for cartographers) by individual countries. The Working Group on Romanization Systems (chaired by Peeter Päll) reported on updates in the UN-accepted romanization rules (see http://www.eki.ee/wgrs/), a most important and cartographically relevant work. A first report was given by the newly established Working Group on Pronunciation. The Working Group on Training Courses in Toponymy (see http://toponymycourses.geog.uu.nl ) reported on courses held the last two years (Khartoum, Quito, Alger) and upcoming courses (Maputo, Sydney, Santo Domingo in 2004, Indonesia 2005 and Vienna 2006). Its convenor also described new teaching material that was becoming available in 2004 and 2005: the United Nations is translating a manual on the collection and processing of geographical names in all 6 UN languages, which might be available in a preliminary version in 2004, but will be in its final version in 2005; the German Bundesamt für Kartographie und Geodäsie will print the proceedings of the toponymy course it organised together with ITC, Netherlands, in summer 2004. Apart from the ICA-produced English-language web course module on toponymy mentioned below, Canada announced the availability of an introductory toponymy web course

#### (http://www.toponymie.gouv.qc.ca/formation/)

Indonesia had launched a specific programme on the naming of islands, as about 10 000 of the 17 000 islands in the archipelago do not bear official names as yet.

The name of the body of water between Korea, Russia and Japan remained a contentious issue.

About 110 papers were presented during the session; most of them will be available from the UNGEGN website,

http://unstats.un.org/unsd/geoinfo/default.htm

# EC Reports

The liaison officer with ICA was able to announce that there had been toponymy sessions at the Durban ICC, and that that would possibly reiterated at the A Coruña ICC. He also gave a plenary demonstration of the toponymy module of the Cartography web course, produced by the ICA Commission on Education and Training (Antal Guszlev and Laszlo Zentai) and which will be available from the Commission's website later this year (http://lazarus.elte.hu/cet ).

A world map highlighting the countries that have a national authority for geographical names accompanies this report. Those countries where, by default, the national mapping organisation is de facto responsable for collecting and processing the geographical names, are indicated as well.

Ferjan Ormeling, ICA Secretary General

# ICA participation in Geomatica 2004

The international congress, Geomatica 2004, was held at the Palacio de Convenciones in Havana, Cuba, from 10 to 14 May 2004. The ICA was represented officially by its President, Milan Konecny, and the ICA played an active role in the meetings. The conference was very well organised by Tatiana Delgado Fernández and her colleagues from GeoCUBA, and the social events provided us with an entertaining slice of Cuban culture.

A mini meeting of the ICA's Commission on Spatial Data Standards was held before the congress, from 7 to 9 May 2004, at El Conde de Villa Nueva in Habana Vieja, the historic colonial part of Havana. Hosted by Tatiana Delgado Fernández, the meeting provided an opportunity to share the Commission's work with colleagues from Latin America.

During Geomatica 2004 itself, a workshop on geographical information standards and their application to spatial data infrastructures (SDIs) was co-chaired by Antony Cooper and Tatiana Delgado Fernández, both of the ICA's Commission on Spatial Data Standards. Milan Konecny spoke on the ICA at the opening ceremony for Geomatica 2004, and presented a plenary address entitled "Desarrollo sostenible para América Latina: el papel de la cartografía y la información geográfica" (Sustainable development for Latin America: the role of cartography and geographical information). Antony Cooper also presented a plenary address, "Actualización incremental y versiones en bases de datos espaciales" (incremental updating and versioning of spatial databases).

There were about 250 delegates from 15 countries at Geomatica 2004, the fourth time it has been held. It formed part of the international convention Informatica 2004, being held for the tenth time. There were about 1600 delegates from 30 countries at Informatica 2004, which included a technical exhibition. The meeting also provided an opportunity for Milan Konecny to have a discussion with Hamadouni Touré, responsible for telecommunications development at the International Telecommunications Union (ITU), about possible cooperation between the ITU and the ICA.

The presentations revealed that cartography and geographical information science are being applied to more and more fields, with multi-disciplinary and integrated approaches becoming increasingly prominent. Important developments are the fusion of hydrographic and terrestrial mapping and the adoption of international standards for geographical information and geomatics, particularly those of the ISO 19100 series. The recognition of the synergies between geographical information on the one hand and information and communications technologies on the other through the inclusion of the Geomatica Congress in the Informatica Convention, is significant.

Antony Cooper, Chair ICA Commission on Incremental updating and versioning

### ICA Working Group on the History of Colonial Cartography in the 19TH and Early 20TH Centuries

At a recent meeting the Executive Committee of the International Cartographic Association approved the formation of a **Working Group** on the History of Colonial Cartography in the 19th and early 20th centuries (1801-1914). This Working Group is chaired by Prof Elri Liebenberg of South Africa with Privatdozent Dr Imre Josef Demhardt of the Geographisches Institut, University of Technology in Darmstadt, Germany, as Co-Chair. Although some of the members of the Working Group are also members of the ICA Commission on the History of Cartography and vice versa, the Working Group operates separately from the Commission and has its own terms of reference. These are

- 1. Establishing a database of interested researchers and encouraging cooperative activities
- 2. Holding a minimum of two meetings to monitor and discuss research work undertaken
- 3. Publishing in accredited international journals
- 4. Preparing a book of comparative studies to be based on research undertaken between 2003 and 2007.

