Dear Colleagues

It is my sincere pleasure to announce that at its 31st General Assembly, the International Council for Science (ICSU) has accepted the International Cartographic Association (ICA) as its full International Scientific Union member. ICSU is a global non-governmental scientific organization devoted to international cooperation in the advancement of science. Its mission is to strengthen international science for the benefit of society. ICSU comprises 120 multidisciplinary national scientific members representing 140 countries and 31 disciplinary international scientific unions. From now on ICSU has 32 International Scientific Union members, giving Cartography a strong voice in the world of science through our Association.

ICA is proud to announce, that at the 4th session of the United Nations (UN) Committee of Experts on Global Geospatial Information Management held in the UN Headquarters in New York, 6-8 August 2014, the ICA’s Initiative on the International Map Year 2015-2016 was received positively.

Welcome to Rio!

The upcoming International Cartographic Conference (ICC) in Rio de Janeiro, Brazil, is a unique opportunity to meet colleagues, present your work, exchange ideas, display your cartographic products, get connected with the global community of cartographers and GIScience researchers and practitioners, and have a good time in one of the most famous cities in the world! Why this is a great opportunity? Simply because the fields of Cartography and GIScience are becoming more relevant than ever. Modern Cartography is critical to mankind; without maps we would be “spatially blind”. Knowledge about spatial relations and location of objects is extremely important for enabling economic development, managing and administering land, handling disasters and crisis situations or simply to show individuals the best way to get to a specific place. Cartography is also most contemporary. New and innovative technologies support cartographers’ work. Maps can be derived automatically from geodata acquisition methods such as laser scanning, remote sensing or sensor-networks. Smart models of geodata
The meeting’s resolution reads:
“The Committee endorses the International Map Year 2015-2016 as proposed by the International Cartographic Association as a valuable means to promote the importance of maps and geoinformation.”

With this outcome, we have reached the most prominent step towards our planned activities coordinated by the Working Group on the International Map Year, chaired by Bengt Rystedt, and consisting of Ferjan Ormeling, Aileen Buckley, Serena Coetzee, Vít Voženílek, Ayako Kagawa and David Fairbairn.

The concept of International Map Year (IMY) is to illustrate to the general public, as well as to decision-makers, the importance of making and using maps in a global context. Maps are key interfaces between geodata, technologies and human users. To highlight the importance of maps means to highlight the importance of all geo-domains. As everything happens somewhere, the knowledge, handling and communication about this somewhere becomes more and more important – just think about assisting decision-makers to better understand and tackle global challenges, such as sustainable development, world peace or security. The celebration of IMY will therefore be a joint effort of the International Cartographic Association (ICA) and the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM). The International Map Year will be formally launched at the ICA’s International Cartographic Conference in Rio de Janeiro, Brazil, on 23 August 2015 and continue until the end of 2016. The planning for national events associated with the International Map Year will start at the beginning of 2015.

We ask all national and affiliate members of ICA, all ICA Commissions and the entire community of cartographers, map researchers and enthusiasts to participate in the celebrations of the International Map Year. Every activity related to the IMY is welcome, but organising a local map day might be a good way to start. Check out internationalmapyear.org for more information.

ICA is looking forward to the International Cartographic Conference (ICC) 2015 in Rio de Janeiro, Brazil. The response to the Call for Papers was unexpectedly high with a large number of submissions. The Scientific Committee, chaired by Prof Claudia Robbi Sluter (University of Parana) has the responsibility of assessing the quality of submissions by applying a review system recommended by the ICA. A selection of submissions to the various publications including Journals, Book and Proceedings will follow together with feedback for authors on how to improve their submissions. We can expect a great programme with exciting contributions and sessions!

Our Brazilian colleagues, directed by Prof Paulo Menezes, are working hard and are very committed to deliver an unforgettable event.

Check out the City Administration of Rio de Janeiro website (www.rio.rj.gov.br/web/ipp/exibeconteudo?id=5062366), which reports on the recent ICA’s Executive Committee visit and highlights the ICC 2015 as the city’s important event in between the Soccer World Cup 2014 and the 2016 Olympic Games!

Prof László Zentai, ICA Secretary General and Treasurer, is already starting preparations for the General Assembly 2015. The General Assembly, which takes place every four years and gathers the ICA national members, is the deciding body of the ICA, thus all executive positions, commissions, changes to statutes or guidelines and selection of venue for the next General Assembly in 2019 can only be voted on then and there. The Secretary General is responsible for making sure, that all documents and information is available in due time, and that every decision making process is accurate, fair and unobscured. As the next term, 2015 to 2019, will be the most important for Cartography and ICA, we need once again committed colleagues that will make themselves available for the sake of our Association. We are looking forward to receiving nominations and the subsequent voting at the General Assembly!

