



ICA News

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International Cartographic Association

Association Cartographique Internationale



ICA Executive Committee

ICA Executive Committee

Milan Konecny

President
Institute of Geography
Masaryk University
Kotlarska 2, 61137 Brno,
Czech Republic
Telephone: #42 5 42 128 316 or 276
E-mail: konecny@geogr.muni.cz

Vladimir S. Tikunov

Vice-president
Vorontsovskie Prudi 7-168
Moscow 117630
Russian Federation
Telephone: #7-095-9391339
Tikunov@geogr.msu.su

David Fairbairn

Vice-president
School of Civil Engineering and Geosciences,
University of Newcastle upon Tyne,
Newcastle upon Tyne NE1 7RU,
United Kingdom
Telephone: #44 191 222 6353
E-mail: Dave.Fairbairn@ncl.ac.uk

Haggai Nyapola

Vice-president
P.O. Box 32883-00600
Nairobi
Kenya
Telephone: 254-0722-728633
E-mail: nyapola2000@yahoo.com

William Cartwright

Vice-president
Department of Geospatial Science
RMIT University
GPO Box 2476V
Melbourne, Victoria 3001
Australia
Telephone: #61 3 9925 2423
E-mail: william.cartwright@rmit.edu.au

Ramon Lorenzo Martinez

Vice-president
Centro Nacional de Informacion Geografica
General Ibanez de Ibero 3
28003 MADRID,
SPAIN
E-mail: rlorenzo@mfom.es;

Kirsi Virrantaus

Vice-president
Institute of Cartography and Geoinformatics
Department of Surveying
Helsinki University of Technology
P.O.Box 1200, FIN-21050 HUT
Finland
Telephone: #358 500 463729
Email: kirsi.virrantaus@hut.fi

Robert B. McMaster

Vice-president
College of Liberal Arts
215 Johnson Hall,
University of Minnesota
Minneapolis, MN 55455,
United States of America
Telephone: #1.612.624.2535
Email: mcmaster@umn.edu

Ferjan Ormeling

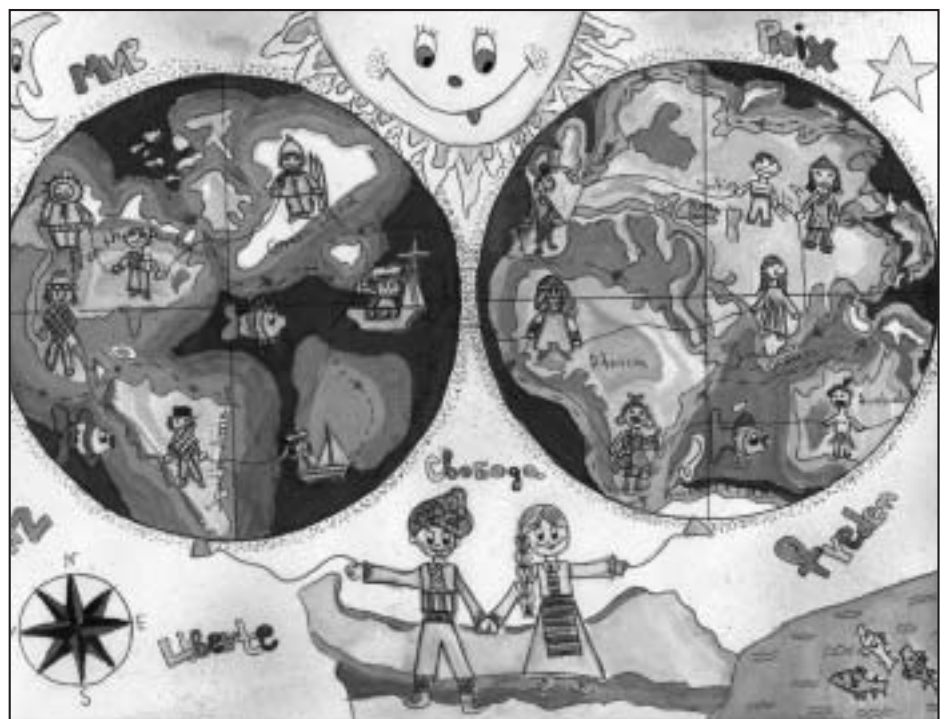
Secretary-General and Treasurer
Faculty of Geosciences,
Utrecht University
P.O. Box 80115,
3508 TC Utrecht
The Netherlands
Telephone: #31 30 2531373
E-mail: f.ormeling@geog.uu.nl

Bengt Rystedt

Past-President
National Land Survey
SE-80182 Gävle, Sweden
Telephone #46 26 63 34 29
E-mail Bengt.Rystedt@lm.se

Graciela Metternicht

Editor ICA News
Department of Spatial Science,
Curtin University of Technology,
GPO Box U 1987,
Perth 6845, Western Australia
Australia
Telephone: #61 8 9266 3935
E-mail: g.metternicht@curtin.edu.au
ftp: cage.curtin.edu.au,
directory: graciela/ICA/incoming



Winning entry of the Children's Map Competition ICC 2005. Title: Bulgaria Is A Friend With All Nations in the World. Artist: Daiana Emilova Hadjiiska, Age: 12. Country: Bulgaria.

Editorial

It has been an enjoyable task to act as the Editor of the Newsletter of the International Cartographic Association since July 1999. During that time, 16 issues of the Newsletter have been produced, with slight changes to the design of the cover and the online availability of all the issues (i.e. ICA 33 to ICA48). Furthermore, the Newsletter is now translated to Spanish and German, thanks to the efforts of the Mercator team of the Polytechnic University of Madrid, and Sven Fuhrmann (Germany).

Making the reading of the newsletter interesting depends on the contents; and in that regard, the continuous support of members of the Executive Committee and Commissions' Chairs is to be acknowledged.

The onus of Editor has now been passed onto Dr Igor Drecki of the University of Auckland in New Zealand. Igor is an active member of the Cartographic community of New Zealand who I'm certain will maintain and improve the standards of the Newsletter.

This is the last issue prior to the XXIII ICC in Moscow, and it contains important last minute information related to the conference. The programme has been finalised, with the submission of 668 abstracts that have been organised into 128 oral and poster sessions. Likewise, ICA Secretary General Ferjan Ormeling provides important information related to the 14th ICA General Assembly, to take place on August 4 and 9 at the Cosmos Hotel Conference Center. Elections of new ICA Officers (President, Vice-Presidents, Secretary General and Commissions' Chairs) as well as the venue for the ICC 2011 will take place during the Assembly.

Furthermore, the ICA has taken the novel initiative of organising a meeting with representatives of National Mapping Organisations to discuss opportunities to further cooperation, in view of the influence that ICA may exert on everyday professional life of NMOs and viceversa. Representatives of Google are likely to participate with a presentation on opportunities that Google may provide for NMOs.

In summary, like in previous occasions, this International Cartographic Conference to be held in Moscow appears well headed for a successful outcome, with an interesting social and technical programme in place.

I hope to meet you in Moscow, from the 4th to the 10th August.

Graciela Metternicht
Editor, ICA Newsletter

From the Incoming Editor

My ICA 'adventure' started eight years ago at the superbly organised and memorable Ottawa ICA 1999 Conference. For the first time I had the privilege of meeting so many people engaged - one way or the other - in 'cartography'. Not needing to present any papers or posters, I immersed myself in paper sessions, commission meetings, workshops, the General Assembly, social programme and, most of all, in discussions with fellow cartographers. I discovered that the ICA is not about statutes and bylaws, but about people with a passion for cartography.

My cartographic adventure started much earlier during my university years in Poland. My professors at the Faculty of Geography and Regional Studies, University of Warsaw opened me up to the wonderful world of cartography. There I made my first real maps, learned about intricacies of cartographic design and symbolisation and wrote my first cartographic essays. Thanks to them I discovered and learned to cherish the beauty of cartography.

Moving to New Zealand (the furthestmost country from Poland) opened new chapters in my cartographic endeavours. Here I got my first real job in cartography, tasted private, government and academic work environments, engaged myself in the local Cartographic Society and organised my first cartographic meetings.

Now I am almost a veteran of ICA events both as attendee and organiser. However, my devotion to serve cartography has not diminished; rather it has grown to new heights. My nomination to become the new ICA News Editor could not come at a better time. I am confident that I have the necessary skills and experience this position requires. I have been involved in editorial and publishing work for many years, in a variety of roles, and taking advantage of many delivery modes. I am delighted with a prospect of continuing this worthwhile and important ICA publication.

The role of ICA News Editor is, above all, to coordinate YOUR contributions into an informative newsletter. Whether you are an EC member, a Commission Chair or a devoted cartographer, I would like to hear from you! I look forward to working closely with all contributors in promoting cartography worldwide.

Igor Drecki
i.drecki@auckland.ac.nz
SGGES, The University of Auckland,
Private Bag 92019



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President's Report

Dear friends and readers of my reports. Another year has passed and I am writing the last report as the ICA President. It seems like yesterday when I was asked by the editor of ICA News Graciela Metternicht to write my first report. And because this is the last report, let me also add several personal notes and opinions.

In my last report, I was addressing you from the Chinese town of Wuhan. Today I'm home, in the Czech Republic. Looking back at the months between Wuhan and today, I have to say my interest in the Balkans has continued. Why? Some countries from this region have become members of the EU, others strive for admission. These efforts are also reflected by significant activities of cartographers and geoinformatics, especially in the area of SDI building. Since participating at the Thessalonica conference last year, I visited Bulgaria three times. In November 2006 I took the place of PP Bengt Rystedt and for the first time participated in the 16th International Symposium on Modern Technologies, Education and Professional Practice in Geodesy and Related Fields in Sofia organized by the Union of Surveyors and Land Managers in Bulgaria. On 9 November 2006, I presented a keynote speech on "Cartography for Global Problems Solutions" and met several specialists from neighbouring countries, who – for many reasons – don't attend conferences outside their region. The above-mentioned Bulgarian Union has been led for a long period of time by Professor Milev. The conference was on a good level, although it was dominated by non-cartographic presentations. It was clear that the successful international conference in Borovetz I had been speaking about in one of the previous issues of ICA News had set a new standard and had led to an increase of conference quality in the entire country.

The next conference was InterGeo East. The idea of the conference was successfully applied in Germany; all GI disciplines are presented on one level as equal. The conference was attended by one of its founders, Mr. Hagen Graef. As the ICA President, I was asked to present a keynote address, in which I commented on current ICA activities. The focus of InterGeo is on large presentations of companies active in GI fields, and the exhibition in Sofia was also representative.