The Working Group has adopted the principle of two focus areas which run in tandem, each over a four-year period starting and ending with an ICA conference. For the period 2003-2007 research within the Working Group will focus on Subsaharan Africa, and for the period 2005-2009 on Australasia (South-East Asia - Australia and New Zealand - Pacific Islands). Thus far members of the Working Group have already contributed to a Special Issue of Cartographica Helvetica on Southern and East Africa which is to be published shortly. Research on the cartography of colonies falling outside the above-mentioned focus areas will also be accommodated. The research results of Working Group members will, as far as possible, be published in accredited international journals and presented in specialised sessions at the 22nd International Cartographic Conference in La Coruña, Spain, in July 2005 and the 23rd International Cartographic Conference in Moscow in 2007. Interested researchers should contact Elri Liebenberg at elri@worldonline.co.za Imre Demhardt or Josef at demhardt@geographie.tu-darmstadt.de for more particulars.

Elri Liebenberg Chair: ICA WG on the History of Colonial Cartography

# Commissions' Report

# Cartography and Children Commission meeting, Glasgow 2004

# Venue: University of Strathclyde in Scotland's largest city, Glasgow.

The 30th World Conference of the International Geographical Union (IGU) will be held in Glasgow, August 15-20, 2004. The Commission on Geographical Education (CGE) will have a Pre-Conference Symposium August 11-15. Part of the pre-conference programme will be arranged in association with the Cartography and Children Commission (CCC) of the International Cartographic Association (ICA). This provides an excellent opportunity for dialogue between geography educators and cartographers with interests in mapping for children.

### The theme of the Pre-Conference is Expanding Horizons in a Shrinking World.

An exciting programme of lectures, paper & poster sessions will be organised, as well as two one-day excursions on August 11th and 12th. One of these is to the West Highlands, including visits to magnificent landscapes, a power station inside a mountain, a fish farm and a whisky distillery. The second is to Central and East Central Scotland, including visits to a unique boat lift between two canals, the famous Forth bridges, attractive coastal fishing villages and a major Scottish castle.

# Call for papers and posters for the Pre-Conference on the following themes:

- International issues in geographical education
- Global development and political boundaries post 11/09/2001
- · Citizenship education
- · Children's perception of place and space
- Children and maps (this part of the programme in association with the Cartography and Children Commission of the International Cartographic Association).

Papers are invited on any aspect of cartography in relation to children and young people but papers on the following themes are especially welcomed:

- · Children and young people's use of digital cartography and GIS
- · Children, maps and the internet
- Research and development in educational cartography (the design and realisation of maps and atlases for schools)

Further information can be obtained from Alastair Robinson (h.a.robinson@strath.ac.uk) if you have any questions about this call for papers. See web site for details: http://www.IGU-CGEGLASGOW2004.ORG

Enquiries about the Cartography and Children Commission of the ICA can be addressed to the Chair, Patrick Wiegand: P.A.Wiegand@education.leeds.ac.uk

Patrick Wiegand, Chair ICA Commission on Cartography and Children

### 2nd Symposium on Location Based Systems (LBS) and Telecartography

Over 120 participants were in attendance in Vienna, Austria, for the 2nd Symposium on Location Based Systems (LBS) and

Telecartography. The meeting held 27-29 of January was co-sponsored by the Commission on Maps and the Internet and organized by co-chair Dr. Georg Gartner from the Department of Cartography and Geomedia Techniques at the Vienna University of Technology. Twenty-nine presentations were made by speakers from Australia, Austria, Germany, Finland, Great Britain, Greece, Hungary, Netherlands, Switzerland, and the United States. Presentations focused on the delivery of spatial information to mobile devices, including such topics as adaptive mobile geovisualization, context-based cartographic display, automatic generalization of mobile maps, map-based panoramas, augmented reality, non-photorealistic 3D city models, XML-based service architecture for mobile cartographic applications, mobile devices for tourism applications, and real-time flight tracking. Past-President of the ICA, Bengt Rystedt, was the honored guest. The third LBS and Telecartography meeting is being planned for 2006.



Dr. Georg Gartner addresses participants at the social event -- dinner at a Viennese "Heurigen" wine restaurant. Photo courtesy Markus Jobst.

Michael Paterson, Chair ICA Commission on Maps and Internet

### Marine Cartography

The main activities for the past few months have been in the planning for forthcoming CoastGIS Symposia.