In respect to publications I am most happy to announce that ICA has started its own scientific journal! The International Journal of Cartography is currently being shaped by the Editors-in-Chief William Cartwright and Anne Ruas in terms of defining its aims and scope, the Editorial Board and the review strategy. We expect the inaugural issues in 2015!

The ICA has established a new instrument to support individuals in advancing their career in Cartography and GIScience to the benefit of the ICA community – the ICA Research Scholarships. The aims of these Scholarships are:
• to foster academic research in Cartography and GIScience domains
• to establish contacts between young scientists and ICA Commissions
• to support young scientists to be able to actively contribute to ICA activities and events, such as International Cartographic Conferences
• to establish opportunities for young scientists within ICA publications and conferences

The goal of these grants is to stimulate young scientists and encourage them to undertake studies in Cartography and GISciences, and develop their careers in these fields. Applicants are responsible for choosing a mentor for their research from any ICA Commission. A letter of support from the proposed mentor must be submitted with the application. Please find details at icaci.org/files/documents/reference_docs/2014-2015_research_scholarship.pdf.

Please feel free to explore a whole range of other ICA activities, such as Commission reports and cartographic events, by visiting our website.

Georg Gartner | President | ICA

Launch of the International Map Year in Germany

In the wake of the successful International Cartographic Conference (ICC) 2013 in Dresden, the German Cartographic Society (DGfK) starts the activities for the International Map Year (IMY) with a New Year’s reception in Berlin on 15 January 2015. The event, including an invited speech given by Professor Manfred Ehlers, will be the starting point for further initiatives on the occasion of the IMY. The Society aspires that all over the country individual regional event series will be arranged.

The regional branches of DGfK will organize numerous events while the scientific institutions will set up so-called science cafés as the focal point of their activities. The positive response of the public to the three late-afternoon science cafés during the ICC 2013 made the German Cartographic Society opt for further events of this type. In addition, the role of Cartography in everyday life shall be emphasized during other meetings, symposia and conferences, last not least during the 2015 German Cartographic Conference which will be organized together with INTERGEO® of DVW at Stuttgart Fair and Convention Centre. In fact, during the past INTERGEO® in Berlin in October 2014, a particular session entitled Mobile Future Now already highlighted the importance of geodata visualisation. The German Cartographic Society is positive that all these geographically distributed events will contribute to increasing the awareness and importance of cartography and cartographic products.

Manfred Buchroithner | German Cartographic Society | Germany

In September 2014, Ferjan Ormeling and Bengt Rystedt, former Secretary General and former President of the ICA, visited Budapest to discuss the establishment and content of the IMY website. The technical and design support for the website has been arranged and regular updates are expected. While there, they attended meetings of the ICA Commissions on Children and Cartography, and Digital Technologies in Cartographic Heritage.

In June 2014, a translation of the on-line book The World of Maps, available from the IMY website, into French and Spanish commenced. Both translations were truly a team effort. The French translation was supervised by a professional translator and coordinated by Francois Lecordix. The costs were paid by the French Cartographic Association and there is plan to print the book. The Spanish translation was produced by a professional translator and coordinated by Pilar Sánchez-Ortiz Rodriguez in collaboration with Antonio F. Rodríguez and Laura Carrasco, all employees of the National Geographic Institute of Spain, which covered the costs for the translation.

A list of national members that have decided to participate in IMY celebrations is included on the website. Argentina was the first country to join, with Switzerland and Uganda joining shortly after. We hope that many more countries will sign up soon.

Promotion of the IMY is very important. The website plays a prominent role in disseminating accurate and useful information about IMY activities, but other means such as papers presented at meetings and conferences or advertisements and announcements published in different kinds of magazines are also encouraged. Many of these means have already been put to a good use with the next opportunity coming at the ICA session held during the International Federation of Surveyors (FIG) working week in May 2015. Even if the number of people attending the session might not be large, the information presented will get a wide circulation.

Finally, we are planning to have a plenary session on IMY at the ICC 2015 in Rio de Janeiro with ICA President Georg Gartner giving an introduction and an UN-GGIM representative presenting how the International Map Year promotes maps and geoinformation from the perspective of UN-GGIM.

Bengt Rystedt | Chair | ICA Working Group on International Map Year | Sweden

International Map Year 2015-2016

This is the last update in the ICA News about the International Map Year (IMY) planning phase. During next two years, reports from various activities taking place around the world will be published together with a final report concluding the IMY. The IMY starts in January 2015, with an official launch at the International Cartographic Conference (ICC) in Rio de Janeiro in August, and it will end in December 2016. For IMY to become a success, the ICA national members are asked to organize the national map days or similar events. More about that later.

