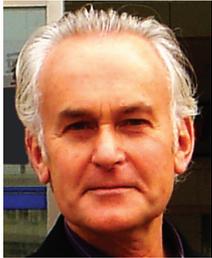




## president's report



### Dear Colleagues

This December 2010 issue of the newsletter is published to again bring the ICA community up-to-date with the activities that have taken place that are associated with the

Association, as well as providing complementary information that will be of interest to friends of ICA. Editor, Igor Drecki is to be again congratulated with the publication of another great issue.

It is worth noting how Igor is using the global reach of the Association to streamline the production, printing and distribution of the newsletter, as well as reducing costs. Igor receives copy and images electronically from global contributors. He then edits and assem-

bles the complete newsletter and generates a PDF file. After it is checked and approved, Igor generates two PDF versions for placing on the website – one for screen viewing and another for download and print. ICA Web masters Felix Ortag and Manuela Schmidt, at TU Wien in Vienna, Austria then place these two PDF files onto the ICA website. In parallel, another digital version of the newsletter is transferred electronically by Igor to a printer in Hong Kong, where, initially, a proof is output for review. This proof is checked by Hong Kong-based ICA Vice President Professor Zhilin Li. After approval the newsletters are printed and dispatched to Professor Li who, with the assistance of students at the Hong Kong Polytechnic University, place the newsletters in envelopes, which are then mailed from Hong Kong to ICA members and associates. This illustrates the wonderful spirit of collaboration

> 02

## 15th general assembly of ica paris · france

As we move inexorably towards the 2011 International Cartographic Conference (ICC) in Paris (3-8 July, 2011), the administration of ICA turns towards the associated quadrennial General Assembly. Whilst the French organising committee in Paris are efficiently proceeding with scientific, technical, social, exhibition, accommodation and publishing aspects of the ICC (and associated workshops), ICA committees are engaged with responsibilities related to the management of our association.

The General Assembly of ICA has a number of purposes, and in order to carry them out, ICA members (who form the General Assembly)

must participate and undertake some tasks. For example, a new Executive Committee must be elected. Nominations for the positions of President, Secretary-General & Treasurer, and seven Vice-Presidents must be received at least five months before the first General Assembly meeting in Paris (i.e. before 2 February 2011). That date is also the deadline for national members to submit bids to host the 2015 General Assembly and International Cartographic Conference: the decision on the location of the 2015 General Assembly will be made by the General Assembly meeting in Paris.

> 03

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Walking through an art exhibition at a national gallery we often marvel at the artistry and workmanship of painters and sculptors, at their vision and influence on the development of national identity. Throughout history we have often referred to them as those who spread the fame of our nation and our country well beyond its borders. We like to associate ourselves with them, the exemplary citizens of our common motherland.

However, we rarely consider cartographers and their work as worthwhile and influential as the work of painters, composers, architects or writers. Why? Why can't a map or an atlas be considered as influential in building national identity as paintings, music or poetry?

Cartography has the ability to encapsulate the conceptual, technological as well as artistic qualities of a nation, and translate them into cohesive and intuitive representations of its people and its environment. An example could be a national atlas that in a well researched, innovative, original and aesthetically creative way represents the natural environment we live in, who we are as a nation, where we came from and how we are organised as a society. It informs and educates, enlightens and inspires. It influences all generations and provides an amazing body of knowledge we can tap into in our everyday lives. A national map series or even an individual map could equip us with the same qualities and pride equally well.

One might argue that cartography has an even wider, more universal influence than the creative arts. With its mastery of representing social and environmental dimensions of our existence it clearly contributes to the development of the human race in general. And it does it so intuitively and so elegantly – truly something to be proud of as cartographers.

The ICA's General Assembly in Paris features strongly in this newsletter. Also, the response to ICC 2011's call for papers has been overwhelming and the conference promises a truly diverse and solid programme. Finally, a feature on the *Map of the Month* highlights the world's best in cartography.

Igor Drecki | Editor ICA News | ICA ●

The **ica news** is published by the International Cartographic Association (ICA).

President: **William Cartwright** | RMIT University | Australia

Secretary General & Treasurer: **David Fairbairn** | Newcastle University | United Kingdom

Editor ICA News: **Igor Drecki** | The University of Auckland | New Zealand

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02 number 55 | december 2010

## president's report cont...

between members of the international community. It reflects upon what is truly an international cartographic community, a community dedicated to advancing cartography and GIScience and growing the Association.

The following sections report on my activities since publication of the last newsletter.

### Outreach Programmes, Ho Chi Minh City, Vietnam, and Jakarta, Indonesia

The ICA ran two outreach education programmes under the 'umbrella' of the ICA Commission on Education and Training. The workshops were conducted to facilitate technology transfer to colleagues in Ho Chi Minh City, Vietnam and Jakarta, Indonesia during July and August 2010.

The Ho Chi Minh City Workshop, 19-23 July 2010, covered Cartographic Information Systems (GIS with a cartographic emphasis), Internet Mapping, Atlas production, Prepress and Digital Printing. Presenters were Professor László Zentai (Hungary) and Professor Vít Voženílek (Czech Republic). Manuela Schmidt (TU Wien) and I contributed to the second week of the course, which addressed Web Cartography and its applications. It covered the topics of Web mapping, Web 2.0 and the design and production of map mash-ups.

The second workshops were held in Jakarta, Indonesia. In the first week the topics covered were Map projections, Map design / Cartography design, Cartography theory (Map Evaluation), Atlas cartography, Toponymy, Map production using GIS, Prepress design and layout using GIS, Computer assisted cartography using ArcGIS and 3D GIS. Presenters were Professor Ferjan Ormeling (The Netherlands) and Dr Gang-Jun Liu (Australia). In week 2 Manuela Schmidt (TU Wien) and I contributed with a program on Web cartography.

All contributors' universities and the Netherlands Cartographic Society GIN are to be thanked for providing the time release and funding air travel costs for colleagues to run the workshops.

### GeoCart'2010, Auckland, New Zealand

I attended the GeoCart'2010 conference in Auckland, 1-3 September 2010. It was organised by the New Zealand Cartographic Society. Igor Drecki and his team did a wonderful job of organising the event at Auckland University. Colleagues from the ICA community presented in Auckland, including Professor Cindy Brewer, Professor Manfred Buchroithner and Dr Ken Field, editor of *The Cartographic Journal*, an affiliated journal of ICA. I gave a keynote presentation and delivered a conference paper.

### Art and Cartography Working Group Workshop, Montreal, Canada

I attended the workshop in Montreal, 8-10 September 2010, hosted by Concordia

University. The workshop was organised by Dr Sebastien Caquard (Canada), co-chair of the ICA Art and Cartography Working Group. Sebastien was assisted in the development and operation of the workshop by Associate Professor Laurene Vaughan (Australia). The meeting brought-together around 20 participants who explored the theme of mapping Montreal from a common database. Professor Jacqueline Anderson, former Chair of the ICA Commission on Children and Cartography attended the workshop. I presented a paper at the workshop, entitled *The City as a MetroMap: Envisioning Montreal*.

### Spatial Excellence Awards, Melbourne, Australia

The awards are held each year by the geospatial sciences industry in Victoria, Australia. I was invited to attend and represent ICA at this event on 15 September 2010.

### ICA Commission on the Theory of Cartography meeting, Hong Kong

ICA Vice President Zhilin Li organised the workshop, which was held at Hong Kong Polytechnic University, 23-24 September 2010. Organisation was supported by the ICA Commission on Theoretical Cartography, chaired by Dr Alexander Wolodtschenko. Also presenting at the conference was ICA Vice President Georg Gartner. I presented a paper on "Geospatial data provision in a Web 2.0 world".

### Joint Board of Geospatial Information Societies (JBGIS) Meeting, Singapore

The Joint Board of Geospatial Information Societies (JBGIS) had an informal meeting on 18 October 2010, prior to the GSDI conference in Singapore. The meeting discussed issues that are relevant to all sister societies that comprise the Board.

### Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) Meeting, Singapore

At this meeting (18 October 2010) I was invited to present a status report about the ICA and our activities.

### GSDI conference, Singapore

Between 18-20 October 2010, I attended the GSDI conference and represented the ICA in conference activities. I was invited to present a paper on ICA Outreach activities at a JBGIS-focussed session. Immediate Past President, Professor Milan Konečný also attended the GSDI conference.

At the Conference in Singapore I met with Associate Professor Abbas Rajabifard, President, GSDI. We followed-up on previous discussions about how both organisations might collaborate in the future.

# president's report cont...

## XXX Indian National Cartographic Association conference, Dehra Dun, India

I was invited by the Indian National Cartographic Association (INCA) President Major General Manoj Tayal (Additional Surveyor General, Survey of India) to attend their conference on Cartography for Sustainable Development, held in Dehra Dun, India, 8-10 November 2010. The conference was organised by the Dehra Dun Chapter of INCA.

XXX INCA Conference auditorium, Survey of India, Dehra Dun, India | *Photograph courtesy of William Cartwright*



The conference organizing committee was chaired by Major General VP Srivastava, Survey of India. Prior to the conference I attended the INCA Executive Committee meeting. I was most pleased to be able to meet with the INCA Executive Committee and be involved in their discussions. I also had discussions with the Surveyor-General of India Swarna Sabba Rao (Survey of India) and the Joint Chief Hydrographer of the National Hydrographic Office (India), Rear Admiral SK Jha. Both of these organisations have headquarters in Dehra Dun.

The conference consisted of an opening address by the Secretary of the Ministry of Science and Technology, Government of India, Dr Shailesh Nayak and a keynote address by Dr T Ramasami, Secretary of the Department of Science and Technology, Government of India. Additionally there were scientific paper presentations, poster sessions and a technical exhibition. At the conference awards were given to esteemed members of INCA and to prizewinners from the India-wide Map Quiz for school students. The Surveyor-General Rao established this quiz over a decade ago. I gave a keynote address about the activities of the International Cartographic Association.

## Executive meeting, Orlando, Florida, USA

The ICA Executive Committee (EC) met in Orlando Florida in November, in conjunction with the AutoCarto 2010. It was pleasing to see many ICA Commissions and Working Groups meeting during the conference. The EC further developed documentation for presentation at the 15th General Assembly in Paris. The EC also met with the USA National Committee for ICA and discussed their plans to bid for the ICC 2015 International Cartographic Conference and General Assembly of ICA.

## 25th ICC and 15th General Assembly of ICA, Paris, France

Paper submissions for the 25th International Cartographic Conference in Paris in July 2011 have now closed. It is most pleasing to see that over 900 submissions were received. It certainly points to a truly wonderful event in Paris. Please make sure that you take advantage of the Early Bird Registration available on-line via the conference web site at [www.icc2011.fr](http://www.icc2011.fr).