The event for 2005 will occur in Aberdeen, Scotland under the able leadership of David Green, Vice Chair. Preliminary dates have been chosen as 21st-23rd July 2005.

A steering committee for CoastGIS 2006 has been formed and already has met twice. Early planning suggests the event will be staged at the campus of the University of Wollongong with workshops after the main sessions in conjunction with the University of Sydney. Probably the event will be held between 13th and 18th July, 2006. The steering committee aims to hold the event close to a regional IGU meeting planned for Brisbane that year in early July.

If all goes well, we hope to gather for CoastGIS 2007 somewhere in the Caribbean.

Ron Furness, Chair

### **Spatial Data Standards**

During the past year the Commission has been in the final stages of developing its book on "World Spatial Metadata Standards" that uses a set of scientific and technical metadata assessment characteristics to analyze and understand the various national and international spatial metadata standards in the world. Prof Henri Aalders, Dutch Commission member, was added as an Associate Editor to edit the Part 2 Regional Summaries, and to write the Introduction for the book. This has been done to facilitate the preparation of the book in view of the workload of the Editor. In April, 2003 Parts 1 through 4 were completed, polished and sent to Elsevier for processing.

Additional work has proceeded this past Summer and Fall. In September a major goal was accomplished when the Part V 6.0Metadata Characteristics Crosstable was completed at the end of the month. This Crosstable contains 70 of the most important characteristics about the various standards and several example profiles.

A copy of the "ICA Prototype V 6.0 Spatial Metadata Standards Crosstable" was presented to ISO/TC211 Chair Olaf Stensen as part of the ICA Spatial Data Standards Commission Report to the ISO/TC211 Plenary Meetings in Berlin, Germany on October 30/31, 2003. This metadata crosstable is another tangible contribution that the ICA Standards Commission has made to the world effort by ISO/TC211 over the years. The Volume 3 book on "World Spatial Metadata Standards" will come out a bit later.

### August, 2003 Commission meeting in the Ithala, South Africa

The full Commission had been planning its work the Spatial Data Infrastructure at its 2000 in Monaco, 2001 in Beijing, 2002 in Brno. More recently it began active work at its 2003 meeting at the the Ithala Conference Center, South Africa, in August.

The Commission continued its discussions on modeling the SDI. A major part of its 2003-07 work on the SDI will be to develop a UML model of the SDI. This idea developed out of a basic discussion begun in Monaco, and developed in more detail at more recent meetings. This new scientific thrust by the Commission was proposed and approved as the major task in the 2003-07 Terms of Reference at the Durban ICA General Assembly the following week. The summer 2004 Commission meeting will be held at the International Hydrographic Bureau headquarters in Monaco.

We also plan to establish a scientific liaison status with all of the major SDI groups in the world, similar to our Category A Scientific Liaison we hold with TC211.

Harold Moellering, Chair

### Joint Workshop on Ubiquitous, Pervasive and Internet Mapping

### (UPIMap2004), Tokyo, Japan, September 7 - 9, 2004

The ICA Commissions on Ubiquitous Mapping and Maps and the Internet announce a workshop in Tokyo at the beginning of September 2004. The workshop is sponsored by the Commission on Ubiquitous Mapping, the Commission on Maps and the Internet, the Center for Spatial Information Science (CSIS) of University of Tokyo, the Geographic Information Systems Association and the Japan Cartographers Association. The ICA Commissions were formed in 1999 and 2003 respectively in response to the rapid growth in the use of electronic networks to distribute maps and spatial data, and rapid diffusion of new mobile devices. The purpose of the workshop is to bring together international specialists in the field of Mobile mapping, Location based Services and Internet mapping, and to disseminate information to a broader audience on new developments and major areas of research.

### **General Information**

The Workshop will focus on a variety of issues related to the distribution and utilization of maps and location based information through mobile devices and the Internet. Working papers should address the terms of reference of the commissions:

### ICA Commission on Ubiquitous Mapping

This new commission deals with a "well-mapped society" where maps will be available anywhere and anytime. Today, the number of way maps and geo-spatial information are likely to be employed is very large and diverse. As the individual gains the ability to access relevant spatial information on demand, human behavior will be influenced in interesting ways. The commission concentrates more on theoretical than practical issues. Its terms of reference are:

- To organize regional workshop including site observation to comprehend the contemporary situation of mobile, car-navigation and location based mapping
- 2. To clarify the similarity and difference in comparing variant systems to establish an evaluation scheme
- 3. To place the notion of Ubiquitous Mapping in domain of Theoretical Cartography

### ICA Commission on Maps and the Internet

The Internet has increased the distribution of maps and re-defined how maps are used. This commission explores the potential of the Internet to improve the quality of maps as a form of communication.