The IMY website – internationalmapyear.org – was published in June 2014. Invitation letters were sent out by the ICA in August 2014 to both national members and ICA commissions. The website contains detailed information on IMY and many suggestions and recommendations for organizing national map days. However, some member nations requested more information on how to participate and celebrate IMY, so we plan to expand and regularly update the IMY website.

In August 2014, ICA President Georg Gartner participated in a meeting of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) at the UN headquarters in New York. There, on behalf of the Joint Board of Geospatial Information Societies (JBGIS), he presented a report on IMY. The report was received positively and IMY is now included in the program of the UN-GGIM as a valuable vehicle to promote the importance of maps and geoinformation. Since almost all national mapping organisations are members of the UN-GGIM, the news about IMY is already well spread.

In September 2014, Ferjan Ormeling and Bengt Rystedt, former Secretary General and former President of the ICA, visited Budapest to discuss the establishment and content of the IMY website. The technical and design support for the website has been arranged and regular updates are expected. While there, they...
can be built, allowing an in-depth analysis of structures and patterns. A whole range of presentation forms is available nowadays, from maps on mobile phones all the way to geoinformation in the form of augmented reality. Finally, maps and other cartographic products are simply attractive. Many people like to use maps, to play with maps, for instance on the internet, or just want to admire them. We are currently witnessing a dramatic increase in the use of maps.

The ICC 2015 in Rio de Janeiro will be an opportunity to reflect on all these issues and more! It will gather cartographers and GIScience experts, government officials, commercial cartography representatives, academics and students of Geoinformation and related fields such as computer science, cognitive sciences or remote sensing, designers and artists, VGI and crowdsourcing activists. To sum up, it will be an event for all those who are interested in the relevance, the attractiveness and the contemporaneity of maps and cartography!

As the world authoritative body for cartography and GIScience, the International Cartographic Association is most pleased that Brazil, one of the most dynamic member nations of ICA, is taking the effort to host the ICC 2015. Given the fact that many prominent Brazilian and Latin-American organizations are dedicated to work on the success of this Conference, it is certain that this will be a wonderful event. For further information, please visit the Conference website at www.icc2015.org or send an email to christina@congrex.com.br.

The City of Rio de Janeiro

One of the major economic and cultural hubs of South America, the City of Rio de Janeiro sits at the heart of the Southeastern Region where 60% of the Brazilian GDP is generated. A cosmopolitan metropolis, known worldwide for its scenic beauty and its natural resources, the city provides a harmonious and agreeable environment for its inhabitants and visitors, for both leisure and work, which combined with its infrastructure, makes Rio an important center for commerce and services, with the advantage of a modern and diversified industrial sector. The City of Rio de Janeiro, which occupies an area of 1,261km², and has a population of over 5.85 million, recognizes that one of its main virtues is the kindness and hospitality with which its residents welcome all visitors.

The City of Rio de Janeiro receives annually more than 2 million foreign tourists, which makes it the most visited city in the country, with an approximate share of 33% of the total number of foreign tourists. Added to this more than 5 million Brazilian tourists visit the city per year. With its ample tourist infrastructure, Rio de Janeiro is ranked among the top destinations in the world in reception for cultural, commercial, technical and scientific events – fairs, symposia, congresses, conventions and exhibitions. Its exuberant natural resources include 90km of beaches, the Tijuca National Park, which includes the largest urban forest in the world, with 3,200ha of Atlantic Forest, the State Parks of Pedra Branca, Desengano and Chacrinha, covering an area of 48,500ha, and the Rodrigo de Freitas, Jacarepaguá, Camorim, Tijuca and Marapendi lakes and lagoons.
The 28th International Cartographic Conference (ICC) will be held at the Marriott Wardman Park Hotel between 2-7 July 2017 in Washington, D.C., USA. The Local Organizing Committee (LOC) has initiated a website that will be the host site for the ICC 2017 – www.icc2017.org. Planning is currently underway to develop a ICC 2017 exhibit booth for the 2015 ICA Conference Exhibition in Rio de Janeiro, Brazil. The LOC also is planning a reception for the ICA Executive Committee, National and Affiliate member delegates, and Commission Chairs during the ICC 2015 in Rio.

E Lynn Usery | Chair | ICC 2017 Local Organising Committee | USA

The Marriott Wardman Park Hotel, venue of the ICC 2017 in Washington D.C., USA

The Map of the Month feature of the ICA website (icaci.org/map-of-the-month) continues to attract plenty of deserved attention. Included here are seven winning entries from the most recent International Cartographic Exhibition held at the ICA Conference in Dresden, Germany, in August 2013. From 3D maps to atlases for the blind and visually impaired, from geportals to digital educational products, they all display wonderful and engaging cartography. Their variety is a testimony to the endless possibilities offered by our discipline and incredible creativity of cartographers involved. We hope you find these examples useful and inspirational.