William Cartwright | President | ICA ●

# 15th general assembly of ica paris · france cont...

In addition, the General Assembly will receive reports on the work of the ICA Commissions and Working Groups for the 2007-2011 period, and elect new Commissions. Commissions for the period 2011-2015 (including any Commissions which are nominated to continue from 2007-2011) will be approved by the General Assembly in Paris. Commissions must be nominated by national members, and again the deadline for these nominations is 2 February 2011. It is normal for a national member to nominate the Commission when the proposed chair is from that nation, but the complete nomination must also include a vice-chair (who must be from a different country) and Terms of Reference.

The General Assembly will also be given the opportunity to vote on a number of other issues, including the financial budget, any changes in Statutes, and new member nations. The role of national delegates is important and it will be useful to receive the names of the principal and deputy delegate from each member nation before 2 February 2011 also.

According to the ICA statutes, Article 5, and By-law 6, each member country has to submit a national report to each ICA General Assembly. These national reports can be in paper or digital form or both, or can be made accessible through the Internet. Thus, the General Assembly receives, on behalf of ICA, the reports

of national members covering cartographic and GI activity during the preceding four years. The national reports, which will be tabled in Paris, are an opportunity for national members to display their work and outputs during the 2007-2011 period. National reports are hosted on the ICA web page and form a useful archive of progress in Cartography and GIScience.

Advice and instruction on all the aspects mentioned here – nominations, deadlines, engagement with the General Assembly, national reports – will be posted to each national member in time for discussion and decisions to be made.

Clearly, the General Assembly is a focus of much activity, but the main International Cartographic Conference itself (described elsewhere) is an attraction in itself, and all the world's cartographers are encouraged to visit Paris. Because the ICA archive is hosted in Paris, attendees are encouraged to bring with them any materials (papers, reports, e-mails, proceedings) which relate to the operation and development of ICA: we will be delighted to receive any documents which could be used by future historians of our association.

We look forward to seeing you in Paris!

David Fairbairn | Secretary General & Treasurer | ICA  
| [dave.fairbairn@newcastle.ac.uk](mailto:dave.fairbairn@newcastle.ac.uk) ●

## ica news children's map award 2011

The 2011 international competition is around the corner; the detailed rules can be downloaded from the ICA Commission on Cartography and Children website [lazarus.elte.hu/ccc/ccc.htm](http://lazarus.elte.hu/ccc/ccc.htm). The final deadline for sending the national winning entries to the international coordinators – Peter van der Krogt and Ferjan Ormeling is **1 April 2011**. If you have any questions related to the competition or its rules, please do not hesitate to contact Temenoujka Bandrova at [tbandrova@abv.bg](mailto:tbandrova@abv.bg) or José Jesús Reyes Nunez at [jesus@ludens.elte.hu](mailto:jesus@ludens.elte.hu).

José Jesús Reyes Nunez | Co-Chair | ICA  
Commission on Cartography and Children | Hungary ●

Children's Map Exhibition at the 24th ICC in Santiago, Chile, 2009 | *Photograph courtesy of José Jesús Reyes Nunez*



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Anne Ruas | Institut Géographique National | France

Timothy Trainor | US Census Bureau | USA

## Past President

Milan Konečný | Masaryk University | Czech Republic

## Editor ICA News

Igor Drecki | The University of Auckland | New Zealand

# ica news contributions

Please send your contributions to

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Auckland  
New Zealand

## Submission Deadlines

**15 May** for June editions

**15 November** for December editions

# 25th international cartographic conference 2011 paris · france



The call for papers to the ICC 2011 has now closed and the results of the review process have been sent to the authors. The Local Organizing

Committee (LOC) was pleased to receive over 900 submissions.

The International Scientific Committee and the French Scientific Committee had a huge task to undertake a review process, not only because of the quantity of submissions, but also because of the process itself - for the first time each of the 245 long papers has been blind reviewed by two reviewers. The final outcome is that the Conference Program contains more than 500 oral presentations and 300 posters. Also for the first time, the 81 best papers will be published in *The Cartographic Journal*, *Cartographica* and the Springer's new ICC series. Other papers and posters will be published digitally. High submission numbers and the subsequent acceptance rate are very pleasing to the ICA and motivating to LOC.

The Local Organizing Committee is currently finalising the scientific program and organising Conference publications, map and commercial exhibitions, and an exciting social program. The first analysis reveals that the classic ICA themes such as geovisualisation, SDI, data quality, generalisation and history of cartography attracted, as usual, a lot of submissions, but other themes such as semiotics, use and user issues, crowdsourcing, digital technology and cartographic heritage also promise to be well represented in Paris. Many papers, nearly 10%,

concern the use of GIS, maps, images and related spatial analytical methods for specific applications. Last but not least, many submissions focus on the conception of specific GeoDB or maps. LOC would like to remind you about a number of specific sessions dedicated to Jacques Bertin, his work and its influence on cartography on Monday, 4 July 2011, and a day meeting for the National and Regional Mapping Agencies to be held on Wednesday.

It is now time to register for the Conference; the early bird rate is available until **1 March 2011**. Please contact the relevant ICA Commission chairs if you would like to participate in their workshops that have been organized to take place just before the Conference. Please do not forget to arrange a visa (if required) and hotel reservation as soon as possible. For registration and information, please refer to our website at [www.icc2011.fr](http://www.icc2011.fr).

We look forward to welcoming you to Paris.

Francois Lecordix | Local Organising Committee ICC 2011 | France ●

Coronelli's giant globes at the National Library | Photography © Alain Goustard/BnF



# ica news 25 years ago...

The item below describes an interesting development that made the ICA a founding member...

Igor Drecki | Editor ICA News | ICA ●

## ICA Newsletter, No 6, October 1985

### IUSM Formed: ICA a Founding Member

During the General Assembly in Perth, the ICA voted to adopt the guiding principles of a proposed International Union of Surveying and Mapping (IUSM). On Tuesday, September 10, 1985, at Harrogate, UK, the IUSM officially came into existence.

Since 1979, the Presidents and Secretary-Treasurers of five international organizations have met regularly. Referred to as the Joint Board of Sister Societies, this board at its sixth meeting in

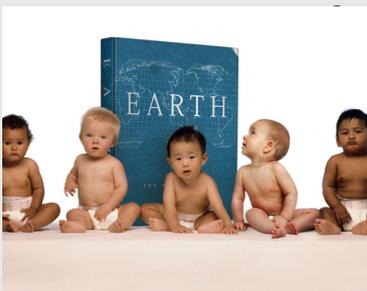
Hannover in 1984 accepted a set of guiding principles leading to the formation of the IUSM. [...] ISPRS President Konecny, ICA President Morrison, and FIG President Weir along with Secretaries Torlegard (ISPRS), Pearce (ICA), and Youngs (FIG) formally initiated IUSM at the eighth meeting of the Joint Board [...] in Harrogate. The six gentlemen comprise the Board of IUSM.

Several actions were taken by the IUSM Board. Dr Fred Doyle, former President of ISPRS and drafter of the guiding principles, has been asked [...] to draft Statutes and Bylaws for IUSM in accordance with guidelines specified by the International Council of Scientific Unions (ICSU). Dr Doyle was also requested to research the steps necessary for IUSM to apply to ICSU for membership. Finally, Dr Doyle was requested to propose a schedule of meetings for IUSM to include major international meeting in 1992. [...]

The *Map of the Month* feature introduced on the ICA website ([icaci.org/map-of-the-month](http://icaci.org/map-of-the-month)) in February this year, currently showcases the winning entries from the International Cartographic Exhibition held at the ICC 2009 in Santiago, Chile. Presented here are all maps and cartographic products published on the ICA website during 2010. They are just a sample of outstanding cartography that encompasses the innovation, talent, creativity and dedication of cartographers and designers. We hope you find them inspirational in your cartographic endeavours.

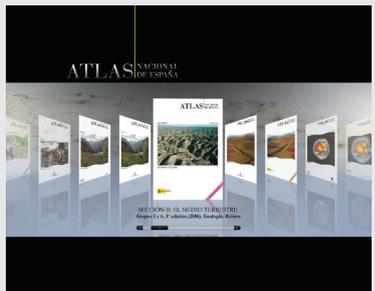
**Manuela Schmidt** | Web Developer | ICA Website | ICA | [icawebsite@cartography.tuwien.ac.at](mailto:icawebsite@cartography.tuwien.ac.at)

february



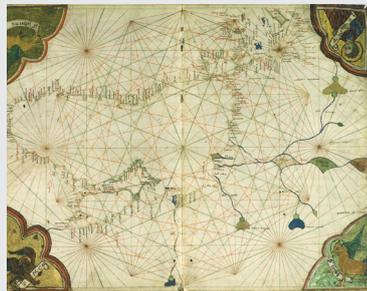
**EARTH Atlas** | Millennium House | Australia

march



**Atlas Nacional de España 1986-2008** | Instituto Geográfico Nacional | Spain

april



**Les Cartes Portolanes** | Institut Cartogràfic de Catalunya | Spain

may



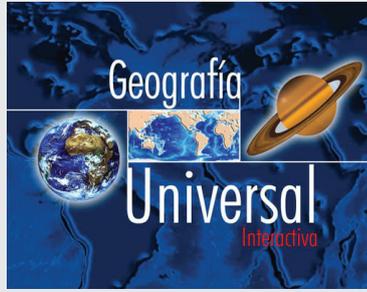
**SCAN Littoral® des côtes de France** | IGN – Service Hydrographique et Océanographique de la Marine | France

june



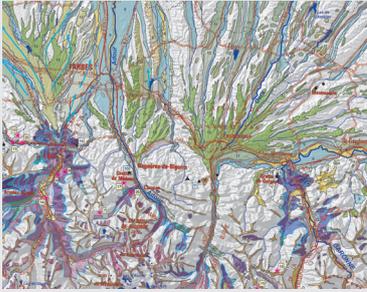
**Panamap Manhattan** | Urban Mapping Inc | USA

july



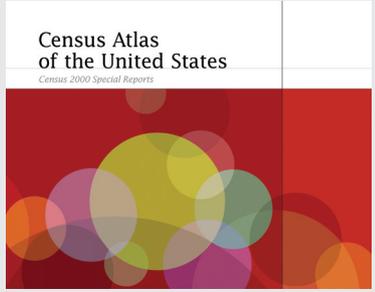
**Geografía Universal Interactiva** | Instituto Geográfico Militar | Chile

august



**Carte Géologique des Pyrénées** | Instituto Geológico y Minero de España – Bureau de Recherches Géologiques et Minières | Spain

september



**Census Atlas of the United States** | US Census Bureau | USA

october



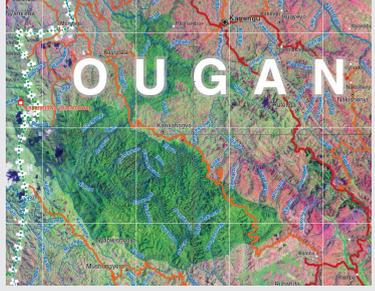
**Carte de Randonnée 4901 Wallis** | Institut Geographique National | France / Wallis et Futuna

november



**Circumpolar Region - International Polar Year 2001** | Natural Resources Canada | Canada

december



**Parc National des Virunga** | Universiteit Gent | Belgium / Democratic Republic of Congo

## donna williams



My interest in cartography is really what led me to geography although I did not know it at the time. In high school, in my attempt to be different from other girls, I took mechanical drafting. I ended up loving the work and did three drafting courses through my teens.