- Focus attention on disseminating maps and spatial data through distributed electronic networks. Product: Journal articles and web pages.
- 2. Examine Internet map usage and project future areas of growth.
- 3. Examine web map user issues to better serve user needs.
- 4. Promote the exchange of information about effective Internet mapping for an international audience.
- 5. Improve user access to maps by examining the potential of Internet map metadata.
- 6. Promote instruction on Internet mapping through collaboration / coordination with other ICA commissions

In conjunction with the working papers, the workshop will also feature live demonstrations.

### About the Location

The meeting will be held at the Komaba II Campus of the University of Tokyo.

(http://www.csis.u-tokyo.ac.jp/english\_2004/location.html). The campus is located near Shibuya, 20 minutes from Tokyo Central Station by train. Tokyo is the capital of Japan and one of the largest economic centers of eastern part of Asia. You can find almost everything in the city from ultra modern electronic equipments to traditional goods. (http://www.tourism.metro.tokyo.jp/english/)

# **Conference Reports**

Tokyo is situated in the central part of the Japanese archipelago. It is easy to make further trips to visit other sites of interest, such as Kyoto, for example. (http://www.jnto.go.jp/)

### Cost

A workshop participation fee will be charged by the organizers - \$200 for attendees, \$100 for students. This includes a technical tour. There are many good hotels near the university. The price of a room is from \$70 a night for a single to \$100 for a twin room.

#### **Resulting Publication**

Working papers will appear on the commission's home page at http://ubimap.net/workshop2004/. Participants are encouraged to submit final papers to scientific journals and, depending on the number of submissions, an edited volume of papers may be published in book form.

### **Working Papers**

If you wish to participate in a paper session of the workshop, you will be asked to submit the following material BY 31 JULY 2004 to a member of the Program Committee:

- a PDF document containing your working paper (4000-5000 words), including:
- a BRIEF biographical sketch of for the author(s)
- COMPLETE address information for all authors, including fax, e-mail, and homepage, if available

### **Live Demonstrations**

If you would like to present a live demonstration of products, provide information on platform and audiovisual equipment requirements BY 31 JULY 2004.

### **Inquiries and Paper Submissions**

Takashi MORITA Department of Civil and Environmental Engineering Hosei University 3-7-2, Kajinocho, Koganei-shi, Tokyo 184-8584 JAPAN morita@k.hosei.ac.jp (EMAIL PREFERRED)

Takashi Morita, Chair ICA Commision on Ubiquitous Mapping

### Gender and Cartography

Continuing the collaboration with FIG's "Under-represented Groups in Surveying" we will participate in the first global internet FIG's conference 5-9 July 2004. Our paper entitled: "Intentions, Faults and Victories-First Decade of Activity of the ICA Commission on Gender and Cartography has been sent to the event organizers. As FIG is maintaining a database on "Women in Geodesy" we propose to enlarge the current list of "Women in Cartography", published in the GaC website (http://www.geo.ar.wroc.pl/GC/) to "Women in Cartography and GIS" by including the appropriate part of FIG's database, and vice versa suitable parts of the ICA's base –to the FIG's one.

After FIG's working week on the "The Olympic Spirit in Surveying (May, 22-27, 2004) Sara Wilkinson from RICS (Sheffield Hallam University,UK) will be able to discuss the problem as the person responsible for the organization of the Global Network for Surveyors. She can be contacted at S.J.Wilkinson@shu.ac.UK.

More scientific character can be expected in the planned collaboration between GaC and the International Geographic Union's commission on "Population and Environment". Unfortunately, the "Gender and Geography" commission in the frame of the IGU has not answered our proposition until now. We hope to include experts from IGU to chosen works connected with the preparation of the guidelines and specifications for mapping of the issues related to gender and under-represented groups at regional and global levels.

The initial declaration of the Brunei Darussalam University can be treated as a first success in promoting the production of gender-oriented atlases of various regions of the world (by encouraging scientific organizations to prepare atlases similar to the demographic atlas produced by the ICA commission for Poland). This country without any tradition in cartography (the oldest map was published in 1930) may in the future become an ICA member. Such a chance may be attributed to the planned organization of the new section of cartography that Dr Becek undertook at the Brunei Institute of Geomatics. The new Demographic Atlas of Brunei has to show important social problems using data gathered in the last census (2001).

Lastly, I like to comment on the recent visit that the President of ICA, Milan Konecny, did to the Polish cartographers. Prof Konecny presented the ICA Honorary Fellowship to Prof. Andrzej Ciolkosz. After this event, he participated, jointly with many other foreign cartographers from Czech Republic and Germany, of the 13th Cartographic School organized every year by the University of Wroclaw.

Ewa K.-Blum, Chair



Participants of the 13th Cartographic School, University of Wroclaw.

# **Conference Reports**

### Mapping from Satellite Imagery

An international course on "GIS and mapping for agricultural decision support" was held in Bankgok, from the 8-12 December 2003 under the auspices of the International Cartographic Association (ICA), the Environmental Systems Research Institute (ESRI), and Land Development Department of Thailand. The instructional team consisted of Dr. Graciela Metternicht, Vice-Chair of the ICA commission on Mapping from Satellite Imagery, Dr. Joel L. Morrison, Professor Emeritus of The Ohio State University, and Mr. Makram Murad-alshaikh, Senior Instructor of ESRI, Redlands.