Finally, I visited Bulgaria in late April and early May 2007, when I was invited to attend the presentation of the 5th annual national Barbara Petchenick Contest in Sofia. The event was excellently organized and managed by Assoc. Prof. Temenoujka Bandrova and it was accompanied by great interest of children, contest participants, parents and other relatives, and also significantly covered by the media. Winners received valuable prizes, mostly cartographic products of the DataMap company, and all participants were presented with a cake from a renowned local pastry company. The program also included cultural performances. Announcement of winners took place at the University of Architecture, Building (Civil engineering) and Geodesy in Sofia, and it was attended by general manager of the Bulgarian NMO (National Agency of Geodesy, Cartography and Cadastre) Mr. Kveten (Cveten) Boev, the Dean of the Faculty of Geodesy Slovejko (Slavejko) Gospodinov and Head of the Department of Photogrammetry and Cartography Assoc Prof. Petr Petrov.. I have also attended the International Geodetical Students Meeting IGSM on May 2-8 2007 in Sofia, Bulgaria and the 20th Jubilee Conference of IGSO where I presented keynote speech on "Geospatial Data and the ICA Potentials". However, besides positive impressions, I have brought from Bulgaria also a negative observation, which will lead me to initiate a modification of our ICA Status. The above-mentioned faculty showed interest to become an affiliate member of ICA (it has been the member of ISPRS for several years). However, the management of the Union of Surveyors does not want to authorize their membership claiming that one organization representing Bulgaria

is enough. I do not intend to interfere with internal matters of our Bulgarian colleagues. However, I think that the strict requirement for any organization (even an ICA member organization) to agree or disagree with admission of other affiliate and contributing members from their country has to be changed to only a recommendatory status for the Executive Committee, so that the opinion would not be binding for the Executive Committee. This would simplify the entire process and ICA would open for eventual applicants. There are signals that the situation is similar in several other countries and that administrative measures which originated in the Cold War era are nowadays preventing new, active and dynamic members from joining the ICA.

But let us get back to other observations I made in conversations with cartographers and GI specialists in conferences in different parts of the world.

At the end of November 2006, I was invited to participate in the first Map Africa conference in Johannesburg. The conference organized by the Indian GIS Development was largely attended by participants from national mapping institutes, universities and mainly the private sector. I have presented a keynote speech at the conference titled 'Capacity Building for Geo-Information Development: *Processes, Content, Context. ICA Potentials*'.

I got acquainted in detail with the status of cartography in the southern part of Africa and I could compare the situation to year 2003 when the ICC took place there. Moreover, I had the opportunity to meet prominent personalities of cartography in the South African Republic, especially general director of NMO Derek Clark. He promised to assist in the realization of ICA plans in Africa, and considered his candidacy to the position of ICA Vice-President. I also met Anthony Cooper and we discussed activities of the commissions on Standardization and Incremental Updating and the good work of ICA in the ISO. I also had a telephone conversation with another active ICA member and WG Colonial Cartography leader Elri Liebenberg. During the visit, I had a good feeling about the strong position of ICA in South Africa, and the positive impact of our association in the country. On the other hand, problems of finding ways how to immediately help Africa are still open.

From South Africa I traveled to Wroclaw where on 23 November 2006 I presented a paper called "Global Perspectives of Cartography" in the „Professional Cartographers“ conference organized by Joanna Bac-Bronowicz. The conference proceeded during the next days in beautiful spa Polanica Zdroj and demonstrated the traditionally high professional level of Polish cartography.

My last journey in 2006 led to a place which is a special favorite of mine – the Spanish Galicia. I was invited to open a conference organized by Ramon Lorenzo in Santiago de Compostela. On each step, I felt positive results and responses to the successful ICC conference in the nearby A Coruna. If someone wanted to see what it really means to interconnect science with practice, especially political practice, they should have participated in this perfectly organized conference. Good news is also the fact that – following the way of the successful Cartographic Institute of Catalunya led by an active ICA member Jaime Miranda – establishment of several other similar institutes is planned in the regions of Spain including Galicia. During the preparation of the ICC in A Coruna I passed through Santiago three times, but this was the first time I had the opportunity to get to know this town of pilgrims and a well-known university. It is really beautiful and I recommend a visit to all of you.

I started the year 2007 with a participation in the World Map Forum in Hyderabad, India. The event was again organized by the Indian GIS

Development. It was well attended and it presented a profile of activities both of the civil and the military sectors, of the private sector and the Academia. The ICA covered a significant part of the program, including a panel discussion that I as the ICA President moderated. The ICA also presented itself with a panel that documented activities of our commissions. Jointly with Joanna Bac-Bronowicz from Wroclaw, Poland, I have also promoted the ICA publication activities. Interest in the panel exceeded all expectations and persuaded me that – regardless of the significantly better visibility of ICA – it is necessary to continue the ICA promotion in all parts of the world. A JBGIS meeting took place in Hyderabad attended by Presidents of FIG and ISPRS, the Rector of ITC (The Netherlands) and representatives of ISCGM and Ordnance Survey. It focused on the problem of fragmentation of activities in the global SDI field and possibilities of their interconnection. I pointed out the paradox that on one hand ICA makes efforts to elaborate specific policies for example for the Latin America, but on the other hand relevant partners (e.g. Geographic Institute Agustin Codazzi in Bogota, Colombia) is prevented by its government from contributing the ICA membership fee (200 USD) which prevents normal, daily-basis cooperation between ICA and the respective organizations. Unfortunately, Colombia is not the only country in this position.

From the hot Hyderabad (over 30°C) I traveled to the cold Helsinki, Finland (with temperatures below -10°C) which subsequently caused me some health problems. Finish cartographers celebrated the 50th anniversary of establishing the Finish Cartographic Association. The ceremonial conference was organized by its president Mr. Anti Jacobsson at the TU Helsinki and it was attended by VP ICA Kirsi Virrantaus and many other colleagues from Finland. Besides keynote speeches of our Finish colleagues, I presented a keynote speech 'Cartographic and Geoinformatics Potentials in Disaster Management' and Liliu Meng 'Pervasive Maps –Design Theories and Applications'. The conference also included a superb exhibition of Finish cartographic products from history to present. I was very proud that I – and thus the entire ICA – was awarded with the FKS Standard. I was also interviewed by Paula Ahonen on the ICA activities and my opinions on development of cartography. The interview was published in the Finish language.

In April 2007 I shortly visited Hungary and in Budapest I met the general director of FOMI, Mr. Szabolc Mihaly. We discussed strengthening the role of Hungarian cartography in ICA and also the role of National Mapping Organizations (Agencies) in ICA. I also met Mr. Gabor Remetey-Fullop, a representative of HUNAGI that actively prepares utilization of INSPIRE project in Hungary.

An important event for me was a meeting of Executive Committee (EC) of ICA at the end of April at my own workplace – the Masaryk University. Considering the fact that in 2006 I spent 130 days abroad, I appreciated the proposal of EC members to meet in Brno. Main discussed issues included preparation of the ICC in Moscow, structure of the program, request for presentations of all Vice-Presidents so that they would cover all main directions of ICA activities – science, education, professional issues and social problems. We also discussed modifications of Status elaborated by PP Rystedt with the help of PP Wood and VP Fairbairn. An important point of the meeting was also the determination to revive cooperation with NMO and NMA. The program of ICC in Moscow will include a special session organized jointly by the President of ICA, VP R. Lorenzo, and General Manager of Rosskartografija Mr. Borodko. We have reached the common conclusion to propose to the General Assembly to introduce the position of the First Vice-President and consider establishment of an Advisory Board composed of ICA Presidents and ICA Secretary General. So far

funding was not available for this original proposal of V. Tikunov. Further to discussions in A Coruna and the EC meeting in Moscow, the proposal of the Research Agenda ICA was presented by Kirsi Virrantaus, evaluated by David Fairbairn and all other members of the EC. The final proposal will be presented at the ICC in Moscow. On basis of my proposal and previous experience in the ICA, we also discussed whether it is suitable to limit the ICA presidency to one term in the office. So far, the Executive Committee will not recommend this modification. The EC meeting in Brno was also on high social level. The meeting participants were received by the Mayor of Brno Mr. Onderka, who discussed matters of creating maps for Brno and informed us about production of maps for the visually impaired funded by the municipality. We were also received by the Rector of the Masaryk University Mr. Fiala and the Dean of the Faculty of Science Mr. Milan Gelnar. The Cartographic Society of the Czech Republic with support of Intergraph CR arranged a gala dinner in honor of the participants. At the dinner members of EC established contacts with representatives of the Czech Cartographic Society. Participants of the meeting also met my students, mainly PhD students of cartography, geoinformatics and remote sensing.

Immediately after the meeting in Brno, an ICA delegation consisting of M. Konecny, R. Lorenzo, F. Ormeling, B. Rystedt and K. Virrantaus traveled by train to Dresden to inspect premises where ICC 2011 could potentially take place. The visit was very well organized by W. Buchroithner and his team. The ICA delegation received detailed information about conditions for ICC hosting and will inform the General Assembly in Moscow. At the end of May, an ICA delegation consisting of the President, Secretary General and VPs David Fairbairn and Ramon Lorenzo will perform an inspection of the other ICC hosting candidate in Paris.

Even though my activities are directed mainly abroad, I have also participated in cartographic events in my own country. At the renowned Book Trade-Fair in Prague, I was presenting – together with the competition organizer Vit Vozenilek and President of the Czech Cartographic Society M. Mikovsky – prizes for the best digital and map products in the Czech Republic. On this occasion, the new Atlas of Climate of the Czech Republic was presented. It was published jointly by the Czech Hydrometeorological Institute (represented by its general director Mr. Oubrnik and deputy director Radim Tolasz) and the Palacky University in Olomouc (represented by V. Vozenilek). The atlas was processed fully on GIS basis and is a high quality example of cooperation among cartographers and specialists from many other fields in visualization of their results. It was an honor for me to write the introduction for this Atlas.

I would also like to comment on two other events in the Middle East and Europe. In the Middle East, as part of the conference held in Dubai, there was a competition of children's drawings organized by Mr. Manal and the Dubai municipal GIS department according to the rules of the Barbara Petchenik contest. 30 drawings were selected from the Gulf countries and we hope they will also be included in the contest at the ICC in Moscow.