When I began my studies at Carleton University in Ottawa, I was attracted to geography because the subject fascinated me but also because it included courses in cartography. To me and at that time, cartography seemed similar to drafting and I completed every cartography course that was available. While researching my Masters thesis on different spatial patterns of men and women operating in neighbourhoods I found that mental mapping was an ideal methodology to explore the subject. The visualization helped the participants express their spatial environment and provided a wonderful tool for displaying results.

The fact that I had done so much cartography in my geography degrees landed me a job with Natural Resources Canada working on the Atlas of Canada. Eva Siekierska was the person who saw the creative mapping I had done in university and hired me to work on some of the

developmental electronic mapping she was doing. That was 23 years ago. Today I still work at the Atlas of Canada. I worked my way from being a research geographer who produced maps to becoming the program manager of the Atlas of Canada ([atlas.nrcan.gc.ca](http://atlas.nrcan.gc.ca)). During my career, I have produced maps using traditional methods of scribing and peel coats, I was part of the team that transformed the Atlas from paper maps to CD-Rom and then to online mapping and now I am exploring the visualization of Atlas maps on hand held devices. All of this has also provided the opportunity of being involved with the Canadian Cartographic Association. This has been such a wonderful experience. It has been quite a career so far and I am looking forward to the next 10 years!

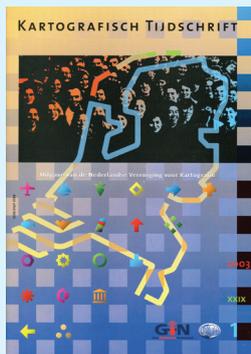
[www.geo-info.nl](http://www.geo-info.nl)

The Netherlands Cartographic Society (Nederlandse Vereniging voor Kartografie – NVK), founded in 1958, published its quarterly journal, *Kartografisch Tijdschrift* until 2003, when the Society merged with the Netherlands societies for geodesy and surveying, and for photogrammetry and remote sensing into the Society for Geo-Information in the Netherlands (GIN). GIN publishes a monthly journal called *Geo-Info*, which caters for all the activities of the new joint Society.

Special features of the *Kartografisch Tijdschrift* were the maps enclosed in every issue and the section on map 'improvement': a poorly designed government or newspaper map would be placed next to an improved visualisation of the same data, to demonstrate what cartographers could do by applying sound cartographic design principles. It also contained a section for its newer members explaining details of (digital) cartographic techniques. Its independent editorial team frequently opted for

special issues devoted to single themes. This internationally-oriented journal contained summaries in English and French.

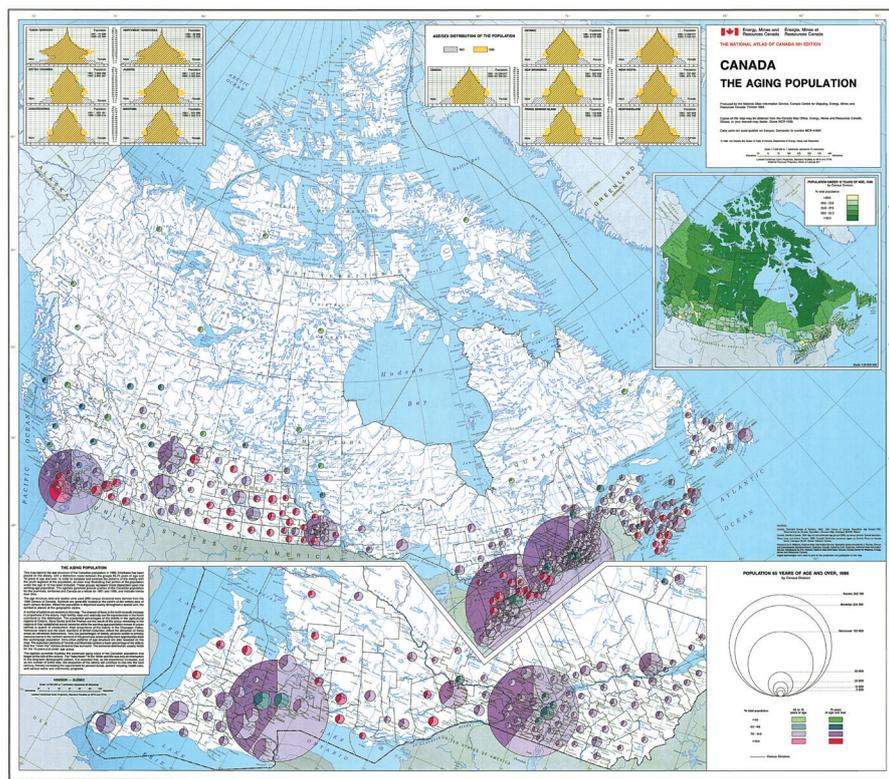
Cover of the 2003 issue of the Dutch *Kartografisch Tijdschrift* journal



Recent cover of the *Geo-Info* journal

Its successor *Geo-Info* is a more policy-oriented journal. It has no less than three columns in every issue, reports on all the meetings of the various subsections of the Society, acts as the mouthpiece of the Society's board, and could be characterised best as a low-threshold membership journal that informs geo-information technicians on new national developments that have a bearing on their varied professional practice.

**Ferjan Ormeling** | Cartographic Editor | *Geo-Info* | *The Netherlands*



developmental electronic mapping she was doing. That was 23 years ago. Today I still work at the Atlas of Canada. I worked my way from being a research geographer who produced maps to becoming the program manager of the Atlas of Canada ([atlas.nrcan.gc.ca](http://atlas.nrcan.gc.ca)). During my career, I have produced maps using traditional methods of scribing and peel coats, I was part of the team that transformed the Atlas from paper maps to CD-Rom and then to online mapping and now I am exploring the visualization of Atlas maps on hand held devices. All of this has also provided the opportunity of being involved with the Canadian Cartographic Association. This has been such a wonderful experience. It has been quite a career so far and I am looking forward to the next 10 years!

**Donna Williams** | Natural Resources Canada | *Canada* | [donna.williams@NRCan-RNCan.gc.ca](mailto:donna.williams@NRCan-RNCan.gc.ca)

Donna Williams | *Canada : The Aging Population* | The National Atlas of Canada | Energy, Mines and Resources Canada | 1993

*Aging Population* was a new concept when this map was produced in the early 1990's for the 5th Edition of the National Atlas of Canada. The focus was on representing the issue of an aging population rather than just demography.



Beginning as a small research group in 1969, the Environmental

Systems Research Institute (Esri) is widely recognized as the technical and market leader in geographic information system (GIS) software. Esri develops GIS solutions that function as an integral component in nearly every type of organization. On any given day, more than a million people around the world use Esri's GIS to improve the way their organizations conduct business. Esri software is used by more than 350,000 organizations worldwide including most US federal agencies and national mapping agencies, 45 of the top 50 petroleum companies, all 50 US state health departments, most forestry companies, more than 24,000 state and local governments, and many others in dozens of industries.

Esri also hosts the Esri International User Conference, the largest GIS industry event in the world, publishes ArcNews and ArcReader, two of the most widely circulated periodicals in the industry, and operates EsriPress, the leading GIS book publisher.

Esri Campus at Redlands, California, USA | Photograph courtesy of Esri



Esri delivers the most sought-after training solutions in the industry. Each year, more than 25,000 GIS professionals and students in the United States are trained by Esri or Esri-authorized instructors. In addition, more than 11,000 individuals from 180 countries have enrolled in Esri Web-based training courses and approximately 50,000 students a year complete university courses taught with Esri software.

### Fast Facts about Esri

- Headquartered in Redlands, California, USA
- 10 domestic US offices
- 80 distributors worldwide
- 2,200 business partners
- Annual revenues of \$794 million
- 2,800 employees in the United States
- Zero-debt company
- Privately held
- Consistent annual revenue growth
- 20% of revenues reinvested in R&D each year

Esri is proud to be an affiliate member of the International Cartographic Association (ICA) since 2002. For many years, Esri has supported the ICA through sponsorships and additional support. For the ICC 2009 in Santiago, Esri was a silver level sponsor. For the ICC 2011 in Paris, Esri is again supporting the conference at the silver level.

The ICA presented Esri President Jack Dangermond with its highest honor, the Carl Mannerfelt Gold Medal, at the 2008 Esri International User Conference. He is only the eleventh recipient of the medal. Through this prestigious award, the ICA acknowledged that under Dangermond's direction, Esri has pioneered innovative solutions for the development of new cartographic tools, the compilation of digital atlases, the promotion of cartography, and the creation of cartographic applications on



Building Q, Esri Campus | Photograph courtesy of Esri

computer desktops, across organizations, on the Internet, and in the field using handheld mobile technology (see *ICA News* No 49, December 2007 for full citation).

Aileen Buckley | Esri Mapping Centre | Esri | USA

Map of Esri Campus (reduced from the original) | Image courtesy of Esri



## reports ica commissions

### Cartography and Children

[lazarus.elte.hu/ccc/ccc.htm](http://lazarus.elte.hu/ccc/ccc.htm)

#### Meeting in Nessebar, Bulgaria

On the afternoon of June 18, the ICA Commission on Cartography and Children had their 2010 meeting. ICA President William Cartwright (Australia), ICA Past President Milan Konečný (Czech Republic) and Chair of the ICA Commission on Planetary Cartography Kira Shingareva (Russia), as well as representatives from member countries were present.

The meeting was divided into two parts. During the first 25 minutes Co-Chairs briefly reported on the Commission activities between the last meeting in Santiago, Chile in November

2009 and June 2010. The last 35 minutes were dedicated to discuss some of the proposals related to the rules of the next Barbara Petchenik World Map Competition that were changed in Chile last year.

**General information about Commission activities for the period 2010-2011:** In January 2010 the list of members on the Commission website was updated, and the Co-Chairs had the opportunity to share some interesting statistics related to the Commission membership: up to June of 2010 our Commission had members coming from 25 countries, and the four countries with the largest number of representatives were Brazil (7), Argentina (5), Greece (5) and Spain (4). The Commission had 55 members: 11 full and 44 corresponding members, all of them having valid contact addresses. At the same time, 8 full and 31



Temenoujka Bandrova (right) and Jesús Reyes Nunez presenting the Commission activities | Photograph courtesy of José Jesús Reyes Nunez

corresponding members could be considered active members, i.e. those who at least have participated in one meeting or event organized by the Commission.

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Since November 2009, four newsletters were sent out, one in December 2009 and one in April 2010, then in September 2010 containing a call for the next Barbara Petchenik Competition, and finally a special one in November 2010 giving information about the joint event to be organized before ICC 2011.