The workshop combined a tutorial on modern cartography with special emphasis on the use of Geographic Information Systems and remote sensing, and a hands-on workshop using ESRI's ArcMap software. Mr. Murad-al-Shaikh presented a tutorial on the basic principles of cartography, the use of ArcMap for data classification and map presentations. Dr. Morrison discussed the effects of the shift to electronic technology used in cartography, the need and use of standards, outlining existing international standards that are available to the geo-spatial data community. Lastly, A/Prof Metternicht lectured on the use of remote sensing with specific emphasis on data collection and image processing techniques related to soils and vegetation. She summed up the discussion by touching on applications of remote sensing for topographic map revision and database maintenance and revision. The workshop was attended by 25 staff from the Land Development Department of Thailand.

Mr. Ard Somrang, Director General of the Land Development Department opened the weeklong workshop by welcoming the students and instructors to Bangkok. The gracious hosts of the Land Development Department, under the leadership of Ms. Wanarat Thothong, were superb in providing the local logistics including a banquet with Karaoke on Thursday evening. Graduation ceremonies on Friday afternoon were presided over by Mr. Chaiwat Wittibutr, Deputy Director General of the Land Development Department. The instructors and students were impressed with the first class facilities made available by the Land Development Department. The week proved beneficial to instructors and students alike.

Joel Morrison and Graciela Metternicht (Vice-Chair, ICA Commission on Mapping from Satellite Imagery)



Participants of the 'GIS and mapping for agricultural decision Support' workshop



Participants during a hands-on session taught by Makram Murad-al-Shaikh, Senior Instructor of ESRI

**Conference Reports** 



# **Special Features**

### The invention of the world. Representations of America and Chile in the imagination and the cartography of the 16th-18th centuries

The Faculty of the Humanities of the Santiago, Chile-based Diego Portales University in the persons of Prof Diana Veneros and Prof Sergio Marras organized a well-attended seminar with this theme from April 5-7, 2004. It focused on the cartographic exploration of Chile, in the wider framework of South America, and did so by integrating different disciplines: literary science, art history, history, cartography, map curatorship and the history of science. As one of the contributors to the seminar I presented a talk on the contributions by the Netherlands (understood in the 17th century as the area of present-day Belgium and Netherlands) to two aspects of the cartography of the Americas: they helped in exploring the extreme North and South of America, apart from that of parts of the East Coast of North America, and they helped in drawing and distributing the image of the Americas: in the 17th century more maps of the Americas were produced and sold in Amsterdam than anywhere else in the world.

Between 1598 and 1643, at least 7 fleets left the Netherlands for Chile; they contributed to the exploration of Tierra del Fuego, and discovered that it was not linked to the surmised southern continent, but could be rounded much quicker round the Cape Hoorn (called by the Dutch after their town of Hoorn where their navigating officer hailed from) than by sailing through Strait Magallanes. Before discovering Cape Horrn, the first detailed pilot book and hydrographic chart of Strait Magallanes that have been preserved were produced by Jan Outgersz, a navigating officer on board the ship Het Geloof who had sailed through the strait in both directions, due to the fact that any detailed maps prduced by his predecessors Magellan, Drake, Sarmiento de Gamboa or Cavendish have been lost.

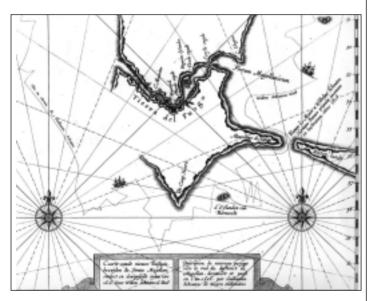


Figure 1: Map from Schouten and LeMaire of Strait leMaire discovered by them, and Cape Hoorn (Cabo de Hornos) called after Schouten's home town of Hoorn.

The final Dutch endeavor in these waters was the circumnavigation of Staten land in 1643 by Hendrick Brouwer, who finally dispelled any idea of links of Staten Land (Isla de los Estados, called after the Parliament of the Dutch Republic) with the surmised southern continent. Apart for searching for a southwest passage, the Dutch also tried to find a northwest passage. In 1609 for instance they hired Henry Hudson as a captain to navigate the ship Halve Maen to find the Indies; Hudson tried in vain to navigate the broad river (later named Hudson River after him) to the Indies. Later on, in English service again, he continued, and found the Hudson bay. As a follow-up to Henri Hudson's discovery of Hudson river, the Dutch fur traders active there instigated the United West Indies Company to found a colony, which was established in 1626 as the New Netherlands, with the capital New Amsterdam (present-day New York).