In November 2006, the European Parliament passed INSPIRE, a project that had been in preparation for several years. This will certainly influence daily work of cartographers and geoinformatics in Europe. Significant credit in passing INSPIRE under Finish presidentship has Jarmo Ratia, general director of the Finish MNO, and also many other cartographers and geoinformatic specialists from EuroGeographics, JRC in Ispra (Alessandro Annoni) and officers from Brussels (Hugo de Graf, Durnf, etc.).

The 23rd International Cartographic Conference

At the end of my final report, I would like to thank to all of you for your cooperation and support that I could feel on every step. That's why I will – despite the big work load – leave my function as a satisfied President who in this way thanks you for your confidence in me. However, more than before I am conscious of various shortcomings that could not have been remediated in a four-year presidential period. I will inform both the General Assembly and presidents of cartographic societies from all countries about these issues. In conclusion, I wish to all of us that we choose from the high quality candidates for president and vice-presidents the best ones who will be able to analyze ICA position and manage the ICA in a complex way with regards to all needs that the organization requires for its activities.

Thank you for your cooperation, we will meet in August 2007 in Moscow!

Milan Konecny
President

14th ICA General Assembly

On August 4 and 9, the 14th General Assembly of the international Cartographic Association will be held in Moscow in the Cosmos Hotel Conference center. The provisional agenda for this assembly is attached. All ICA member states are asked to send in a delegate and to inform the Secretary-General beforehand who their delegate will be. The most important item on the agenda is probably the election of ICA officers for the 2007-2011 term, and the selection of the 2011 conference venue. Another important issue is the proposed change in the venue, the only issue for which a postal vote can be sent in.

Ferjan Ormeling
ICA Secretary-General

	Première session : samedi 4 août 2007, (9h - 17h)	First Session : Saturday 4th August 2007, 9:00 – 17:00	
1	Ouverture et allocations de bienvenue	<i>Opening and addresses</i>	President
2	Appel des membres	<i>Roll call of members</i>	Secretary General
3	Adoption de l'ordre du jour	<i>Adoption of the Agenda</i>	Secretary General
4	Désignation de deux Scrutateurs	<i>Nomination of two Scrutineers</i>	President
5	Membres suspendus de vote	<i>Members ineligible to vote</i>	President
6	Exclusion de membres	<i>Withdrawal of Membership</i>	President
7	Adoption du compte-rendu de la 12 ^e et 13 ^e Assemblée générale, 2003, 2005	<i>Adoption of the minutes of the 12th and 13th General Assembly, 2003, 2005</i>	Secretary General
8	Nouveaux membres nationaux	<i>New member nations</i>	President
9	Nouveaux membres affiliés	<i>New affiliate members</i>	President
10	Rapport du Président – 2003-2007	<i>President's report 2003-2007</i>	President
11	Rapport du Secrétaire général –2003-2007	<i>Secretary General's report 2003-2007</i>	Secretary General
12	Rapport du Trésorier – 2003-2007	<i>Treasurer's report 2003-2007</i>	Secretary General
13	Rapport des Commissaires aux comptes	<i>Auditors' report</i>	J.Olson, J.Miranda
14	Adoption des comptes	<i>Adoption of the Accounts</i>	President
15	Budget provisoire 2007-2011 montant de l'unité de cotisation	<i>Preliminary budget 2007-2011 subscription units</i>	Secretary General
16	Statuts de l'ACI	<i>ICA Statutes</i>	Past-President
17	Rapport sur les publications	<i>Publications report</i>	Robert McMaster
17a	Rapports nationaux	<i>National reports</i>	Secretary-General
18	Motions	<i>Motions</i>	David Fairbairn
19	Présentation des activités 2003-2007 des commissions et groupes de travail	<i>Presentation of commissions and working groups activities 2003-07</i>	William Cartwright
20	Proposition de commissions 2007-2011 présentation des candidatures et des termes de référence	<i>Commission proposals 2007-2011 presentation of nominations and terms of reference</i>	Ramón Lorenzo
21	Présentation du programme de recherche de l'ACI	<i>Presentation of the ICA research agenda</i>	Kirsi Virrantaus
22	Présentation des candidatures au Comité exécutif	<i>Presentation of nominations to the Executive Committee</i>	Haggai Nyapola
23	Propositions pour les prochaines conférences	<i>Future conference proposals</i>	Vladimir Tikunov
24	Récompenses de l'ACI	<i>ICA Awards</i>	President

The 23rd International Cartographic Conference

Nominations for President

William Cartwright	Australia
Ramón Lorenzo	Spain

Nomination for Secretary General

David Fairbairn	United Kingdom
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Nominations for Vice-President

Derek Clarke	South Africa
George Gartner	Austria
Pablo Gran	Chile
Menno-Jan Kraak	Netherlands
Zhilin Li	China
Anne Ruas	France
Vladimir Tikunov	Russia
Timothy Trainor	USA
László Zentai	Hungary

Nominations for Commission Chairs

New Commissions	Name	Country
Geospatial Analysis and Modeling	Bin Jiang	Sweden
ICA Maps and Society	Chris Perkins	United Kingdom
Use and User Issues	Corné van Elzakker	Netherlands
Digital Technologies and Cartographic Heritage	Evangelos Livieratos	Greece
Existing Commissions		
Cartography & Children	Nikolaj Komedchikov José Jesús Reyes/ Temenoujka Bandrova	Russia Hungary/Bulgaria
Education & Training	David Fraser	Australia
Gender & Cartography	Wieslawa Zyszkowska	Poland
Generalization and Multiple Representation	William Mackaness/ Sebastien Mustière	United Kingdom/ France
History of Cartography	Alexei Postnikov Elri Liebenberg	Russia South Africa
Management & Economics of Map Production	Philippe De Maeyer	Belgium
Mapping from Satellite Imagery	Graciela Metternicht	Australia
Map Projections	Daan Strebe	USA
Maps for Blind and Partially Sighted People	Daniel Jacobson	Canada
Maps & Internet	Michael Peterson	USA
Marine Cartography	Patricio Carrasco Hellwig	Chile
Mountain Cartography	Karel Kriz	Austria
National & Regional Atlases	Peter Jordan	Austria
Planetary Cartography	Kira Shingareva	Russia
Spatial Data Standards	Antony Cooper	South Africa
Theoretical Cartography	Alexander Wolodtschenko	Germany
Ubiquitous Mapping	Takashi Morita	Japan
Visualization & Virtual Environments	Gennady Andrienko	Germany

Summary of abstracts received

The Local Organising Committee has summarised the abstracts submitted at the deadline of the 15th January 2007. The graphics below show the amount of abstracts received per congress theme and the number of oral and poster sessions that have been allocated to each theme.

The 668 abstracts received have been now selected for oral or poster presentations, and the LOC is requesting all authors to submit full papers by the 31st May 2007 via electronic mail to reports@icc2007.com.

Correspondence and questions on E-mail: rusobgeo@mail.ru

The basic rules for reports sending:

- Full paper body up to 10 pages
- Number of drawings in the report is should not exceed 8 (eight). The drawing size should not be larger than 1/3 of page size
- Heading (Font - Times New Roman 16), Authors (Font - Times New Roman 12), Organization title (Font - Times New Roman 12), E-mail (Font - Times New Roman 12)
- The language of the full report texts should be English
- Using web interface attach papers body as a file. File format should be RTF or DOC. Left margin - 3 cm, right and bottom margins - 2,5 cm. Font - Times New Roman 12, line spacing - one and half.

The reports will be published on CDrom.

(See charts page 6)

The Program

Friday 03.08.2007

10-00 – 18-00 Executive Committees meeting

Saturday 04.08.2007

10-00 – 18-00 Registration

11-00 – 13-30 General Assembly ICA

13-30 – 14-30 Lunch

14-30 – 16-00 General Assembly ICA

16-00 – 16-30 Coffee Break

16-30 – 18-00 General Assembly ICA

Sunday 5.08.2007

10-00 – 18-00 Registration

10-00 – 18-00 Maps Exhibition, Technical Exhibition, Barbara Petchenik

11-00 – 13-30 Opening Ceremony

13-30 – 14-30 Lunch

15-00 – 16-00 Exhibition opening ceremony Maps Exhibition, Technical Exhibition, Barbara Petchenik