The Commission established a good contact with the IGU Commission on Geographical Education, and encouraged our members to present our activities within their Commission at regional events. A possible role of our members in the organization or participation in the GIS Day to be celebrated on 17 November 2010 was also discussed. Meeting participants were asked to share their experiences with these kinds of activities and pass them on for inclusion in the Commission newsletter.

During the meeting we have informed our members about the upcoming ICC 2011 and the most important deadlines relating to this conference. We talked about our plans to organize a joint meeting together with other ICA Commissions immediately prior to ICC 2011. In early October 2010 we finalised plans for a joint Symposium of four ICA Commissions, i.e. Cartography and Children, Education and Training, Maps and the Internet, Planetary Cartography, and the ICA Working Group on Cartography on Early Warning and Crisis Management. The Symposium will be held between 30 June and 1 July 2011 at the University of Orleans.

An update was given about the *Biannual Awards on Educational Cartographic Resources* competition. Its first edition is organized together with the ICA Commission on Education and Training for the ICA Conference in Paris, 2011. From September 2010, a call for participation was published on both Commissions' websites.

**Discussion of the proposed changes to the 2011 Barbara Petchenik Competition rules:** The meeting participants discussed some specific changes of the rules for the next edition of the competition to be held in Paris. The more important decisions were:

- A national coordinator and national ICA representative can allow entries not awarded at the national level competition to be used by national non-profit organizations (for educational and research purposes only). In such case, the national coordinator needs to send this information to the Chair of the ICA Commission on Cartography and Children who will make it publicly available through the Commission communication channels. If a national coordinator or national ICA representative is contacted by an international non-profit organization about using such entries for any purpose, then ICA Executive Committee (President or Secretary General) and the Chair of the ICA Commission on Cartography and Children should be contacted before making it available.

- From the 2011 competition, an official ICA form will be introduced to be signed by parents, to avoid any difficulties in publishing the winning entries in books or as posters, postcards, etc.
- From the next ICC in Paris, the Barbara Petchenik Exhibition will include two new panel boards showing copies of the final winning entries from the previous competition together with the current entries.



ICA Past President Prof Milan Konečný signing the book *Children map the World* for Daniela Karaivanova, Bulgarian winner of the Barbara Petchenik Award | Photograph courtesy of José Jesús Reyes Nunez

Another discussion focused the opinions expressed by the Jury members of the Barbara Petchenik Competition about the new point system introduced for the first time at the 2009 Competition. In general, their remarks were positive: they agreed that it is a very good tool for a preliminary selection of finalists and a good starting point for discussions, but the final decision should be made at the ICC conference, where they can see personally the original entries and not only the scanned ones supplied on a CD-Rom by the international coordinator.

At the meeting's conclusion, William Cartwright and Milan Konečný thanked the Commission for its work over the last several years. The Co-Chairs closed the meeting inviting all colleagues to participate in the next Commission meeting that will be held during the ICC 2011 in Paris.

José Jesús Reyes Nunez | Co-Chair | ICA Commission on Cartography and Children | Hungary ●

## Digital Technologies in Cartographic Heritage

[web.auth.gr/xeee/ICA-Heritage/](http://web.auth.gr/xeee/ICA-Heritage/)

### Workshop in The Hague, The Netherlands

The first announcement, including a call for papers and registration details, of the 6th International Workshop on Digital Approaches to Cartographic Heritage, The Hague, 7-8 April 2011 is available online from [xeeb.web.auth.gr/](http://xeeb.web.auth.gr/)

[gr/ICA-Heritage/Commission/6th\\_Workshop/InternationalWorkshop.pdf](http://gr/ICA-Heritage/Commission/6th_Workshop/InternationalWorkshop.pdf).

The Workshop is organized by the ICA Commission on Digital Technologies in Cartographic Heritage and the National Archives of the Netherlands (Nationaal Archief). The submission deadline is 10 March 2011.

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

## Education and Training

[lazarus.elte.hu/cet/](http://lazarus.elte.hu/cet/)

### Commission Workshops

The ICA Commission on Education and Training has sent an invitation to all ICA member nations inviting them to take up the offer by the Commission to run a workshop specifically designed to build on the cartographic knowledge of local cartographers in 2011. So far one nation has replied in the affirmative and the Commission is working towards making this workshop a reality. Guidelines have been produced for the workshops and are available from the CET website [lazarus.elte.hu/cet/](http://lazarus.elte.hu/cet/).

### Joint Symposium in Orleans, France

A workshop *Looking to the Future: Maps for Education and Children* is being organised for July next year in Orleans, France, prior to the ICC 2011. At present, the participation of the ICA Commissions on Cartography and Children, Management and Economics of Map Production, Maps and the Internet and Education and Training has been confirmed. Dr Jesus Reyes and Professor László Zentai are the key organising team.

### Assisting in Paper Reviews for ICC 2011

Commission members reviewed the cartographic education and training papers presented for consideration for the ICC 2011 conference. Thanks go to these members. Many papers have been submitted for the Cartographic Education and Training theme of the conference. This has resulted in an exciting mix of papers for the conference.

### Contributions to ICA Research Agenda

Two papers have been prepared as a contribution to the ICA Research Agenda. The first paper was presented at the ISPRS Commission VI, Mid Term Symposium, Enschede, in June 2010: *The Role of International Geomatics Organisations in the Promotion of Continuing Professional Development (CPD)* by David Fairbairn and David Fraser

In the paper the nature of CPD is considered: the process is modelled and each component is examined in the context of geomatics. Firstly, the type of person and institution interested in

CPD (the consumer) is addressed. Secondly, there is a range of suppliers of CPD resources including commercial companies, educational establishments or international learned societies. Thirdly, the material delivered also forms part of the model: there is a wide range of content, available material, and dissemination method.

The second paper entitled *The Changing Face of Cartographic Education and Training* has been prepared by three Commission members, Professor László Zentai, Professor Maria Cecília Bonato Brandalize and Associate Professor David Fraser, for the ICC 2011 conference. This paper discusses the issue faced by many cartographic departments and programs around the world. That is the demise of cartography as a discipline in its own right and the dispersal of cartographic theory and practice into many and varied education programs representing other disciplines.

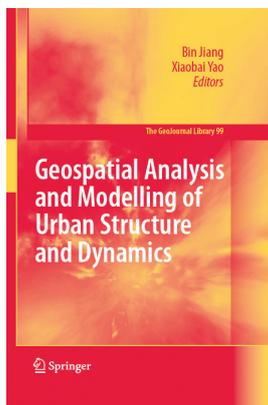
**David Fraser** | Chair | ICA Commission on Education and Training | *Australia* ●

## Geospatial Analysis and Modeling

[fromto.hig.se/~bjg/ica/](http://fromto.hig.se/~bjg/ica/)

### Commission Activities

A special issue on geospatial modeling and visualization, developed from the 3rd ICA Workshop on Geospatial Analysis and Modeling, August 6-7, 2009, Gävle, Sweden ([fromto.hig.se/~bjg/ica/workshop2009/](http://fromto.hig.se/~bjg/ica/workshop2009/)) is forthcoming with the international journal *Computers, Environment and Urban Systems*. We would like to thank the guest editor Professor Itzhak Benenson for his effort.



A recent book partially developed from 2nd ICA Workshop on Geospatial Analysis and Modeling held in 2007 in Athens, USA | *Image courtesy of Bin Jiang*

A joint commission meeting of the ICA Commission on Geospatial Analysis and Modeling with the

ICA Commission on Geovisualization will be held in conjunction with *GeoViz Hamburg 2011: Linking geovisualization with spatial analysis and modeling* in Hamburg, 10-11 March 2011 ([www.geomatik-hamburg.de/geoviz/](http://www.geomatik-hamburg.de/geoviz/)).

**Bin Jiang** | Chair | ICA Commission on Geospatial Analysis and Modeling | *Sweden* ●



Imre Demhardt explaining some cartographic principles in the Foscue Library of Southern Methodist University, Dallas, Texas | *Photograph courtesy of Elri Liebenberg*

## History of Cartography

[www.ichistcarto.org/](http://www.ichistcarto.org/)

### International Symposium in Arlington, Texas, USA

The ICA Commission on the History of Cartography held a successful Symposium at the University of Texas at Arlington (UTA) from 10-13 October 2010. The commission meeting was held in conjunction with the 7th Biennial Virginia Garrett Lectures on the History of Cartography on 8 October 2010, and the Fall Meeting of the Texas Map Society on 9 October 2010. The general theme was *Charting the Cartography of Companies: Company Mapping, 1600-1900*. The Commission aimed to highlight the influence of chartered companies (precursors of modern corporations) in cartography as they played an important role in overseas exploration, trade, expansion and colonial power. They relied upon maps and charts for planning, implementation and operation, and often employed their own map and chart makers, surveyors, cartographers and mapping departments.

To accommodate as many participants as possible, papers on other cartographic endeavours during the 19th century were also presented. Members of the ICA Commission on Maps and Society participated, as did representatives of the USGS. Papers on the development of photogrammetrical techniques in American sector mapping, the digital transition in US cartography during the 1970s, and the diffusion of USGS geospatial data for science research, demonstrated the Commission's mandate to not only investigate and record the history of cartography, but also of GI Science. The Symposium was attended by approximately 50 people.

The Symposium comprised 7 sessions during which 21 papers were presented. The majority

of participants were from the US, but others came from as far afield as Croatia, Hungary, South Africa, Brazil and the UK. On the closing day a separate session gave Prof Matthew Edney of the University of Wisconsin and Prof Roger Kain of the University of London the opportunity to explain their views in regards to the future development of Volume 5 of the *History of Cartography Project* of the Chicago University Press. Volume 5 of this prestigious publication will deal with the cartography of the 19th century.

To complement the Symposium, a special Map Exhibition on *Concessions to Chartered Companies as Mirrored in Maps, 1600-1900*, was staged by the Virginia Garrett Map Library of UTA. The Garrett Library is one of the leading Map Libraries in the US and holds approximately 900 maps dating from the 1500s to the 20th century.

During the Symposium a technical visit was undertaken to the Foscue and DeGolyer Libraries of the Southern Methodist University in Dallas. As the principal repositories at SMU for special collections in the humanities and the history of science and technology, these libraries hold extensive cartographic treasures. The social aspect of the Symposium was also well catered for with a full-day excursion to Fort Worth to visit the historic Stockyards, the Water Gardens, the Amon Carter Museum, as well as an exhibition providing an overview of the history of the city.

A published Proceedings of the Symposium will be available as from April 2011 after which the papers will also be made available on the Commission's website [www.ichistcarto.org](http://www.ichistcarto.org). Interested parties may contact Dr Imre Josef Demhardt at [demhardt@uta.edu](mailto:demhardt@uta.edu) for more information.