This concludes the Dutch contribution to the exploration of the continent, later only extended by the exploration of Surinam's interior. But apart from that, the Dutch contributed to projecting the image of America, either in maps or in illustrations.

Maps of the Americas, especially of Brazil in the 16th and 17th century were adorned with the images of cannibals (Brazil) and giants (Patagonia); this was still continued into the 1630s, when people must have known better. The Dutch contributed to the humanizing of the representation of the area's original inhabitants, especially through the illustrations produced by the painters Eckhout and Post, who the Dutch governor John Maurice of Nassau brought with him when he occupied Pernambuco for one generation (1630-54). Not only the inhabitants, but the landscape is humanised as well. It is tamed, subjected to human activities. In the news map of Pernambuco (figure 2) produced in 1625 in Antwerp we see all the activities, the cutting and processing of sugarcane, the tilling of potatoes and pineapple, and of manioc, as well as its rasping and further treatment. Instead of cannibals and wild animals we find sugar mills in the interior of Bahia and Pernambuco.



Figure 2. News map of Pernambuco, produced by A.Verhoeven, Antwerpen 1625. A= Pernambuco, B=canal to the city, C=street between the castles, D=Fortaleza de tierra, E=village of Recife, F= Castle on the sea, G=stone reef, H=Brazilian shipping, I=chapel Nuestra Senhora de Nazareth, K=manner in which the Portuguese transport themselves.

The Dutch painters Frans Post and Albert Eckhout were accompanied by the scientists Willem Piso and Georg Marcgraf, that produced a history of the Dutch occupation (Rerum per octennium in Brasilia et alibi nuper gestarum...). There is also a manuscript collection, Theatrum rerum naturalium Brasiliae, consisting of 800 drawings, oil paintings and water coulours of Indians, negroes, animals, plants and fruits, with a description of all animals and insects) and a Historia naturalis Brasiliae, compiled by Johannis de Laet (1648) with

# **Special Features**

# Forthcoming Events

all plants described and drawn by Georg Markgraf and Willem Piso. In my opinion, this was the first scientific documentation and mapping of the Americas, 100 years before La Condamine and 170 years prior to the scientific mapping by Von Humboldt. The material of all these endeavors was distributed all over Europe by John Maurice when he came back there, parts ended up in the Netherlands, in Denmark, in Berlin, Krakov and Paris, where it inspired new styles of ornamentation. It is only now that all this material is put together again.

But even if the permanent presence in South America was stopped after 1654, the commercial Dutch charting establishment of Van Keulen continued its coverage: in 1680 it published the New large shining sea torch contained 230 printed hydrographic charts, which were evidence of systematic planning, complete coverage and uniform scales. There existed no comparable publication at the time, and the later map series of the British, Spanish and French navies were modeled on it in map frames and scales. Van Keulen's data quality did not stand the test of time, and the company lacked the resources to update the maps with new measuring techniques. When we look at the index sheet of printed maps in the New large shining sea torch, we see that only the west coast of America was not covered by printed charts. But apart from those printed maps, the house of Van Keulen kept stocks of over 500 manuscript charts (1704-1726) on a larger scale (a.o. harbour approach charts). The maps have a uniform size (60x100cm) and execution (see figure 3).

The manuscript charts of the East coast shown in figure 3 were based on surveys by the Dutch themselves. It is not known to what degree those of the West Coast were similarly produced or derived from Spanish charts; they still must be compared.

Ferjan Ormeling, ICA Secretary General

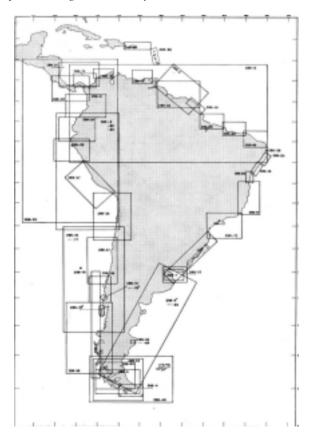


Figure 3. Index maps of manuscript maps kept in store by the Van Keulen firm, commercial hydrographers in Amsterdam, in the 17th and 18th century.

### **INTERCARTO 10**

Sustainable Development of Territories: GIS and practical experience

Date: July 12 -19, 2004.

### Venues: Vladivostok (Russia), and Changchun (Peoples Republic of China)

The International Cartographic Association, International Geographic Union, Federal Survey of Geodesy and Cartography, Pacific Institute of Geography, M.V. Lomonosov Moscow State University and North-East Institute of Geography and Agricultural Ecology (People's Republic of China) invite the scientists and specialists working in the field of complex problems of sustainable development of territories and also in the area of sciences about the Earth and society and those using GIS to take part in the International Conference " INTERCARTO-10".