14-30 – 18-00 Technical Sessions

16-00 – 16-30 Coffee Break

14-30 – 18-00 National Delegations Meeting

18-00 – 19-00 Welcome Reception

Monday 06.08.2007

10-00 – 18-00 Registration

10-00 – 18-00 Technical Sessions

10-00 – 18-00 Maps Exhibition, Technical Exhibition, Barbara Petchenik

10-00 – 18-00 Technical excursions

11-30 – 12-00 Coffee Break

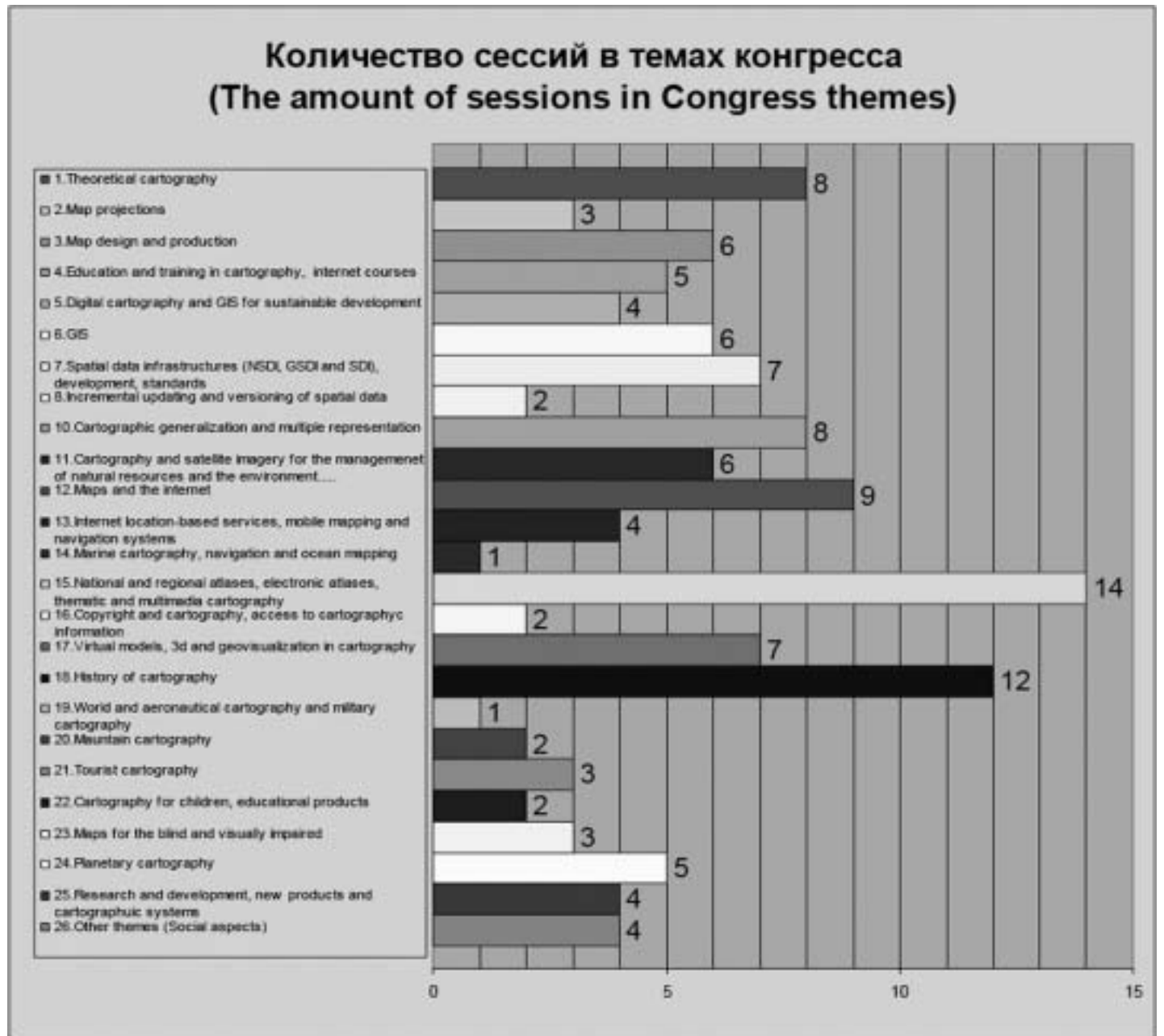
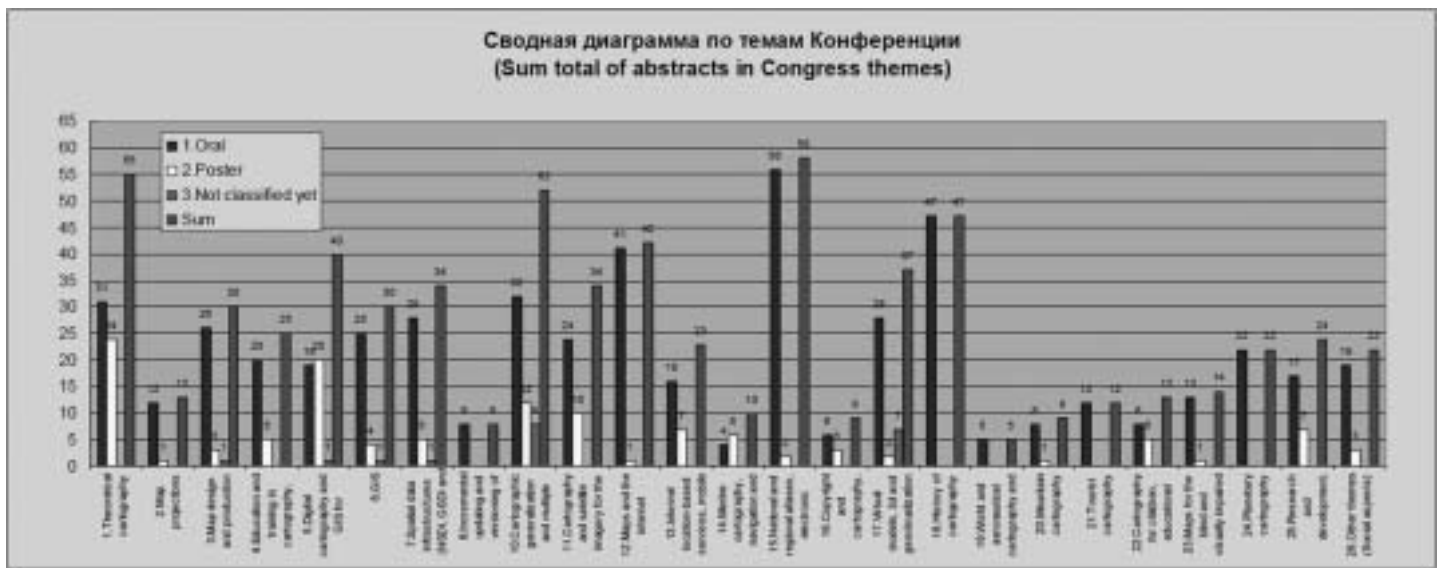
13-30 – 14-30 Lunch

16-00 – 16-30 Coffee Break

18-00 – 19-00 Exhibitors' Reception

18-00 – 20-00 Social program

The 23rd International Cartographic Conference



The 23rd International Cartographic Conference

Tuesday 07.08.2007

10-00 – 18-00 Registration
 10-00 – 18-00 Technical Sessions
 10-00 – 18-00 Maps Exhibition, Technical Exhibition, Barbara Petchenik
 10-00 – 18-00 Technical excursions
 11-30 – 12-00 Coffee Break
 13-30 – 14-30 Lunch
 16-00 – 16-30 Coffee Break
 18-00 – 20-00 Social program

Wednesday 08.08.2007

10-00 – 18-00 Registration
 10-00 – 18-00 National Delegations Meeting
 10-00 – 18-00 Technical Sessions
 10-00 – 18-00 Maps Exhibition, Technical Exhibition, Barbara Petchenik
 10-00 – 18-00 Technical excursions
 11-30 – 12-00 Coffee Break
 13-30 – 14-30 Lunch
 16-00 – 16-30 Coffee Break
 18-00 – 19-00 Presentation of ICC2009 organizing country
 18-00 – 20-00 Social program

Thursday 09.08.2007

10-00 – 18-00 Registration
 10-00 – 13-30 General Assembly ICA
 10-00 – 13-30 Technical Sessions
 10-00 – 13-30 Maps Exhibition, Technical Exhibition, Barbara Petchenik
 11-30 – 12-00 Coffee Break
 13-30 – 14-30 Lunch
 14-30 – 16-30 General Assembly ICA , Closing Ceremony

Friday 10.08.2007

Delegations departure

Opening and closing ceremony

The opening ceremony will take place on Sunday 5th August, at 11 am. Keynotes are confirmed from ICA President Milan Konecny, A.M. Berlyant, A.V.Borodko, V.P.Savinykh, V.S.Tikunov, Menno-Jan Kraak, Ferjan Ormeling.

The closing ceremony will take place on the afternoon of the 9th August, with the General Assembly of the ICA, followed by the closing Ceremony with keynote presentations by ICA Vice-Presidents Prof Kirsi Virrantaus (Finland) and Prof Robert McMaster (USA).

Social programme:

The conference website includes an extensive list of tours that will take place prior and during the conference, at affordable cost. There will be bus tours around Moscow city, The Kremlin; the Pushkin Museum of Fine Arts; State Tretyakov Gallery; the Cathedral of Christ the Savior; to Novospasskiy Monastery; and the towns of St Petersburg (2 days), Suzdal-Vladimir-Bogolubovo, Sergiev Posad. All tours include English speaking guides. More information is available at: <http://icc2007.com/key23/lang2.htm>.

Registration Fees

	Until May, 31 2007	From May, 31 2007
Full participant	490 €	550 €
Student/Senior	245 €	275 €
Only One day	150 €	170 €
Accompanying person	150 €	170 €
Participant from Russia	250 €	300 €

Requisites for transfer of foreign currency

Account With Institution	SBERBANK MOSCOW, RUSSIA
SWIFT:	SABRRUMM
Beneficiary account number	40502978938120200043
Beneficiary customer:	FSUE "MAGE" Address: 45, Volgogradskij Av. MOSCOW, RUSSIA, 109316

Questions on registration fees should be sent to Kozeev Nikolaj (FSUE "MAGE"), Phone/Fax: +7(495) 177-50-00;
 E-mail: magp@inteltec.ru

On the matter of hotel booking and visa support, please, address to:

Other arrangements related to:

1. Hotel accommodation of the Conference participants
2. Visa support for the Conference participants
3. Transfer (transport service for the Conference participants)
4. Registration of the Conference participants
5. Cultural program
6. Conference room rent for sessions accommodation, office equipment rent

Should be addressed to the External Economic Joint-Stock Company on Tourism and Investments "INTOURIST". Contact person: *Mr. Andrey Polovetsky, Mr. Vadim Tuhvatulin, Mrs. Tatyana Semerikova;*

Tel: +7(495)730-61-18; Fax: +7(495)956-89-34

E-mail:

vik@intourist.ru; vadim@intourist.ru; ab@intourist.ru; ts@intourist.ru

ICA Workshops and Seminars

Map Language and Geoinformation

Location: Moscow, Institute of Geography RAS

Date: 3-4 August 2007

Contact: Alexander Wolodtschenko,

email:

alexander.wolodtschenko@mailbox.tu-dresden.de Nikolay Komedchikov,

email: nnk@rambler.ru

The seminar "Map Language and Geoinformation" is open for all colleagues with cartographic and non cartographic traditions and without fee. Seminar's goals are allow all participants to report on their current theoretical- or applied-cartosemiotic researches, to activate and to support in particular young scientists, to develop the cooperation with cartographic and non cartographic experience.

Some selected sub-themes of the seminar are: a) cartosemiotics and map language in communication society; b) competence questions of cartosemiotics; c) map language and others languages; d) map language and internet; e) language(s) of topographic, thematic and special maps; f) cultural-semiotic and historical aspects of map language.

Deadlines

Abstracts submission: 1st June, 2007 (abstracts should be no more 300 words)

Abstracts notification: 15th June, 2007

Preliminary program will be displayed since July 1, 2007 on the Commission "Theoretical Cartography" web site: <http://rcswww.urz.tu-dresden.de/~wolodt/tc-com/>

The results of seminar will be published as cd-proceedings.