**Elri Liebenberg** | Chair | ICA Commission on the History of Cartography | *South Africa* ●

## Mapping from Satellite Imagery

[mailer.fsu.edu/~xyang/ica/](mailto:mailer.fsu.edu/~xyang/ica/)

### Workshop in Orlando, Florida, USA

The ICA Workshop on *Advances in Sensors and Algorithms for Topographic and Thematic Mapping* has been successfully held in Orlando, Florida, USA, 19 November 2010. The event was organized by the ICA Commission on Mapping from Satellite Imagery with co-sponsorship from the ICA Commission on Geospatial Analysis and Modeling. It was held in conjunction with the Special Joint Symposium of ISPRS Technical Commission IV and AutoCarto2010.

Three oral paper sessions were included in the Workshop, which covered a variety of topics ranging from new remote sensors, improved information extraction algorithms, and innovative topographic and environmental mapping applications. Workshop attendees included active scholars from the United States, Canada, Sweden, and China. Professor Zhilin Li, ICA Vice President, was present during the Workshop. A selection of the papers from the workshop will be included in an edited book that is expected to be published in 2012.



A paper session at the ICA Commission on Mapping from Satellite Imagery Workshop in Orlando, Florida, USA | Photograph courtesy of Xiaojun Yang

### Other Events

The Commission is sponsoring three other events: *LIDAR & RADAR 2011 - The International Symposium on LIDAR and RADAR Mapping*, Nanjing, China, 26-29 May 2011 (see [www.lidar2011.org](http://www.lidar2011.org) for more information); *JURSE 2011 - Joint Urban Remote Sensing Event*, Munich, Germany, 11-13 April 2011 ([www.jurse2011.tum.de](http://www.jurse2011.tum.de)), and *EOGC 2011 - Earth Observation for Global Changes*, Munich, Germany, 13-15 April 2011 ([www.eogc2011.tum.de/](http://www.eogc2011.tum.de/)).

### Recent Publications

Several major publications resulting from the EOGC2009 sponsored by our Commission include a Springer book on *Advances in Earth Observation of Global Change* (published in 2010) and a special issue on *Earth Observations and Remote Sensing for Environmental*

*Management and Hazard Mitigation* to be published by the *IEEE Journal of Selected Topics in Earth Observations and Remote Sensing* in early 2011.

Xiaojun Yang | Chair | ICA Commission on Mapping from Satellite Imagery | USA ●

## Maps and the Internet

[maps.unomaha.edu/ica/](http://maps.unomaha.edu/ica/)

### Workshop in Orlando, Florida, USA

The annual meeting of the Commission was held in Orlando, Florida, on 19 November 2010, in conjunction with AutoCarto2010 arranged by the Cartography and Geographic Information Society (CAGIS). Meeting facilities were arranged by CAGIS and presentations were made by representatives from Finland, United Kingdom, USA, Switzerland, Czech Republic, Netherlands, China, Japan, and Norway.

Reviewers of papers had an opportunity to talk to the presenters over lunch at a nearby restaurant. Reviews will help select chapters for the third book to be produced by the Commission since its inception in 1999. The book will be published by Springer Verlag during 2011 and will concentrate on the use of Application Programmer Interfaces (APIs) and other Webservices. Please contact the Commission Chair if you would like to include a chapter in the book.

The ICA Commission on Maps and the Internet will meet with the ICA Commissions on Cartography and Children, Education and Training, and Planetary Cartography, as well as with the ICA Working Group on Cartography on Early Warning and Crisis Management in Orleans, France, before the International Cartographic Conference in Paris.

Michael Peterson | Chair | ICA Commission on Maps and the Internet | USA ●

## National and Regional Atlases

[www.univie.ac.at/cnra/](http://www.univie.ac.at/cnra/)

### Workshop in Yogyakarta, Indonesia

On 20 and 21 October 2010 an atlas workshop was organised in Yogyakarta, Indonesia by the ICA Commission on National and Regional Atlases in cooperation with the National Coordinating Agency for Surveying and Mapping of Indonesia (Bakosurtanal), the Faculty of Geography of Gadjah Mada University of Yogyakarta, the Indonesian Cartography Association, the Indonesian Geography Association and the Association of Geographers



Prof Ferjan Ormeling (right), past Dean Prof Hartono (centre) and Noorhadi Rahardjo, President of the Faculty, in the conference hall | Photograph courtesy of Peter Jordan

of Gadjah Mada University. Mrs Diah Kirana from Bakosurtanal functioned most ably as the principal local organizer.

The meeting took place at the campus of the Gadjah Mada University, the largest university in Indonesia with a prominent cartography section. Yogyakarta still maintains a preeminent historical and cultural importance in Indonesia and is surrounded by a multitude of cultural attractions such as the Borobudur.

The event was composed of two meetings, a workshop *Atlases as expressions and carriers of space-related identity* on 20 October 2010 and a seminar *The strategic role of maps in development* a day later. The event was also an occasion to present Volume II of the proud National Atlas of Indonesia, edited by Bakosurtanal. Dr Suharto Widjoyo, head of the atlas department of Bakosurtanal, gave a detailed report about the work on this atlas and the problems that were encountered and solved.

More than 150 participants attended the Workshop, a good share from the Gadjah Mada University, but also from other parts of Indonesia. ICA was represented by Prof Ferjan Ormeling and Peter Jordan, Commission Chair. On the first day, Ferjan Ormeling presented a paper discussing developments from printed atlases to complex atlas information systems. During the seminar on the strategic role of maps in development, he used examples from the National Atlas of Indonesia to demonstrate how maps can be applied for spatial and regional development. In his first paper, Peter Jordan highlighted the theme of the workshop by stressing the role of national and regional atlases in nation building and in supporting regional identities by referring to several European examples. In his second paper he used the example of the Atlas of Eastern and Southeastern Europe to demonstrate the specific problems of comparative trans-national thematic mapping at larger scales. One of the most impressive papers was presented by Setia Adi Purwanta, Chair of the Indonesian Association of the Blind, who is blind himself. He discussed the symbolisation of tactile maps and urged stronger efforts in standardizing map symbols for the blind internationally.

All presentations were followed by lively

discussions, and the whole event was covered widely by the Indonesian media.

Only a few days after the event the Merapi volcano, situated just 20-25 km north of Yogyakarta, erupted. While the city was not so much affected, villages on the slopes of the volcano were destroyed and about 300 people lost their lives.

## Other Events

The ICA Commission on National and Regional Atlases was a co-organizer of the 3rd Conference of the Adriatic Forum, Vienna, 23-24 September 2010. The focus of this meeting was on the regional development and regionalisation in the Adriatic space (in a wider sense), but also on atlases as means of representing regional development. The conference attracted 85 registered participants from 15 European countries.

**Peter Jordan** | Chair | ICA Commission on National and Regional Atlases | *Austria* ●

## Theoretical Cartography

[rcswww.urz.tu-dresden.de/~wolodt/tc-com/](http://rcswww.urz.tu-dresden.de/~wolodt/tc-com/)

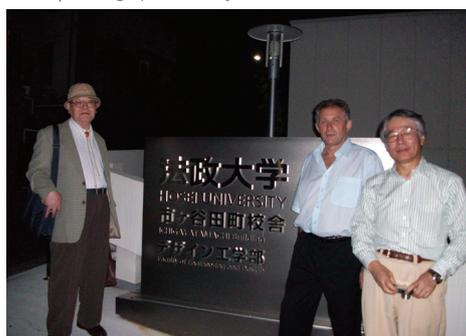
### Meeting in Tokyo, Japan

The Japan Cartographers Association (JCA) and the ICA Commission on Theoretical Cartography held a joint meeting at the Hosei University, Faculty of Design and Engineering on 17 September 2010. The meeting was dedicated to the 10th anniversary of ICA Commission on Theoretical Cartography (1999-2009). It was the second event of the Commission devoted to its establishment in 1999 (see *ICA News* No 53 for details). The Commission was established at the 11th General Assembly of ICA in Ottawa, Canada, and Tositomo Kanakubo (ICA Honorary Fellow) supported by JCA was the main initiator of the new Commission.

The meeting was held under chairmanship of Prof Takashi Morita and included three presentations:

- *Introduction to meeting and brief history of the ICA Commission on Theoretical Cartography* by Tositomo Kanakubo

Organizers of the Tokyo meeting: (from left) Tositomo Kanakubo, Alexander Wolodtschenko and Takashi Morita | *Photograph courtesy of Alexander Wolodtschenko*



- *Influence of Jacques Bertin's "Sémiologie Graphique"* by Takashi Morita
- *From Prehistoric Maps to Mini-Atlases* by Alexander Wolodtschenko

After interesting discussion the Japanese dinner took place in a restaurant near the meeting venue.

### Special Session in Hong Kong - China

A special session in memory of Jaques Bertin and his influence on the global community of cartographers and geographers over the last 40 years was held during the ICA Workshop on *Theories of Map Design in Digital Era* at the Hong Kong Polytechnic University, 23-25 September 2010.

The ICA Commission on Theoretical Cartography organised the special session, which included three presentations:

- *J Bertin - one of the pioneers of cartographic semiotics* by Alexander Wolodtschenko
- *How Bertin's approach is still relevant today* by Alberta Bianchin
- *Personal experience with Jacques Bertin* by Takashi Morita

The session and discussion was moderated by ICA President William Cartwright. The Commission will also take part in the special session dedicated to Jacques Bertin at the ICC 2011 in Paris.

### Carto-semiotics Course, Hong Kong

On 20-21 September 2010, Department of Land Surveying and Geo-informatics of the Hong Kong Polytechnic University hosted a cartographic-semiotic series of lectures for master students delivered by Alexander Wolodtschenko. This course was a part of the Commission's project *Cartographic-semiotic Courses 2009-2010* oriented at dissemination of cartosemiotic knowledge at universities with cartographic and non-cartographic traditions. The selected topics included prehistoric maps and sign systems, mini-display atlases on smart phones, Bild-atlases and atlas cartosemiotics as a new interdisciplinary direction. Students were particularly interested in the conception, creation and use of minidisplay atlases on mobile multimedia devices. A selection of posters and pre-diploma theses of Dresden students were also presented in this course.

### Workshop in Kyiv, Ukraine

In early 2011, the Commission is planning two events:

- 25 March 2011: Seminar on Cartography (sections of atlas semiotic, terminology and geo-ontology) hosted by the National Aviation University in Kyiv, Ukraine
- 8 April 2011: Vilnius Seminar on Cartosemiotics 2011 *Competences for Modern Cartography* hosted by Vilnius University, Lithuania

The Commission is also planning a meeting prior to the ICC 2011 in Paris. For the 2011-2015 period the Commission is proposing four new focus themes: theories of map design, cartographic ontology, terminology and applied cartosemiotics.