Enquires and general correspondence concerning the Conference should be addressed to:

Dr. Victor V Yermoshin Secretary of the Organizing Committee IC-10 Pacific Institute of Geography, Russian Academy of Sciences Far Eastern Branch 7 Radio Street, Vladivostok 690041, Russian Federation Tel: (4232) 33 90 65; (4232) 32 06 72 E-mail: yermoshin@tig.dvo.ru or oler@tig.dvo.ru Website: http://www.tig.dvo.ru

The modern city of Vladivostok is the real pearl of Russia and the entire Pacific-Asian region, Based in 1860 on the coast of the Golden Horn Bay as the post of Russia in the Far East, the city is the most important industrial, transport, scientific, and cultural center and the largest port of the Pacific coast. Tourists, guests of the city, local residuals are charmed with Vladivostok, its unique nature and numerous protected areas in Primorskii Krai.

Vladivostok's climate is monsoon, the average temperature for July varies from +18 C to +20 C. Air humidity is 90%; the average monthly water temperature in the Peter the Great Bay is +20 C.

Plenary sessions of the Conference, the Seminar and an Exhibition will be held in the halls and auditoria of the Far Eastern Branch of the Russian Academy of Sciences.

The second part of the conference will be take place on July 16 -19, 2004 in Changchun (Peoples Republic of China). Further information about this section of the conference can be obtained emailing at: zhangbai@mail.neigae.ac.cn.

Intercarto-10 at Changchun will include an excursion to the Changbaishan Mountain, located in the southeast of Jilin province, 700 kilometers away from Changchun City, and is the boundary mountain between China and Korea. It is the source of Tumen river, Yalu river and Songhuajiang river. It was also entitled as one of the 10 famous mountains of China and the highest peak of east part of Eurasia, and was awarded with the "AAA-grade" beauty spot of the country.

# Forthcoming Events

### The British Cartographic Society

The 41st Annual Symposium and Map Curator's Workshop will be held from Thursday 9 September to Sunday 12 September 2004 at the University of Durham, Durham, England. The Symposium will consist of our usual mixture of informative lectures, workshops and social events.

- Symposium Session I Children and Cartography
- Symposium Session II Education in Cartography
- Symposium Session III Mapping Boundaries
- Symposium Session IV Historical Military Mapping
- Symposium Session V Contemporary Military Mapping
- Strategic Session: influencing the future direction of British cartography
- Exhibition: the annual showpiece of mapping in the UK
- Annual Dinner and Awards Ceremony

BCS members will receive a brochure and booking form in the post in May. For any specific queries please contact:

David Fairbairn, BCS Programme Committee Chairman, School of Civil Engineering and Geosciences, University of Newcastle upon Tyne, Newcastle upon Tyne NE1 7RU, UK. Tel +44 (0)191 222 6353 Fax +44 (0)191 222 8691 e-mail Dave.Fairbairn@ncl.ac.uk British Cartographic Society web site is at http://www.cartography.org.uk/ Latest symposium news on http://www.cartography.org.uk/Pages/Latest/SympDurh.html

### June

### 12th International Conference on Geoinformatics 2004

7-9 June 2004 Gävle, Sweden, email geoinformatics@hig.se http://www.hig.se/geoinformatics/

### Second National Congress of Cartography - Argentina

IX National Cartographic Week Date: 22 - 25 June 2004 Venue: Av Julio Roca 651 - Buenos Aires, Argentina Contact: Organising Committee Cabildo 381 (1426 AAD) Buenos Aires Phone: 4574-5576, ext. 184, 4349 - 3115 Email: acac@com4.com.ar

### July

### XXth ISPRS Congress

Istanbul, Turkey, from 12-23 July. Enquiries to: Prof Dr M Orhan Altan, Director ISPRS 2004 Congress, Istanbul Technical University, Faculty of Civil Engineering, 34469 Ayazaga, Istanbul, Turkey Email: oaltan@itu.edu.tr Web: www.isprs2004-instanbul.com

### August

### GITA Australia and New Zealand Conference 2004

9-11 August 2004 Location : Melbourne Australia Organisation : GITA Telephone : +61 (0) 2 9979 8586 Email : Jose.Diacono@gita.org.au WebSite : http://www.gita.org.au

### Map Asia 2004

(3rd Asian Conference on GIS, GPS, Aerial Photography and Remote Sensing)

August 26 - 29, 2004 Beijing , China Email: info@mapasia.org Web: http://www.mapasia.org

### September

RSPSoc 2004 Aberdeen, united Kingdom From 07-10 September Enquires to: Email: rspsoc@nottingham.ac.uk Web: www.rspsoc.org

### **IGARSS 2004**

Anchorage, AK, USA From 20-24 September Web: www.igarss.org

# Fifth Arab Conference on Geographic Information Systems (ARABMAP 2004)

6 - 7 September 2004
Location : Egypt - Cairo
Organisation : Information Technology Institute
Address : Information Technology Institute 241 ElAhram st., Giza, Egypt
Telephone : 202 - 3868420 Ext. 335
Fax : 202 - 3868429
Email : arabmap@iti-idsc.net.eg
WebSite : www.ngisc.gov.eg