The 23rd International Cartographic Conference

Cartography with ArcGIS

Fees: This three-day course is free for ICC 2007 Conference attendees and ESRI users

Location: Moscow, Data+ Training Center Moscow, Bolshaya Gruzinskaya Str., 10. See the map at http://www.dataplus.ru/About/map_eng.htm

Date: 2 - 4 August 2007

Contact:

Instructor: Makram Murad-al-shaikh (ESRI, USA), email: mmurad@esri.com

Registration: Natalya Tikhonova, email: ntikhonova@dataplus.ru

Additional info: Nina Lebedeva, email: nlebedeva@dataplus.ru

Topics covered:

- The design process: Map, design, and communication; eye imitations in deciphering graphics; map critique; one day's worth of basic cartographic principles
- Feature symbology: Choosing appropriate unambiguous symbols and colors; setting layer symbology in ArcMap™; working with styles in ArcMap; creating custom symbols
- Thematic mapping: Displaying qualitative and quantitative data; choosing a classification method; normalizing data
- Text and labels: Text placement guidelines; labeling options in ArcMap (including the Maplex™ extension); setting label weights and priorities; building expressions to format labels; label placement options
- Annotation: Creating annotation features in ArcGIS®; managing annotation groups; editing annotation
- Mapping raster data: ArcMap raster tools; raster properties; resampling raster data for display; using the Effects toolbar; rendering relief maps
- Creating visually balanced and informative layouts and final output: Characteristics of effective maps; layout design tools; setting legend, scale bar, and other map element properties; creating and using templates
- Using the proper generalization level for improving map readability at publication scale
- Using the capabilities of representation for visualization
- Critiquing maps for the purpose of improving design skills

For more course details:

Visit <http://www.esri.com/training/cartography>.

Who should attend?

This course is designed for experienced ESRI® ArcGIS software users who want to produce high-quality map products. Attendees are highly encouraged to bring their own maps for use in the map critique exercises

Prerequisites:

Attendees should have completed either of the following courses: Introduction to ArcGIS I or Learning ArcGIS Desktop, or have equivalent knowledge of ArcGIS

Available seats:

This course is limited to 16 persons. Attendees of the ICC 2007 Conference who would like to attend the course will be given priority if they make reservations between now and the last day of May 2007. On

1 June 2007, the remaining seats will be available to both ICC 2007 Conference attendees and other ESRI users on a first come, first served basis. The final registration deadline for all is 15 July 2007. Please plan on applying to attend this course early.

Modeling of the Spatial Data Infrastructure

Location: St. Petersburg, St. Petersburg University

Date: Sunday, July 29 - Wednesday August 1 2007

Contact:

Harold Moellering, email: geohal+@osu.edu

German Kuroshev, email: KGD@GK6816.spb.edu

Who should attend:

Members of the Commission and guest spatial scientists interested in modeling the SDI. They should have a good knowledge of spatial data modeling, and a deep knowledge of UML modeling concepts. This is a working meeting of the Commission, and not a seminar.

ISO Spatial Data Standards

Location: Moscow, Moscow State University of Geodesy and Cartography (MIIGAiK)

Date: 7 August 2007

Co-Chairs: Harold Mollering and Henry Tom

Contact:

Harold Mollering, e-mail: moellering.1@osu.edu

Henry Tom, email: henrytom@verizon.net

Kira Shingareva, email: kirash1@yasenevo.ru

Covered topics:

1. Standards Panel Session
Moderator: Henry Tom, Co-Chair, ISO/TC 211 Advisory Group on Outreach HenryTom@Verizon.net
2. Status of the International Standardization Organization (ISO) Technical Committee 211, Geographic information/Geomatics
Moderator: Henry Tom, Co-Chair, ISO/TC 211 Advisory Group on Outreach
3. Status of Standardization in the International Cartographic Association
Moderator: Dr. Harold Mollering, Chair, ICA Commission on Spatial Data Standards
4. Status of the ISO Metadata Standard and its related Standards
Moderator: David Danko, Project Leader, ISO 19115 Metadata Standard
5. Status of Standardization in the North America
Moderator: John Moeller, American National Standards Institute (ANSI) L1 GIS Standards
6. Status of Standardization in Latin America
Moderator: Santiago Borrero, Secretary General, Pan American Institute for Geography and History
7. Status of Standardization in Europe
Moderator: Alessandro Annoni, INSPIRE, European Commission
8. Status of Standardization in Asia Pacific
Moderator: Dr. Abbas Rajabifard, Centre for Spatial Data Infrastructures and Land Administration, University of Melbourne
9. Status of Standardization in the United Nations
Moderator: John Latham, UN Geographic Information Working Group (UNGIWG)

Plans to form a Working Group on Art and Cartography

Contemporary methods for depicting the earth and its cultural and natural attributes use graphic and non-graphic formats, maps and map-related artefacts, for visualizing geography and for building virtual landscapes and environments. The discipline area of Cartography, traditionally, has applied Art (Design), Science and Technology to map-making to design and realise these products. Prior to the mid 1950s cartographic artefacts were built under the theoretical and practical 'umbrella' of this partnership of Art, Science and Technology. However, since then it is argued, the theory and methodology associated with visualizing geography has focused on Science and Technology, and away from Art. This 'move' away from Art was accelerated by: 1. Computing, computers and complete automated systems; and 2. A 'quest' to gain 'scientific legitimacy' by using Scientific Visualization as a lodestone for gauging the 'quality' of theories and applications.

Science and Technology has been embraced by cartography as a means to ensure that what is presented is scientifically 'correct' – products are considered to 'work' if they are scientifically 'elegant', technologically 'buildable' and 'deliverable' using contemporary communications systems. But, it is argued, Science or Technology, need not always take on primary roles, and there now is a need to address the role that Design needs to take to facilitate the further development of contemporary cartography, especially in the areas where New Media has been applied to facilitate the building of Geographical Visualization tools.

It is intended to establish a new ICA Working Group to address how to best provide geo-communication tools that will allow for improved visualization of geography- by incorporating ART. It is hoped that the work of this proposed Working Group will re-define how we can better visualise Space and Place, considering: Science, Technology and Art.

It is planned to have a 'start-up' meeting in Vienna in early February 2008. For more information contact: william.cartwright@rmit.edu.au

*Professor William Cartwright
Vice-President of ICA*

Generalisation and Multiple representation

Tutorial on Generalisation and Multiple Representation

Location: Moscow, MIIGAiK (Moscow State University of Geodesy and Cartography)

Date: 4 August 2007

Contact: William Mackaness (william.mackaness@ed.ac.uk); Anne Ruas (anne.ruas@ign.fr)

The tutorial "Generalisation and Multiple Representation" is open to all colleagues with cartographic and non cartographic traditions. The Tutorial will provide an all day course on generalisation and multiple representation given by international experts in this field (Dirk Burghardt; Julien Gaffuri; William Mackaness, Liqiu Meng; Moritz Neun; Anne Ruas; Monika Sester, Christelle Vangenot).

Generalisation is all about representing the geography of the world at multiple levels of detail. Many organisations are interested in the efficient storage and update of their map data. This intensive tutorial will provide an overview of theoretical and technical developments in the field. We encourage anyone with an interest in this topic, but who want to learn more, to attend this tutorial.

Registration is done via an email to william.mackaness@ed.ac.uk, with cheaper price before the 22nd of June 2007. Program, Fee and information are given on the Commission 'Generalisation and Multiple Representation' web site: <http://ica.ign.fr>

Because of the organisational requirements of the workshop, we would like to know as soon as possible if you would like to attend. Please let us know as soon as possible, but most definitely *before* the 1st June if you would like to attend this tutorial.

Location

More details of the precise location of the tutorial will be given nearer the time. The Metro is the best way to get to the University. Details of the location of the State University of Moscow can be found at: <http://www.msu.ru/en/>

Generalisation and Multiple Representation Research Workshop

Location: Moscow, MIIGAiK (Moscow State University of Geodesy and Cartography)

Date: 2-3 August 2007

Contact: William Mackaness (william.mackaness@ed.ac.uk) & Anne Ruas (anne.ruas@ign.fr)

The workshop "Generalisation and Multiple Representation" is open for all colleagues with cartographic and non cartographic traditions. Seminar's goals are allow all participants to report on their current theoretical- or applied- researches, to activate and to support in particular young scientists, to develop the cooperation with cartographic and non cartographic experience.

Program and information are given on the Commission 'Generalisation and Multiple Representation' web site : <http://ica.ign.fr>. Please send an email as soon as possible to william.mackaness@ed.ac.uk if you wish to participate to the workshop.

Anne Ruas and William Mackaness

Commission for Marine Cartography

Planning for CoastGIS 2007, to be held in Santander, Northern Spain 8 - 10 October 2007 is underway. A very satisfactory number of presentations are planned. The Local organising Committee, headed by Maica Garriga, is supported from the Ocean and Coastal Research Group, University of Cantabria, Spain. Details can be obtained through the upcoming conferences link at www.coastgis.com.

This will be my last contribution as Chair of the Commission and a good time for me to express my gratitude to everyone who has supported me over quite a few years. This includes the present Executive Committee who have always been very supportive of the Commission.

I also pay compliment to my colleague on the FIG/IHO/ICA Advisory Board for Standards of Competence for Hydrographic Surveyors and Nautical Cartographers, Professor Lysandros Tsoulos, for his unstinting support.

We both plan to continue supporting the work of the Advisory Board by representing the ICA. I intend to continue with the CoastGIS conferences as long as I can and will nominate as a future Member of any newly formed Commission on Marine Cartography coming out of the next ICA General Assembly.

A number of reasons prevent me from attending the ICC in Moscow – I know you will all have a great experience and wish you all, particularly the organisers, all the very best.

*Ron Furness
Chair*

Commissions' Reports

Maps and the Internet

The ICA Commission on Maps and the Internet will held its Annual Meeting in Warsaw, Poland, from July 31 – Aug. 2, 2007. If you plan on attending the meeting, even if you are not presenting, contact Jolanta Korycka-Skorupa at j.skorupa@uw.edu.pl to complete a registration form.

The meeting will begin with a reception in the Department of Cartography at the University of Warsaw at 6 PM, Tuesday, July 31 (on-site registration begins at 5 PM). There will be two sessions on Wednesday morning August 1 from 9 AM to 1 PM. The excursion will follow at 2 PM with a dinner at 8 PM. There will be two more sessions on Thursday morning August 2 from 9 AM to approximately 1:00 PM. The registration cost for the meeting has yet to be determined by the local organizers but should be less that US \$50.