**Alexander Wolodtschenko** | Chair | ICA Commission on Theoretical Cartography | *Germany* ●

## Use and User Issues

[www.univie.ac.at/icomuse/](http://www.univie.ac.at/icomuse/)

### Recent Activities

After a successful Commission workshop at University College London (see report in *ICA News* No 54), the Commission on Use and User Issues supported two other events in Europe:

- A workshop on *Emerging Methods for Studying Use of Spatial Technologies* which was held on 14 September in Zurich, Switzerland, in conjunction with GIScience
- The 3rd workshop on *Usability of Geographic Information* which was held on 10 November in Southampton, UK

Commission members were involved in the organization of both workshops which had clearly different focuses and audiences. Links to presentations can be found on the Commission website.

Another highlight in which Commission members were involved (and for which the Commission was also acknowledged) was the appearance of the book *Interacting with Geospatial Technologies*, edited by Mordechai (Muki) Haklay and published by Wiley. Part of the book covers the Commission's field of interest and does that very well, with chapters on – for instance – user-centred design, usability engineering and methods and techniques of evaluation and deployment. As such it may not only be considered as complimentary, but also as a prelude to the planned Commission book publication on methods and techniques of use, user and usability research.

### Future Plans

We would like to draw your attention to the Commission's pre ICC 2011 workshop on *Use and User Issues in Public Transport Geoinformation* which will be held on 1-2 July 2011 in Paris, France. This is going to be a special workshop with a unique format, clearly different from the usual sessions with presentations. Therefore, we strongly recommend your attendance.

**Corné van Elzakker** | Chair | ICA Commission on Use and User Issues | *The Netherlands* ●

## Cartographic Science Congress



The 5th Cartographic Science Congress took place in the Province of Santa Fe between 28 June – 2 July 2010. It was organized by the ICA Affiliate Member Centro

Argentino de Cartografía (Argentine Cartography Center) Association (see member's profile in *ICA News* No 54), together with the Engineering and Hydrographic Sciences Faculty, Litoral National University. 160 specialists from Argentina, Chile and Uruguay have participated.

During the first two days, four technical workshops took place attracting 90 participants. More than 60 teachers participated at the 3rd *Teacher Training on Cartography Conference*, covering both theoretical and practical themes.

During the following three days, 24 technical papers and 2 poster sessions were presented. In addition, eight conferences, two round tables and one technical presentation took place, in which agencies and commercial companies showcased their services and displayed their latest generation equipment. Before prizegiving and closing ceremony, the cartographic challenges in Argentina were discussed in a plenary session. The session was very successful allowing 10 decisions to be made.

The opening ceremony included the performance of the University Chorus and an opening cocktail reception. And, during the last night, the Board of Directors and participants shared a Comradeship Dinner.

**Ana Maria Garra** | Secretary | Centro Argentino de Cartografía Association | Argentina ●

## 3rd International Conference on Cartography and GIS

The 3rd International Conference on Cartography and GIS took place in Nessebar, Bulgaria between 15-20 June 2010. The event was supported by Prof Dobrin Denev, Rector of the University of Architecture, Civil Engineering and Geodesy (UACEG) in Sofia. The conference incorporated the International Cartographic Association (ICA) Regional Symposium on Cartography for Central and Eastern Europe.

After two successful conferences held in Borovets in 2006 and 2008, the 2010 edition grew to a new heights not only from a historical but also from a geographical perspective: 6 keynote speeches, 110 presentations, 190 authors from 32 countries. Various presenta-



Participants of the ICCG3 Workshop in Nessebar, Bulgaria | Photograph courtesy of Temenoujka Bandrova

tions were delivered by authors from Bulgaria, Czech Republic, China, Iran, Russia, Greece, Turkey, Albania, Macedonia, Germany, Hungary, Netherlands, Spain, Australia, Belgium, Egypt, Croatia, Romania, Argentina, Austria, India, Malaysia, Mexico, Nigeria, Poland, Switzerland, UAE and Kosovo.

The keynote speeches were presented in special sessions by:

- Dr Paul Hardy, ESRI: *Scaling-up Cartography - Cloud Computing and Multi-scale Content for Tomorrow's Mapping*
- Dr Miklos Gross, Eurosense: *The Mission of Cartography in the Modern Information Society*
- Dr Athina Trakas, OGC: *Interoperability from a global perspective*
- Prof Joachim Rix, Germany: *Spatial Data Infrastructures: The Subnational Dimension in the European Context*
- Assoc Prof Dr Temenoujka Bandrova, Bulgaria: *Bulgarian Cartography: from Paper to Virtual Reality*
- Prof William Cartwright, ICA President: *Maps, Sketches and Annotations: Representations of the Geography of Conflict - Galilipoli 1915*

During the opening ceremony, Daniela Karaivanova (15) was presented with the 2009 Barbara Petchenik Children's Map Award for

Participants of the ICA Commission on Planetary Cartography annual meeting | Photograph courtesy of Temenoujka Bandrova



her work submitted to the international competition (see a photograph on page 08). An occasional diploma was presented by the ICA Past President Prof Milan Konečný.

Two ICA Commissions on Cartography and Children, and Planetary Cartography together with the ICA Working Group on Cartography on Early Warning and Crisis Management held their annual meetings during the conference. During the meetings the upcoming tasks and the common projects of the Commissions were discussed. The next annual meetings will be held in Paris at the ICC 2011.

The conference hosted a seminar on early warning and disaster/crisis management under the auspices of the Czech Ambassador to Bulgaria His Excellency Mr Martin Klepetko. ICCG3 workshop on *Infrastructure of spatial data: an opportunity for data exchange in South East Europe* organized by Dr Ulrich Boes was also held during the conference.

Immediately before the conference, the 3rd ISDE Digital Earth Summit was held at the same location between 12-14 June 2010. The International Society for Digital Earth (ISDE) Summits were earlier organised in New Zealand (2006) and Germany (2008).

The programme included 6 keynote speeches and 45 presentations, and attracted 110 authors from 15 countries: China, Germany, Czech Republic, Italy, Bulgaria, USA, Argentina, Belgium, India, Iran, Japan, New Zealand, Netherlands, Sweden and Great Britain.

During the Summit three meetings of the Executive Board of Digital Earth were held under the leadership of ISDE Vice President Prof Milan Konečný and General Secretary Prof Huagong Guo from China. In addition, a round table on *Digital Earth in Europe* was organised and chaired by Alessandro Annoni (Italy).

For more information about the Conference and the Summit, see [www.cartography-gis.com](http://www.cartography-gis.com).

**Temenoujka Bandrova** | University of Architecture, Civil Engineering and Geodesy | Bulgaria ●

## GeoCart'2010 Conference

### *Mapping in a mashed-up world*

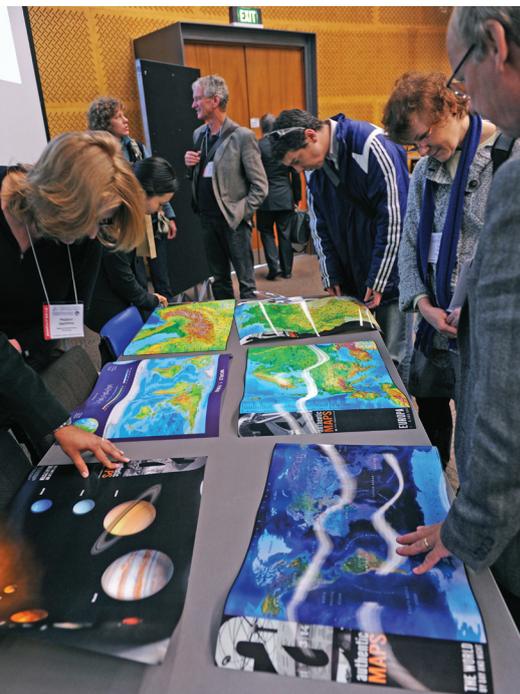
The 5th National Cartographic Conference, GeoCart'2010, and the first ICA Regional Symposium on Cartography for Australasia and Oceania, were held at the University of Auckland, New Zealand, between 1-3 September 2010. The Conference attracted 78 delegates from New Zealand and overseas, including Australia, Belgium, Chile, Czech Republic, Germany, New Caledonia, United Kingdom and USA.

The programme delivered 43 keynote, paper and poster presentations, as well as the National Cartographic Exhibition, GeoExpo'2010, a commercial exhibition and a rich social programme, including the Gala Dinner with live entertainment courtesy of (again!) Prof Mark Gahegan (University of Auckland).

In the opening keynote address, Prof Manfred Buchroithner (Dresden Technical University, Germany) presented a review of current developments with True-3D in Cartography. After the talk, we were treated to a display of several lenticular-foil maps he brought with him. From 3D cartography, we travelled to battlefields and humanitarian aid centres to experience first hand the benefits of cartography. Commander David Crossman, Head of Geospatial Intelligence Organisation (New Zealand Defence Force) presented a few real life examples of how maps and geospatial technology helps the NZDF in crisis situations.

The next day started with a keynote address by President of ICA William Cartwright (RMIT

3D maps presented by Prof Buchroithner received plenty of attention at GeoCart'2010 | *Photography Marney Brosnan*



University, Australia) which linked the Conference theme, *Cartographies for Tomorrow: Mapping in a Mashed-up World* with the opportunities, issues and challenges for cartographers and the geospatial community in general. In the afternoon, Colin MacDonald (Land Information New Zealand) shared with us the many challenges and rewards of running a national mapping organisation. His presentation focused on the future of government mapping, such as innovation, freeing-up access to data, improving accuracy and faster response to user needs.

The last day of the Conference featured a keynote address by Cindy Brewer (Pennsylvania State University, USA). Apart from the usual "brewers", she presented a collaborative work concerned with the design of an interactive online environment where the display of topographic maps is adjusted according to the viewing scale. From there we were invited by Phil Allen (GeoSmart, New Zealand) to tour the streets of Auckland and check how accurately they are represented by free databases versus commercially maintained ones. His question *Is free maps the death of commercial cartography?* has been left for us to answer...

The range of other presentations throughout the Conference was impressive, from the use of eye movement tracking tools to follow how people look at and visually search a map, to applying the principles of spherical trigonometry and geodesy to find the location of a moving object. Also of note was the emergence of *crowdsourcing* applied to Cartography, particularly with the applications related to *crowdsourced* (or user-submitted) data. Slava Kisilevich (University of Konstanz, Germany) provided a fascinating example of this, where he was using a massive dataset of 100 million(!) geotagged photos collected from Flickr and Panoramio, which could then be used to provide important information about people's behaviour, their movement, geographical places and events.

The panel discussion with keynote speakers was informative, with useful input from overseas and local leaders in the geospatial industry.

There were a lot of attractive displays dotted around, with GeographX NZ Ltd providing their usual high quality display of products, and Eagle Technology Group showcasing forthcoming software technology.

The internationally reviewed Conference proceedings, supplemented by a number of invited contributions and edited by Tony Moore (University of Otago) and Igor Drecki (University of Auckland), are scheduled to be published in the *Lecture Notes in Geoinformation and Cartography* series by Springer Verlag in 2011.