### FOSS for Geoinformatics: GIS GRASS Users Conference 2004

September 12-14, 2004 Location : Bangkok, Trailand Organisation : Chulalongkron University Address : GRASS-2004 SECRETARIAT Faculty of Survey Engineering Department of Survey Engineering Chulalongkorn University Patumwan, Bangkok, Thailand 10330 Tel: +66-2-2186661 Fax: +66-2-2186653 Email: grass04\_office@gisws.media.osaka-cu.ac.jp Web: http://gisws.media.osaka-cu.ac.jp/grass04/

### **11th SPIE International Symposium on Remote Sensing** 13-17 September, 2004

Gran Hotel Costa Meloneras Maspalomas, Gran Canaria, Spain http://spie.org/info/ers

### October

FIG Regional Conference for Asia and the Pacific Jakarta, Indonesia From 03-07 October Enquiries to: Email: fig@fig.net. Web: www.fig.net

# Forthcoming Events

### **XXIV INCA International Congress**

Date: October 6 - 9, 2004 Venue: Science City, Kolkata Contact: Dr. A. K. Dasgupta, Organising Secretary. Telephone: + 91- 33 - 23346459/6331/3699 Email: inca2004@rediffmail.com

### **5th AARSE Conference**

Nairobi, Kenya From 18-21 October Enquries: Dr W K Ottichilo, RCMRD, PO box 18118, 0500 Nairobi, Kenya Fax: 254 (2) 802 767/861 673 Email: rcmrd@rcmrd.org; ottichilo@rcmrd.org

### **VIII International Earth Sciences**

Congress 18 - 22 October 2004 Santiago, Chile Enquires: Instituto Geografico Militar Email: cct2004@igm.cl Web: www.igm.cl/Cct2004/english/index.htm

### November

20

Asian Conference on Remote Sensing 2004 Cheng, Mai, Thailand, From 0-7 November Enquires to Web: www.aars-acrs.org

### January 2005

### 8th Global Spatial Data Infrastructure **Conference (GSDI-8) & FIG Working** Week

16-21 April 2005 Location : Cairo, Egypt Organisation : GSDI Association, International Federation of Surveyors (FIG), the Egyptian Committee for Surveying and Mapping (ECSM), and the Egyptian Survey Authority (ESA) Contact person: Markku Villikka, Email: esa1@idsc1.gov.eg Telephone : +45 3886 1081 Fax : +45 3886 0252 Email : fig@fig.net WebSite : http://www.fig.net/cairo/

### Cartographic Cutting-Edge **Technology for Natural Hazard** Management

#### October 20 - 22, 2004, Dresden, Germany

Both geohazard management (in the widest sense) and new technologies in cartographic data visualisation represent fields of growing world-wide interest. This is why, with strong support of the International Cartographic Association (ICA) and the German Cartographic Society (DGfK), the Institute for Cartography of the Dresden University of Technology plans to bring together experts in geohazards mitigation and rescue as well as cartographers, GIS developers and hard- and software providers. The interdisciplinary mix of presentations will certainly stimulate interesting discussions. After the devastating centennial flood in 2002, Dresden seems to be an adequate venue for such a future-oriented meeting.

### **Conference Venue**

The Cartographic Cutting-Edge Conference will be held at the IFW, Leibniz Institute for Solid State and Materials Research Dresden. Lecture Hall, Helmholtzstraße 20, D-01069 Dresden.

Registration fees until Jun 30, 2004 after Jun 30, 2004 Ordinary \* 250 - 300 Euros Students \* 100 - 150 Euros \* The Get together, the coffee breaks, the lunches and the conference documents are

includes at the registration fee.

Scientific Secretariat Prof. Dr. Manfred Buchroitner Mrs. Steffi Sharma Dresden University of Technology, Institute for Cartography D-01062 Dresden Phone: +49 (0) 351-463 34809/7562 E-mail: Steffi.Sharma@mailbox.tu-dresden.de or Manfred.Buchroithner@mailbox.tudresden.de

Organizing Secretary: **INTERCOM Konferenzservice** TU Dresden GmbH Mrs. Sylvia Neumann E-mail: sneumann@intercom-dresden.de

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### Contributions

Please send contributions to: Graciela Metternicht, Editor ICA News School of Spatial Sciences Curtin University of Technology GPO Box U 1987, Perth 6845 Western Australia Email: graciela@vesta.curtin.edu.au Fax: +61-8-9266 2703 Ftp: cage.curtin.edu.au Login and pwd: engftp Directory: /graciela/ICA/incoming

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For further information contact: The ICA Secretary General: Ferjan Ormeling, Faculty of Geographical Sciences, Utrecht University, P.O.Box 80115, 3508 TC Utrecht, The Netherlands. Email: f.ormeling@geog.uu.nl



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