Prof. Michael P. Peterson
Chair

Visualization and Virtual Environments

In 2007 we will organize our annual commission meeting in Helsinki, at the Technical University of Helsinki on August 2 and 3, preceding the main ICA conference in Moscow (4-10 august) under the header "From geovisualization toward geovisual analytics".

The objective of the meeting is to set the agenda for the next four years. Content wise this will be a follow up on last year's meetings in Vancouver, WA (AutoCarto) and in Muenster (GIScience). A Preliminary program can be found at <http://kartoweb.itc.nl/icavis/2007/index.html>. Contact kraak@itc.nl

Menno Kraak
Chair

Theoretical Cartography

Workshop in Kyiv

With the motto "Ecological Cartosemiotics and Ecological Safety", the ICA Commission on Theoretical Cartography and National Aviation University (NAU), Department of Human Safety, held a workshop on the 30th March 2007 in Kyiv, the capital of the Ukraine.

The opening ceremony was conducted by V.M Isaenko, Director of the Institute of Municipal Activity, with participation from D.F Baisa, Land Use and Information Technologies, O.I. Zaporozhetc, Head of Department of Human Safety and A.Wolodtschenko, Chair, ICA Commission on Theoretical Cartography.

Over 50 participants from Kyiv universities and institutes (NAU-Faculty of Ecology and Faculty of Geomatics and Transport Systems; National University-Faculty of Geography; Institute of Land Use and Information Technologies; Institute of Geography) took part of the workshop. 19 papers were presented in three oral sessions with topics in the areas of human safety; cartography, cartosemiotics and ecology. The main goals of this workshop were support young scientists in Kyiv, and allow for PhD students and diploma thesis students to report on their current theoretical or applied researches.

After lunch there was a round table discussion, with such topics as: next workshop for young scientists from Kyiv and others cities of the Ukraine, ecological education and training, ecological mapping and problems in the Ukraine, and the possibility of creating a department of applied cartosemiotics. The organizers will publish the results of workshop as CD-proceedings.

Workshop on "Cartographic knowledge and terminology"

The Kyiv Scientific and Production Center "Cartografia" (SPCC) was host and sponsor of the workshop "Cartographic knowledge and terminology", organized by the ICA Commission on Theoretical Cartography. On the 29th March 2007, Dr R. Sossa, Director of SPCC welcomed participants from National University-Faculty of Geography, Institute of Geography of the National Academy, Scientific Institute for Geodesy and Cartography, and SPCC in his office.

The meeting included two papers presentations ("Atlas cartosemiotics: a new discipline" by A.Wolodtschenko and "Ukrainian Cartographic Lexicon" by R.Sossa), and four reports and discussions. The following thematic aspects were discussed: cartographic lexicons, new cartosemiotic terminology, ISO standards and cartographic terminology.

Another similar workshop is planned to be held in March 2008, in Kyiv.

Alexander Wolodtschenko
Chair, ICA Commission on Theoretical Cartography



Participants of the workshop "Cartographic knowledge and terminology"

Report of ICA Commission on Maps and Graphics for Blind and Partially Sighted People 2006-2007: Summary of New Developments & Future Plans

The following report brings readers up-to-date with activities of the commission since December 2006.

Conferences

After some persuasion, using a visit to Moscow as enticement, the commission has been able to repeat the unprecedented success of the previous ICA conference in A Coruña, Spain. A total of 14 papers, equalling the number given at ICC2005, have been accepted for oral presentation. With emphasis on using innovative devices that make spatial information more widely available to larger numbers of visually impaired people, the conference perhaps marks a turning point in tactile cartography research. Three themed sessions cover the following topics: 1. Tactile map use, reading & design: cognitive perspectives; 2. New ways of accessing spatial information in the absence of vision: multimodal interfaces & virtual mapping; and 3. Tactile mapping: further technological developments. As the titles indicate great strides are being made applying new geo-technologies and represent a move away from the static tactile map. Representatives from local blind organisations in Russia will be invited to the presentations and visits to these institutions are planned for commission members attending the conference.

Tactile Activity

Recent reports of tactile activity have centred on innovation. In response to new designs and in order to explore the impact these could have on tactile graphics, a special issue of the commission newsletter on technology has been compiled. To give a flavour of 'what's going on', TacNews (8) features articles on the following developments.

- TeDUB (Technical Drawing Understanding for Blind people) is a new method providing visually impaired people with an accessible route to diagrams and plans. The system uses speech synthesis and various sounds to provide basic output, but user's can also feel characteristics of a graphic via a force feedback mechanism, in this case a joystick.
- The Talking Tactile Tablet currently being promoted in the UK and US combines tactile maps with a touch pad that offers verbal instructions and layers of spatial information that would otherwise be inaccessible through touch alone.
- A review paper investigating Braille embossers and touch sensitive screens reports on how these devices can be applied to tactile production more generally.
- Finally as funding for TIMP (Tactile Inkjet Mapping Project) comes to an end the project that has been examining novel tactile production methods for the past 3 years announces its findings.

The issue also includes a thought piece on electronic wayfinding devices and Location-Based Services (LBS), introducing readers to positioning technology and mobile navigation tools, discussing the relevance such developments might have in improving access to spatial information for blind and partially sighted people. Most articles appear to share a common trait. The devices described are not tactile maps according to conventional definitions, but involve providing geographic representations of environments in the broadest sense. The appeal of new technology also typifies a widespread notion that expecting a tactile map alone to fulfil the spatial needs of blind and partially sighted user's is no longer tenable.



The Talking Tactile Tablet (TTT or T3), with a sheet from the National Geographic Talking Tactile Atlas of the World mounted.

Commission website

A new website developed by the co-chair is in preparation. This is intended to replace INTACT and will reflect developments in technology and the changing nature of tactile mapping. Dan Jacobson who is responsible for the project has indicated that the new web page will be more interactive. Additionally it is forecast to include a useful bibliography, a place for archiving full versions of material where authors can upload copies of their seminal material, and resource pages with quick and easy access to sites considered important for improving tactile design.

Commission Newsletter

A survey of the newsletter's readership, growth and increasing internationalisation of its content will appear in TacNews (10). The review, based on the geographical distribution of subscribers, should be a useful guide to worldwide interest in tactile graphics. As this kind of information has not existed previously, a quick survey could also approximately identify the location of tactile map activity hotspots and serve to pick out zones that should form the focus of future research interest. TacNews (10) will be the final issue for founding editors Ann Gardiner and Jonathan Rowell. As both will be vacating their positions, new editors are being sought.

Statement on Standardisation

A statement reflecting the commission's position on standardisation is in preparation and will appear on the website forthwith. In summary standardisation is declared undesirable, largely because it is unachievable. The use of standard symbols is therefore discouraged, while more consistent design advocated by recommending a series of best practice guidelines. After years in gestation, the Braille Authority of North America (BANA) and Canadian Braille Authority (CBA) are jointly publishing official guidelines for producing tactile graphics. Designers will be directed to this exhaustive document. A paper will introduce the new guidelines in Moscow.

Archive of Tactile Material

Calls to establish an archive of tactile mapping have received a lukewarm response. Though the NCTD in the UK has acted as an unofficial repository for examples of tactile material, building on a collection of tactile works bequeathed to them by Ron Hinton, there is

Commissions' Reports

no proper library as such, nor does any record of what tactile maps have been produced exist. Despite initial enthusiasm when the idea was first proposed at the Commission meeting at TG2005, lack of interest subsequently means this has now been put on the backburner.

Scoping the Future Research Agenda

Based on consultations with an expert panel of producers, designers, practitioners, researchers and users of tactile maps, the commission has broadly identified five essential topic areas that should form the focus for future research consideration. These include: technology, particularly new innovations; availability of tactile maps; guidelines to help improve consistency of design, user involvement in all aspects of the tactile graphic production process; and training for both makers of tactile material and potential users.

Jonathan Rowell
Chair

ISO/TC 211 Activities

ISO/TC 211 is the International Organization for Standardization's Technical Committee developing standards for Geographic Information/Geomatics. The following is a brief report of the ISO/TC 211 activities since they were last reported on in the ICA News, in June 2006.

ISO/TC 211 has now published 25 International Standards, four Technical Specifications and three Technical Reports (see: <http://www.isotc211.org>). Over the last year, the following were published:

- ISO 19131:2007, Geographic information – Data product specifications
- ISO 19134:2007, Geographic information – Location-based services -- Multimodal routing and navigation
- ISO 19137:2007, Geographic information – Core profile of the spatial schema
- ISO/TS 19138:2006, Geographic information – Data quality measures
- ISO/TS 19139:2007, Geographic information – Metadata -- XML schema implementation

Of particular interest to the cartographic community is ISO 19131, which is a "mirror" standard for ISO 19115:2003, Geographic information – Metadata. ISO 19131 specifies the parameters required for a data set, using the metadata elements defined in ISO 19115, such as spatial and temporal referencing systems, spatial and temporal extents, themes, and desired quality. The user can then match easily the metadata of the delivered data set against the data product specifications, to determine if the data set meets their needs. Also of particular interest are ISO/TC 19138, which defines measures to assessing and recording data quality, and ISO/TS 19139, which provides the XML for implementing ISO 19115.

New projects that have commenced over the last year are:

- ISO 19146, Geographic information – Cross-domain vocabularies
- ISO 19147, Geographic information – Location Based Services – Transfer Nodes
- ISO 19148, Geographic information – Location Based Services – Linear Referencing System

ISO 19146 aims at harmonizing the technical vocabularies used in different geo-spatial domains, particularly for standards. ISO 19147 aims at standardizing the data about transfer nodes in transport systems (eg: bus stops, train stations or airports), so that they can be shared

between responsible authorities. Such data includes time tables, accessibility for the disabled, and availability of parking and shelters. ISO 19148 aims at providing standard references for positions along linear infrastructure, such as pipelines, rivers, roads, railways and seaways – it is often more useful to reference a position as a distance along the linear feature from a known point (eg: an intersection) than it is using absolute geographical coordinates (latitude and longitude).

ISO/TC 211 has also started the process of revising and amending existing standards, and the following commenced over the last year:

- Amendment of ISO 19110:2005, Geographic information – Methodology for feature cataloguing; and
- Revision of ISO 19118:2005, Geographic information – Encoding.