Tim Nolan and Igor Drecki | New Zealand  
Cartographic Society | New Zealand

## ICA Workshop on Theories of Map Design in Digital Era

The ICA Workshop on *Theories of Map Design in Digital Era* was held at The Hong Kong Polytechnic University between 23-24 September 2010. The workshop, attended by more than 40 international experts from ten countries, was jointly organized by The Hong Kong Polytechnic University and the ICA.



Participants of the ICA Workshop on Theories of Map Design in Digital Era in Hong Kong | *Photograph courtesy of Zhilin Li*

The two-day Workshop was kicked off by Prof Alex Wai, Vice President (Research) of The Hong Kong Polytechnic University. Prof. William Cartwright, President of ICA, and Mr Wong Chung-hang, Deputy Director of Lands Department of the Hong Kong Special Administrative Region, also delivered their welcome addresses at the opening ceremony. Participants included Prof Georg Gartner, Vice President of ICA, Alexander Wolodtschenko, Chair of the ICA Commission on Theoretical Cartography and Prof Takashi Morita, Chair of the ICA Commission on Ubiquitous Mapping, as well as Prof Deren Li, Chinese Academy of Sciences and of Engineering, and Prof Anthony Yeh, Chinese Academy of Sciences.

The opening ceremony was followed by two keynote speeches by Prof William Cartwright and Prof Deren Li. More than 30 high-level papers were presented in six sessions, namely a special session in memorial of Jacques Bertin, Cartographic theory and philosophy, Theory of map design, Communication and information theory, Semiotic and symbolization, and Concepts and models. At the Workshop's conclusion, a brainstorming session was organized to discuss future developments.

Zhilin Li | Hong Kong Polytechnic University | China

## AutoCarto 2010



The Cartography and Geographic Information Society (CaGIS) held its biennial AutoCarto Conference in Orlando, Florida, November 15-19, 2010. The

AutoCarto Conference was held jointly with the American Society for Photogrammetry and Remote Sensing's (ASPRS) annual conference. In conjunction with this joint meeting was special participation from the International Society for Photogrammetry and Remote Sensing (ISPRS), the International Cartographic Association (ICA), and the International Geographical Union. Conference attendees were treated to presentations from the presidents of the three international societies, including Professor Orhan Altan (ISPRS), Professor William Cartwright (ICA), and Professor Ronald Abler (IGU).

The AutoCarto portion of this joint meeting included 13 different sessions with topics ranging from geovisualization, generalization, and map design and dynamic maps to data models and ontologies, remote sensing and terrain modeling, and web-based mapping. Presenters came from 17 different countries, including Germany, the United Kingdom, New Zealand, Poland, Czech Republic, Switzerland, Belgium, Norway, France, Japan, Canada,

Russia, Australia, Turkey, The Netherlands, Korea, and the United States. In all, 59 research presentations were given in the AutoCarto sessions.

Several ICA commissions also met at this conference. The ICA Working Group on Census Cartography held a symposium on *Cartographic Advances in Census Data Collection and Dissemination*. The ICA Commission on Management and Economics of Map Production held a workshop on the *Management of Geographic Information and Map Production*. The ICA Commission on Mapping from Satellite Imagery held a workshop on the *Advances in Sensors and Algorithms for Topographic and Thematic Mapping* that was co-sponsored by the ICA Commission on Geospatial Analysis and Modeling. The ICA Commission on Maps and the Internet, along with the ICA Working Group on Open Source Geospatial Technologies, held a meeting on *Online Maps with APIs and Map Services*. The ICA Commission on Map Projections held an open meeting to discuss the future of that commission. Last but not least, the ICA Working Group on Cartography on Early Warning and Crisis Management held an open meeting.

The CaGIS Board of Directors was delighted to welcome the ICA Executive Committee (EC) and had many opportunities to meet with its members at the CaGIS membership social and at several gatherings that CaGIS Executive Director Eric Anderson and CaGIS President Scott M. Freunds Schuh hosted in the hotel's



Scott Freunds Schuh (left), Lynn Usery (centre) and William Cartwright at AutoCarto 2010, Orlando, Florida, USA | Photography Eric Anderson

Penthouse Hospitality Suite overlooking the Orlando skyline.

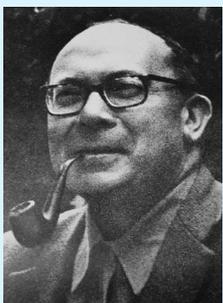
Exciting news from the CaGIS Board and the US National Committee to the ICA (USNC) is that we are preparing to submit a bid to host the 2015 ICA International Cartographic Conference and General Assembly in Washington, DC. An organizing committee led by Lynn Usery, Chair of the USNC, is developing a proposal for submission to the General Assembly in 2011. We are excited at the prospect of bringing the international cartographic community to our nation's capital. Washington, DC, has much to offer, including historic sites, national monuments, and the Smithsonian museums to name just a few. A decision on the site for ICC 2015 will take place at the 15th General Assembly of ICA this coming summer in Paris.

Scott M Freunds Schuh and Eric Anderson | Cartography and Geographic Information Society | USA ●

## obituary

### Jacques Bertin

27.07.1918 – 03.05.2010



Jacques Bertin was born in 1918 in Maisons-Laffite. He studied geography at La Sorbonne. In 1954 he created the Cartographic Laboratory of the École pratique des hautes études (EPHE) and became

its director. Later he was director of the Graphics Laboratory of the École des hautes études en sciences sociales (EHESS), before becoming a researcher at the National Centre for Scientific Research (CNRS).

Jacques Bertin worked on the efficacy of thematic maps and their design improvements. He analysed visual effects on the transmission of information and the necessity for classifica-

tion and application of hierarchy to data by means of different processes, including the ordered matrix. Bertin's ground breaking research brought him international recognition, especially his work on semiotics and the subsequent publication of the famous *Sémiologie Graphique. Les diagrammes, les réseaux, les cartes* in 1967, with two new editions appearing in 1973 and 1999.

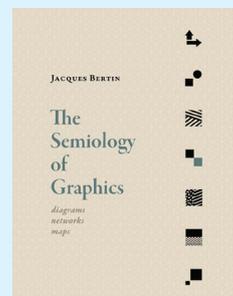
Jacques Bertin was the Chair of the Commission on Terminology of the French Committee of Cartography. He received the prestigious Carl Mannerfelt Gold Medal at the 1999 ICA Conference in Ottawa, the highest award of the International Cartographic Association awarded to cartographers of outstanding merit who have made significant contributions of an original nature to the field of cartography.

He died in Paris on 3 May 2010.

In honour of Jacques Bertin and to celebrate his work and contribution to cartography, the French Committee of Cartography added two special sessions to the programme of ICC 2011 in Paris. On Monday, 4 July, Gilles Palsky will officially present Jacques Bertin's life and work. Following this, different cartographers from around the world will present their research

either inspired or influenced by Bertin. Last but not least, a special *Café Carto* dedicated to Jacques Bertin will be arranged.

Anne Ruas | Comité Français de Cartographie | France ●



Esri Press has recently republished *Semiology of Graphics: Diagrams, Networks, Maps* by Jacques Bertin.

This cartographic classic has continuously held its place of significance. Now, with a new epilogue

written by the author shortly before his death, this new 2010 edition in English reawakens us to the information design possibilities of modern technology. Bertin was thrilled to know that this book would be coming out and that there was still immense interest in his work and dedication to keeping it alive. For ordering, visit [esripress.esri.com/display/index.cfm](http://esripress.esri.com/display/index.cfm).

Aileen Buckley | Esri Mapping Centre | Esri | USA ●

## january 2011

31-03 February: Understanding Different Geographies: Communicating Meaning with [Geo]Graphic Artifacts | Vienna | *Austria* | [udg2011.univie.ac.at/](http://udg2011.univie.ac.at/)

## march

03-04: HYDRO-IND-2011 | *Hydrography – An Instrument for Regional Cooperation & Maritime Safety* | New Delhi | *India* | [www.hydrobharat.nic.in/HYDROIND\\_2011.htm](http://www.hydrobharat.nic.in/HYDROIND_2011.htm)

10-11: GeoViz Hamburg 2011: Joint Workshop of ICA Commission on Geovisualization and ICA Commission on Geospatial Analysis and Modeling | Hamburg | *Germany* | [www.geomatik-hamburg.de/geoviz/](http://www.geomatik-hamburg.de/geoviz/)

## april

07-08: 6th International Workshop on Digital Approaches to Cartographic Heritage | Hague | *The Netherlands* | [xeee.web.auth.gr/ICA-Heritage/Commission/workshops.htm](http://xeee.web.auth.gr/ICA-Heritage/Commission/workshops.htm)

11-13: JURSE 2011 – Joint Urban Remote Sensing Event | Munich | *Germany* | [www.jurse2011.tum.de/](http://www.jurse2011.tum.de/)

13-15: EOGC 2011 – Earth Observation for Global Changes | Munich | *Germany* | [www.eogc2011.tum.de/](http://www.eogc2011.tum.de/)

## may

03-08: GI4DM 2011 | *GeoInformation for Disaster Management* | Antalya | *Turkey* | [www.gi4dm2011.org/](http://www.gi4dm2011.org/)

26-29: LIDAR and Radar Mapping: Technologies and Applications | Nanjing | *China* | [www.lidar2011.org/](http://www.lidar2011.org/)

## june

30-01 July: Joint ICA Symposium of four ICA Commissions and ICA Working Group | *Maps for the Future: Children, Education and the Internet* | Orleans | *France* | [lazarus.elte.hu/jointsymposium2011/](http://lazarus.elte.hu/jointsymposium2011/)

30-02 July: Workshop and Tutorials of ICA Commission on Generalisation and Multiple Representations | Paris | *France* | [aci.ign.fr/](http://aci.ign.fr/)

## july

01-02: ICA Commission on Use and User Issues Workshop | *User Issues in Geospatial Public Transport* | Paris | *France* | [www.univie.ac.at/icacomuse/](http://www.univie.ac.at/icacomuse/)

02: Esri ICA Workshop | *Designing and Creating Web Maps with ArcGIS* | Paris | *France* | [mappingcenter.esri.com/index.cfm?fa=resources.esriWorkshop](http://mappingcenter.esri.com/index.cfm?fa=resources.esriWorkshop)

03-08: 25th International Cartographic Conference | *Enlightened view on Cartography and GIS* | Paris | *France* | [www.icc2011.fr/](http://www.icc2011.fr/)

## september 2011

05-08: CoastGIS 2011 | *Marine and Coastal Spatial Planning* | Oostende | *Belgium* | [www.coastgis.info/](http://www.coastgis.info/)

# ica affiliate members

Organisations, institutions or companies wishing to support the mission and activities of the International Cartographic Association can become affiliate members. The following organisations support the ICA:

**Bundesamt für Kartographie und Geodäsie** | *Germany* | [www.bkg.bund.de](http://www.bkg.bund.de)  
Attn: Prof Dr D Grünreich, Director | [dietmar.gruenreich@bkg.bund.de](mailto:dietmar.gruenreich@bkg.bund.de)

**Centro Argentino de Cartografía** | *Argentina* | [www.centroargentinodecartografia.org](http://www.centroargentinodecartografia.org)  
Attn: Prof Carmen Alicia Rey, President | [cac@centroargentinodecartografia.org](mailto:cac@centroargentinodecartografia.org)

**Dubai Municipality** | *United Arab Emirates* | [www.dm.gov.ae](http://www.dm.gov.ae)

**East View Cartographic** | *United States of America* | [www.cartographic.com](http://www.cartographic.com)  
Attn: Matthew Tanaka | [matthew.tanaka@cartographic.com](mailto:matthew.tanaka@cartographic.com)

**Eko-Graf Cartographic Publishing House** | *Poland* | [www.ekograf.pl](http://www.ekograf.pl)

**ESRI** | *United States of America* | [www.esri.com](http://www.esri.com)  
Attn: Mark Cygan | [mcyan@esri.com](mailto:mcyan@esri.com)

**Geospatial Information Authority of Japan** | *Japan* | [www.gsi.go.jp](http://www.gsi.go.jp)  
Attn: Miho Takagi, Chief of Environmental Geoinformation Section | [miho@gsi.go.jp](mailto:miho@gsi.go.jp)

**Indian National Cartographic Association (INCA)** | *India* | [www.incaindia.org](http://www.incaindia.org)  
Attn: Shri KC Rout, Secretary General | [routkc@yahoo.com](mailto:routkc@yahoo.com)

**Institut Cartografic de Catalunya** | *Spain* | [www.icc.es](http://www.icc.es)  
Attn: Jaume Miranda i Canals, Director | [miranda@icc.es](mailto:miranda@icc.es)

**Institut Géographique National** | *France* | [www.ign.fr](http://www.ign.fr)  
Attn: Mr Jean-Philippe Lagrange, Director | [jean-philippe.lagrange@ign.fr](mailto:jean-philippe.lagrange@ign.fr)

**Instituto Geográfico Nacional España** | *Spain* | [www.ign.es](http://www.ign.es)  
Attn: Sebastian Mas Mayoral | [smas@mfom.es](mailto:smas@mfom.es)

**Intergraph** | *United States of America* | [www.intergraph.com](http://www.intergraph.com)  
Attn: Vince Smith | [vince.smith@intergraph.com](mailto:vince.smith@intergraph.com)

**International Institute for Geo-Information Science and Earth Observation (ITC)** | *The Netherlands* | [www.itc.nl](http://www.itc.nl)  
Attn: Corné van Elzakker | [elzakker@itc.nl](mailto:elzakker@itc.nl)

**Land Information New Zealand** | *New Zealand* | [www.linz.govt.nz](http://www.linz.govt.nz)  
Attn: Geoff Howard | [ghoward@linz.govt.nz](mailto:ghoward@linz.govt.nz)

**Moscow State University of Geodesy and Cartography** | *Russia* | [www.miigaik.ru](http://www.miigaik.ru)  
Attn: Professor Vasilii A Malinnikov, Rector | [lgm@miigaik.ru](mailto:lgm@miigaik.ru)

**National Hydrographic Office** | *India* | [www.hydrobharat.nic.in](http://www.hydrobharat.nic.in)  
Attn: BR Rao, Chief Hydrographer | [inho@dataone.in](mailto:inho@dataone.in)

**National Land Survey of Finland** | *Finland* | [www.nls.fi](http://www.nls.fi)  
Attn: Heli Ursin | [heli.ursin@nls.fi](mailto:heli.ursin@nls.fi)

**Navionics Hydrographer** | *Italy* | [www.navionics.com](http://www.navionics.com)  
Attn: Francesco Pezzana, Managing Director | [pezzana@navionics.it](mailto:pezzana@navionics.it)

**Navteq** | *The Netherlands* | [www.navteq.com](http://www.navteq.com)  
Attn: Dr Kees Wevers | [kees.wevers@navteq.com](mailto:kees.wevers@navteq.com)

**Ordnance Survey** | *United Kingdom* | [www.ordnancesurvey.co.uk](http://www.ordnancesurvey.co.uk)  
Attn: Bob Lilley | [blilley@ordnancesurvey.co.uk](mailto:blilley@ordnancesurvey.co.uk)

**Polskie Przedsiębiorstwo Wydawnictw Kartograficznych (PPWK)** | *Poland* | [www.ppwk.pl](http://www.ppwk.pl)  
Attn: Dr Beata Konopska | [b.konopska@ppwk.pl](mailto:b.konopska@ppwk.pl)

**Rectas** | *Nigeria* | [www.rectas.org](http://www.rectas.org)  
Attn: Dr Olajide Kufoniyi, Executive Director | [rectas@oauife.edu.ng](mailto:rectas@oauife.edu.ng) or [kufoniyi@skannet.com.ng](mailto:kufoniyi@skannet.com.ng)

**Regional Centre for Mapping of Resources for Development (RCMRD)** | *Kenya* | [www.rcmrd.org](http://www.rcmrd.org)  
Attn: Dr Hussein O Farah, Director General | [rcmrd@rcmrd.org](mailto:rcmrd@rcmrd.org)

**Star Informatic Publishing Solutions** | *Belgium* | [www.star.be](http://www.star.be)  
Attn: Paul Duré, Head | [paul.dure@star.be](mailto:paul.dure@star.be)

**Union of Chambers of Turkish Engineers and Architects, Chamber of Surveying and Cadastre Engineers (UCTEA-CSCE)** | *Turkey* | [www.hkmo.org.tr](http://www.hkmo.org.tr)  
Attn: Prof Dr Necla Ulugtekin, Head of the Commission on Cartography and Geospatial Informatics | [hkmo@hkmo.org.tr](mailto:hkmo@hkmo.org.tr)

**United States Geological Survey** | *United States of America* | [cegis.usgs.gov](http://cegis.usgs.gov)  
Attn: Lynn Usery | [usery@usgs.gov](mailto:usery@usgs.gov)

**University of Architecture, Civil Engineering and Geodesy, Faculty of Geodesy** | *Bulgaria* | [www.uacg.bg](http://www.uacg.bg)  
Attn: Dr Temenoujka Bandrova | [bandrova\\_fgs@uacg.bg](mailto:bandrova_fgs@uacg.bg)

**University of Balamand** | *Lebanon* | [www.balamand.edu.lb/english/GIS.asp](http://www.balamand.edu.lb/english/GIS.asp)  
Attn: Prof Oussama Jadayel, GIS Center Academic Director | [info@balamand.edu.lb](mailto:info@balamand.edu.lb)

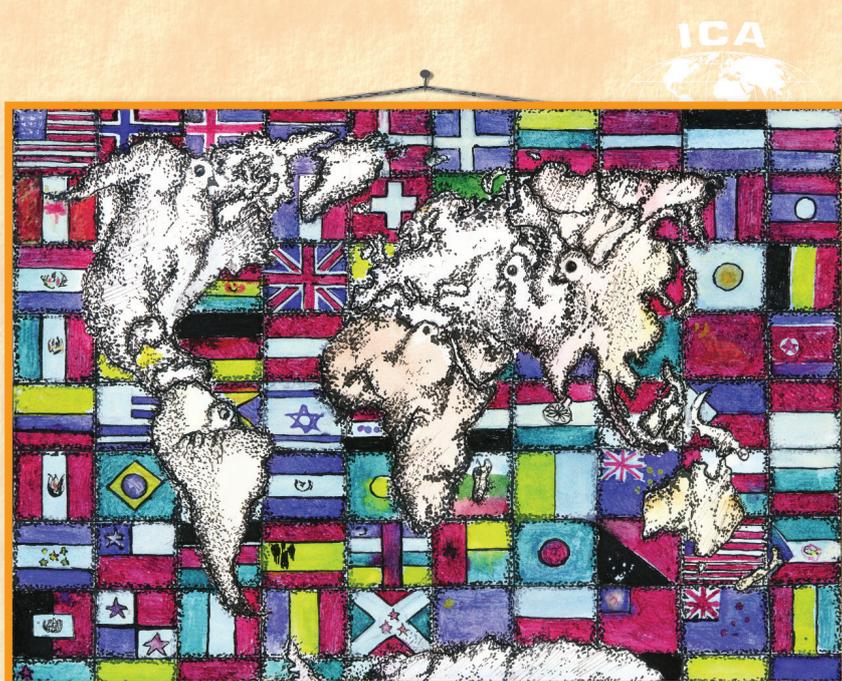
ICA welcomes new affiliate members; for more information, please contact:

**David Fairbairn** | Secretary General & Treasurer | *ICA* | [dave.fairbairn@newcastle.ac.uk](mailto:dave.fairbairn@newcastle.ac.uk)

# children's map gallery 1993 winners



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Lekavicius Alfonsas | 11 | *Peace in the World* | Vilnius | Lithuania

Paul Bratu | 15 | *Pomul Vietu* | Romania



Trihedi Oktianto | 12 | - | SDN Primary School: Yogyakarta | Indonesia

Jana Duranková | 13 | *Children Around the World* | ZŠ Žamovica | Slovakia

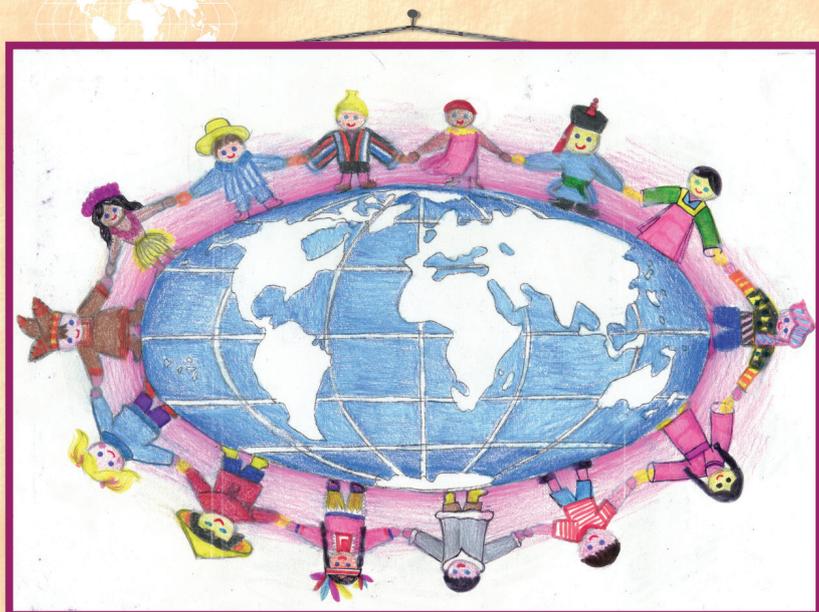


Henry Huang | 14 | *Greetings From the World* | Duwich College: London | United Kingdom



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GREETINGS

FROM THE WORLD !!