The 23rd ISO/TC 211 Plenary was held in Riyadh, Saudi Arabia, on 14 and 15 November 2006, preceded by a number of Working Group, Project Team and Editing Committee meetings, as well as an exhibition, tutorials and a workshop on the implementation of the ISO 19100 standards. Of interest to the cartographic community might be that ISO/TC 211 established there an ad hoc group which will investigate standards requirements for ubiquitous geographic information (UBGI).

The 24th Plenary is scheduled to be hosted by Italy and the United Nations Food and Agriculture Organization (UNFAO) in Rome, Italy, on 30 May and 1 June 2007, preceded by Working Group, Project Team and other meetings. Significantly, this will be the third Plenary co-hosted by a liaison organization, reflecting the value of the ISO 19100 standards to their communities. The 25th Plenary is scheduled for Xi'an, China, on 1 and 2 November 2007.

Antony Cooper and Dave Danko
ISO/TC 211 Liaisons to the ICA

6th ICA Mountain Cartography Workshop

The 6th workshop on 'Mountain Mapping and Visualisation' will take place from the 11 – 15 February 2008, in Lenk, Switzerland. Lenk is located in the Bernese Oberland, near the impressive Wildstrubel massif (3243 m), at 1068 m above sea level. The Sports and Cultural Centre KUSPO in Lenk offers a wide range of activities in the beautiful landscape of the Swiss Alps.

The workshop will cover the following themes: Mapping and GIS applications of mountainous areas; Physical and topographic mapping; Relief representation; Visualisation, animation, and new media applications.

Deadlines:

Call for abstracts until 1 November 2007

Publication Submission of papers until 1 February 2008

The papers will be published in a printed and in an online version (PDF). It is planned to submit a selection of revised papers to an international journal.

Accommodation has been reserved at the Sports and Cultural Centre KUSPO,

CH-3775 Lenk (www.kuspo.ch), and the cost of the workshop is 300 CHF all inclusive. Please note that the number of participants is limited to 50. Pre-registrations can be sent to lenk2008@cartography.ch. More information is available at: www.mountaincartography.org

Lorenz Hurni
Commission Chair

The United Nations Spatial Data Infrastructure (UNSDI)

The United Nations Geospatial Information Working Group (UNGIWG), established in 2000 and comprising some 30 UN agencies, funds and programmes, recommended at its annual Plenary in Addis Ababa in October 2005 that the group should move forward on formulating the concept and implementation modalities for a United Nations Spatial Data Infrastructure (UNSDI). Acknowledging the existence of major ongoing SDI developments at national and regional level, this led to UNGIWG calling a United Nations Spatial Data Infrastructure Global Partners Meeting (UGPM), hosted at the European Space Agency (ESA) Centre for Earth Observation (ESRIN) in Frascati, Italy on 1 and 2 March 2007.

The objectives of the meeting were to brief representatives from Member States on the UNSDI development process and its current status and to engage in a structured dialogue on the institutional, technical and coordination issues facing the development and implementation of a proposed UNSDI in coordination and cooperation with similar developments at national, regional and global level. This gathering built upon the UNSDI discussions held internally within UNGIWG and was meant to explore how a UNSDI would be situated in the context of non-UN SDI initiatives. 82 Participants attended the meeting, representing UN Member States, United Nations agencies, programmes and missions, global, regional and national spatial data infrastructure initiatives, a variety of scientific establishments and the private sector.

Numerous and informative “tone setting” presentations related to the UNSDI context: applications context in the areas of humanitarian affairs, global food security, forest resources assessment, environment and transport/logistics; national and regional SDI initiatives; capacities and tools for geospatial information access and analysis. The UNSDI vision, strategy and implementation plan was presented as well as the concept of UNSDI national coordination offices mandate and activities in the context of the ongoing UN reform process “United Nations Delivering as One” as well as a contribution to achieving the Millennium Development Goals by 2015.

The UGPM meeting presentations as well as the final meeting report can be accessed at www.ungiwg.org/unsdi

Based on these presentations and participants’ own experiences, suitably composed Breakout Groups and a Panel Session, comprising selected representatives from UN agencies, Member States, Regional Organizations and potential Partner Programmes identified a series of key issues on:

- institutional and technical aspects related to UNSDI development and implementation process and;
- “the joys and responsibilities of partnering and coordination”.

The results of this key dialogue meeting, where a comprehensive set of institutional and technical recommendations for the UNSDI development have been formulated will be reviewed by a forthcoming special UNGIWG Session on UNSDI in early June 2007 in preparation for its annual 8th Plenary Meeting in Bangkok in November.

Jelle U. Hielkema
UNGIWG Secretariat
Rome, Italy

ICA/NMAs Collaboration

ICA will celebrate fifty years of existence in 2009. The relationship between the International Cartographic Association (ICA) and National Mapping Agencies (NMAs) around the world has been remarkable since the founding of ICA in 1959. The support offered by NMAs during the early years was decisive in establishing firm economic support for the ICA in its job of promoting international co-operation. There are many matters and issues of mutual interest. The responsibilities attributed to NMAs refer directly to topics relating to cartography and geographical information. Cartography in most NMAs refers to the production of maps and capture of geographical data, and a relationship to near disciplines such as topography, photogrammetry, remote sensing, data processing, global positioning systems, update of information, management of cartographic numerical bases and of geographical information systems. Further matters integral to NMAs may include historical cartography, the development of national atlases and land-use studies.

There is evident coincidence between these topics and those included under the different commissions and working groups of the ICA. These address education and training, incremental updating and



Participants of the UNGIWG-UGPM workshop held on 1st and 2nd March 2007

Special Features

versioning of spatial databases, national and regional atlases, mapping from satellite imagery, spatial-data standards, ubiquitous mapping, visualisation and virtual environments, maps and the internet, generalisation and multiple representation, and the quality and uncertainty of spatial data. ICA has always nurtured ongoing interchange between world experts from all sectors within which cartographic activity is pursued. It has established a real, international and updated global network for exchange of technological knowledge between experts in cartographic matters, and of geographical information. The ICA commissions have taken a leading role in fostering relations between staff responsible for technical projects in the NMAs and within the international field of ICA activity. Many NMA employees have contributed to and benefited from their membership of ICA commissions and working groups.

ICA serves as the main forum, open to all countries of the world, within which NMAs may find a platform for dissemination of their own technological developments in the fields of cartography and geographical information, and evaluate their projects in relation to those of other countries. ICA can put professionals developing activities within academic, company or public-administration sectors, as well as those in regional organisations, in contact with NMA professionals all over the world. In addition, ICA offers NMAs an outstanding opportunity at the International Map Exhibition to show maps realised in years preceding conferences, and to win international recognition through one of the prestigious ICA awards given to the best of them.

To celebrate the fiftieth anniversary in 2009 it would be great to strengthen and improve further collaboration with NMAs and to ensure that most belong to and collaborate with ICA as affiliate members.

In this sense the ICA Executive Committee promoted an action to produce a paper "Rationales for National Mapping Agencies to become an affiliate member of the ICA" to act as a background paper for a special meeting with NMO representatives included in Moscow's agenda. A letter signed by A. Borodko, General Manager Roskartografija, Milan Konecny, ICA President and Ramón Lorenzo, ICA Vicepresident was already sent to NMAs all over the world convening this meeting.

*Ramón Lorenzo,
ICA vice-president*

ICA Research Agenda in Cartography and GI science

By ICA Vice-Presidents Kirsi Virrantaus and David Fairbairn

Editor's note: this is an extract of the whole document to be presented at the 23rd ICC, Moscow, August 2007.

Background to the agenda

Maps and geographical information have special power through their ability to connect and integrate data sets by the inherent geographical location, and present the information contents in a user-friendly and understandable visual and tactual means. Such ability has long been recognised as an intrinsic property of the map artefact, as well as contemporary geodatabases. The power of maps and geographic data handling has been recently recognized in many real world applications and strategic decision making situations related to crisis management,

early warning systems, efforts for supporting sustainability and decreasing global poverty.

The International Cartographic Association (ICA), as a globally well represented and internationally visible organization, has a special position and role as a promoter of the development of Cartography and Geographic Information Science. Research and development in ICA aim in general to create theory and methods for Cartography and Geographic Information handling. By applying theories and methods to various applications, new tools can be created for cartographic and geographic information practice. Such topics are addressed at the main work-forums of ICA, its Commissions. These organizations are formally established by vote at the quadrennial ICA General Assemblies, although interim Working Groups can also be established between General Assemblies by the ICA Executive Committee (EC) to address specific short-term issues.

The idea of the ICA Research Agenda on Cartography and Geographic Information Science was initially considered at ICA Executive meetings during the 1990s but the specific decision to work on a structured research agenda was taken at the London EC meeting in 2001, with a plan to organize a session on the issue at the International Cartographic Conference in Beijing in 2001. This session included several valuable presentations (including those from Professors Dietmar Gruenreich and Liqiu Meng). The work plan for the research agenda development was made during the Mexico City EC meeting in 2005. It was realized that several ICA Commissions had overlapping research concerns while some new, challenging topics were outside of any Commission's field. A formal Research Agenda would have a significant role in informing Commission members, General Assembly delegates and ICC attendees, of the integrated nature of research activity in cartography and GI science, the expanding scope of such research and the role of ICA in promoting such activity.

The goal of the Research Agenda

The goal of this agenda is primarily to give some guidelines for the Commissions' work as well as to lead to tighter co-operation between Commissions. The agenda can also support the development of the flexible Commission structure of ICA. From a practical point of view the agenda may outline the future contents of the proposed International Yearbook for Cartography and Geographic Information Science.

More widely, the agenda is written in order to show the ICA's actual and potential contribution to scientific research within our global society, and to serve as a moderator for discussions in that forum. In order to implement its own strategic mission, "to ensure that geospatial information is employed to maximum effect for the benefit of science and society" (http://www.icaci.org/en/ICA_Strategic_Plan_2003-08-16.pdf) ICA must have a clear agenda for research covering all fields and topics under the title Cartography and Geographic Information Science. This agenda, therefore, documents current research activity in these fields, suggests areas where more intensive or renewed effort is required, and also discusses the methods by which some of this research can be undertaken – within ICA Commissions, through international collaboration with sister societies and under suggested programmes of integrated research stimulated, we hope, by the presentation of this summary.

Process of developing this agenda

The first preliminary study on research topics within the remit of ICA was made in the 2003 Budapest meeting of the EC and Commission chairs, who tried to outline the topics of interest to each

Commission. The work was continued in 2005 in the Mexico City EC meeting as well as in A Coruña in 2005 in two brainstorming sessions for Commission (and Working Group) chairs and co-chairs, and the first draft documents outlining the research interests of Commissions were created. In the meetings the Mind Map technique was used and, based on that work, the first draft document was written, presented to the 2006 Moscow EC meeting, discussed and subsequently sent to the Commissions for comments. Commissions have been asked to provide additional text with relevant literature references on the topics that they feel important. The second draft was discussed in the EC meeting in Brno in 2007 and the plan for finalizing the agenda as well as publishing it in the Moscow Proceedings was made. Before presentation, another round of comments among the commission chairs has been organized.

The structure of the agenda

The scope of the agenda is wide including both cartographic and geographic information science issues. Depending on the background of the person the entire field can be approached by several ways. It is impossible to make a generic structure of the topics that fits all opinions. It is also impossible to create a non-overlapping hierarchy of research topics. What has been done on the basis of common discussions has now been organized under subtitles or keywords. The definitions of 'cartography', a 'map', and the 'cartographer', as presented by ICA, have also influenced the scope of this agenda – a primary intention is to ensure that the topics discussed here fall within the accepted extent of Cartography and GI Science, and that we can also see synergies with closely related fields, notably in spatial data collection and handling.

The definitions of the terms Cartography ("Cartography is the art, science and technology of making and using maps.") and GIScience ("Geographic Information Science is the scientific context of spatial information processing and management, including associated technology as well as commercial, social and environmental implications.") are taken from ICA Strategy. (http://www.icaci.org/en/ICA_Strategic_Plan_2003-08-16.pdf) :

Keywords

The keywords have been extracted from the produced mind maps. Short discussion on the keywords has been added in order to explain the role or/and meaning of each keyword. In the following text the important research topics are in bold. References to supporting fields of science are written in italic. It must be kept in mind that the topics cannot be organized totally hierarchically under the main keywords, but there are several topics that could belong to more than one keyword.

The keywords are:

1. **Geographic Information** (We have decided to mainly use 'Geographic Information' in this document. *Geospatial Information* is considered as a synonym, and *Geospatial* is used in contexts where it is commonly used)
2. **Metadata and SDIs** (In the text *spatial data infrastructures (SDI)* has a synonym of '*geospatial data infrastructure*'; by adding *geo-* prefix we can emphasize the real contents of the data in question.)
3. **Geospatial analysis and modelling** (The emphasis is on the extraction of added value from the processing of spatial data on maps and the use of analysis and modelling techniques to initiate, support and supplement the mapping process)
4. **Usability** (This keyword covers a range of issues which connect the human user of spatial data with its representation, its processing, its modelling and its analysis)

5. **Geovisualisation, visual analytics** (Here the visual representation of spatial data, in map and in other forms, is discussed, along with methods of using such representations)
6. **Map production** (This keyword stands for the numerous stages in mapping and map production as technical processes, but also production of various map types from atlases to Internet maps.)
7. **Cartographic theory** (The fundamental concepts which form the basis of all our spatial data handling are incorporated under this keyword)
8. **History of Cartography and GI Science** (The importance of the development of methods and practices throughout history was recognised in the brainstorming session: all current-day activity is informed by detailed accounts of such development)
9. **Education** (To ensure a valid and viable future for our current activity, we need to research and implement methods to educate and train future generations: methods of doing this fall under this research heading)
10. **Society** (A dominant research topic throughout has been the examination of how such spatial data handling is grounded in societal structures and how it is undertaken by different groups of people).

Concluding remarks: how to implement the RA

The purpose of this research agenda has been to identify and briefly elucidate some current and potential research issues which fall under the terms of reference of ICA and individuals and groups who work under its remit. Primarily this includes the Commissions of ICA each of which is charged with undertaking research work in their area. This agenda is intended to encourage the Commissions to consider their research areas, and to examine possible overlaps and co-operation possibilities with other Commissions. Further, it will assist in identifying those areas of Cartographic research which are not currently covered by any Commission and which need further encouragement. Finally, this document should disseminate the agenda of ICA to other organizations, both those with which we can undertake research collaboratively and those for whom the results of ICA sponsored research will be of value.

Clearly, therefore, we believe that this research agenda should be reflected upon by the constituent Commissions of ICA. One of the major responsibilities of the elected chairs of the Commissions is to develop a 'Terms of Reference' document which should explicitly list the deliverables expected over the four-year period of the Commissions existence (the Commissions can be re-elected). Such deliverables should yield valid research results. A further duty of a Commission chair is to invite and manage a group of expert and interested individuals to achieve the deliverables. The work programme can be completed through focussed research meetings and conferences (which can be during and around the time of biennial International Cartographic Conferences or at other times), through ongoing communications within the Commission, and through collaboration with Commissions in sister societies. Alternatively it is hoped that this agenda can be used in a positive by those individuals who are submitting proposals for explicit funding to regional, national and international research funders.

In all cases, ICA expects the results of research to be widely disseminated for the benefit of itself, the wider cartographic community and society in general. The presentation of a Commission report is required at each quadrennial General Assembly of ICA, and the opportunities to present research findings in the conference arena exist. Publication of research work in academic and scientific journals would also be expected, along with more informal communication through Commission websites etc.

Forthcoming Events

Location India 2007

3rd International Conference and Exhibition on Vehicle Tracking, Locational Intelligence and Surveying
12-13 June 2007

Hotel Grand Ashok, Bangalore, India
<http://www.location.net.in/india/>

INTERCARTO – INTERGIS 13

Sustainable Development of Territories
12-14 August 2007.

Khanty-Mansijsk (Russia)
E-mail: syv@npc-monitoring.ru

Map Asia 2007

14 - 16 August, 2007
Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia
<http://www.mapasia.org>

Location Asia 2007

5-6 September, 2007
Hotel Shangri La, Kowloon, Hong Kong
Annual International Conference and Exhibition in the field of positioning, navigation and timing technologies
<http://www.location.net.in/asia/>
Email: info@hinte-messe.de
Website: <http://www.intergeo.de>

4th International Symposium on LBS and TeleCartography

The Hong Kong Polytechnic University
8-10 November 2007
Email: lsgi.lbs2007@polyu.edu.hk
<http://lsgi.polyu.edu.hk/LBS2007>

Middle East Spatial Technology (MEST 2007)

Bahrain, Kingdom of Bahrain
10-12 December 2007
Email: bseng@batelco.com.bh
Website:
<http://www.engineer-bh.com/mest2007/>

2nd International Conference on Cartography and GIS

Borovets, Bulgaria
21-24 January 2008
Email: cartography@abv.bg
Website: <http://www.datamap-bg.com>

Geocomputation 2007

National Centre for Geocomputation,
Maynooth, Ireland
3-5 September 2007
Email: geocomputation@nuim.ie
<http://ncg.nuim.ie/geocomputation>

XXIII Brazilian Cartographic Congress

Rio de Janeiro, Brazil
16-20 September 2007
sbc.rlk@terra.com.br
<http://www.cartografia.org.br>

XII Congress of the Spanish Remote Sensing Association

Mar del Plata, Argentina
19-21 September 2007
<http://www.aet.org.ar>

ISPRS Workshop on Updating Geo-spatial Databases with Imagery & The 5th ISPRS Workshop on DMGISs

Urumchi, Xingjiang, China P. R.
28 August - 29 August 2007
Website: <http://isprs-wg41.nsd.gov.cn>

Intergeo 2007

Leipzig, Germany
25-27 September 2007
Email: info@hinte-messe.de
Website: <http://www.intergeo.de>

Map India 2008

Pragati Maidan
22 January - 24 January 2008
New Delhi, India
Email: info@mapindia.org
Website: <http://www.mapindia.org>

GSDI 10

University of the West Indies at St. Augustine,
Trinidad and Tobago
25 February - 29 February 2008
Email: onsrud@gsdi.org
Website: <http://gsdi.org/gsdi10/index.html>

FOSS4G2007

Victoria Conference Center, BC, Canada
24 September - 27 September 2007
Email: vanessa@seatoskymeetings.com
Website: <http://www.foss4g2007.org/>

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: g.metternicht@curtin.edu.au

Fax: +61-8-9266 2703

Ftp: [cage.curtin.edu.au](ftp://cage.curtin.edu.au)

Directory: [/graciela/ICA/incoming](http://graciela/ICA/incoming)

**The following
Organizations support the
International Cartographic
Association:**

Centro Argentino de Cartografia

ph +54 1 576 5545
fax +54 1 502 6799
Av. Cabildo 381
1426 BUENOS AIRES
ARGENTINE

Institut Cartografic de Catalunya

ph +34 93 567 15 24
fx +34 94 567 15 67
Parc de Montjuic, s/n
08038 BARCELONA
SPAIN

United States Geological Survey

ph +1 703 648 4639
fax +1 703 648 5542
National Mapping Division
519 National Center
PRESTON Virginia 22092
USA

Institut Géographique National

ph +33 1 43 98 82 95
fx +33 1 43 98 84 00
136 bis rue de Grenelle
75700 PARIS 07 SP
FRANCE

National Hydrographic Office

P.O. Box 75
DEHRA DUN - 248001
INDIA

Geographical Survey Institute

ph +81 298 64 1111
fax +81 298 64 1804
Kitasato 1
Tsukuba-shi
IBARAKI-KEN 305
JAPAN

**International Institute for
Geo-Information Science and Earth
Observation (ITC)**

ph +31 53 487 44 44
fax +31 53 487 44 00
Hengelsestraat 99
P.O. Box 6
7500 AA ENSCHEDE
THE NETHERLANDS

**Moscow State University for
Geodesy and Cartography**

ph +7 095 261 3152
fax +7 095 267 4681
4 Gorokhovskiy by-street
MOSCOW 103064
RUSSIAN FEDERATION

**The Union of chambers of Turkish
Engineers and Architects, Chamber
of Survey and Cadastre Engineers
(UCTEA-CSCE)**

Summer Sok. No 12/10
06440
Yenisehir – Ankara
TURKEY

**Indian National Cartographic
Association**

C. G. O. Complex, DF - Block, 7th Floor
Salt Lake, Kolkata - 700064
West Bengal, INDIA
<http://www.incaindia.org/membership.htm>

PPWK

ul Solec 18/20 0
00-410 Warszawa
POLAND

Eko-Graf Publishing house

39 Lipowa al.
53-124 Wroclaw
POLAND

*The International Cartographic
Association welcomes new affiliate
members.*

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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