In addition, the ICA website is continually maintained and updated, thanks to Manuela Schmidt and Felix Ortig, our ICA webmasters. Apart from regular items, several documents and features, including information about the upcoming ICC 2015 in Rio de Janeiro, have recently been updated.

Please visit the ICA website regularly for the latest news and information on upcoming cartographic events, to learn about our Association or to leave a comment. Your feedback is always welcome!

Igor Drecki | Editor ICA News | ICA

The Map of the Month feature of the ICA website (icaci.org/map-of-the-month) continues to attract plenty of deserved attention. Included here are seven winning entries from the most recent International Cartographic Exhibition held at the ICA Conference in Dresden, Germany, in August 2013. From 3D maps to atlases for the blind and visually impaired, from geportals to digital educational products, they all display wonderful and engaging cartography. Their variety is a testimony to the endless possibilities offered by our discipline and incredible creativity of cartographers involved. We hope you find these examples useful and inspirational.

In addition, the ICA website is continually maintained and updated, thanks to Manuela Schmidt and Felix Ortig, our ICA webmasters. Apart from regular items, several documents and features, including information about the upcoming ICC 2015 in Rio de Janeiro, have recently been updated.

Please visit the ICA website regularly for the latest news and information on upcoming cartographic events, to learn about our Association or to leave a comment. Your feedback is always welcome!

Igor Drecki | Editor ICA News | ICA

The Map of the Month feature of the ICA website (icaci.org/map-of-the-month) continues to attract plenty of deserved attention. Included here are seven winning entries from the most recent International Cartographic Exhibition held at the ICA Conference in Dresden, Germany, in August 2013. From 3D maps to atlases for the blind and visually impaired, from geportals to digital educational products, they all display wonderful and engaging cartography. Their variety is a testimony to the endless possibilities offered by our discipline and incredible creativity of cartographers involved. We hope you find these examples useful and inspirational.

In addition, the ICA website is continually maintained and updated, thanks to Manuela Schmidt and Felix Ortig, our ICA webmasters. Apart from regular items, several documents and features, including information about the upcoming ICC 2015 in Rio de Janeiro, have recently been updated.

Please visit the ICA website regularly for the latest news and information on upcoming cartographic events, to learn about our Association or to leave a comment. Your feedback is always welcome!

Igor Drecki | Editor ICA News | ICA
people often speak of the dichotomy of cartography, and this is exactly what appeals to me, the blending of artistic creativity, scientific construction and technology that goes into map making. I came relatively late into cartography, having left an unfinished arts degree behind to work in the mining industry in a remote part of Western Australia. My first experience was updating underground mine plans and digitizing lithological logs for drill holes to enable 3D plots of the mine geology. This ignited my interest in spatial visualisation of data to enhance our knowledge of the environment in which we exist. Consequently I completed a Diploma at a technical college and then a Bachelor of Science in Cartography at Curtin University of Technology, Perth. As a student I spent a lot of time working on large datasets. At different times immersed at depth in the topography of the Western Australian coastline and then subdivisions in the expanding metropolis of Perth.

I now work with the Geological Survey of New South Wales, having started in the cartographic section, I currently manage the online spatial information systems. The Geological Survey is progressive in exploring open source technologies, focusing on interoperability and accessibility in the delivery of both its raw data and interpretive geological knowledge. We are currently upgrading our delivery architecture, integrating disparate systems and databases to provide seamless access to the accumulated geoscientific knowledge of NSW, a challenging task due to the wide variety of data types and a diverse range of users. The greatest challenge is to deliver the system in the most sustainable form. My work encompasses all aspects of cartography, as I strive to find the right blend of aesthetics, functionality and performance in the delivery and visualisation of spatial information.

Trisha Moriarty | Geological Survey of New South Wales | Australia | trisha.moriarty@trade.nsw.gov.au
The British Cartographic Society (BCS) celebrated its 50th anniversary in 2013. At the inaugural meeting in 1963 Brigadier D.E.O. Thackwell, then Vice-President of ICA, was elected as President of the Society. Programme and Publication committees were formed and it was decided to launch The Cartographic Journal (see ICA News, No 50, June 2008, p 7, for a full profile), with J.S. Keates as first editor. The Society rapidly grew and became the main focus for cartographic activities in the United Kingdom (UK) with a broad range of members from various sectors. The Cartographic Journal soon established itself as a leading journal internationally and is one of the ICA’s endorsed publications.

Although the BCS came into existence soon after the formation of the ICA, until the mid-1990s, the UK adhering body for the ICA was the Royal Society – in effect the British academy for sciences – who represented the UK on all International Council for Science members and several other international scientific associations. Cartographic matters were in the hands of the Cartography sub-committee of the Royal Society’s Committee for Geography. Following a review of the Royal Society’s role in the 1990s, where there was an appropriate national subject society, the Royal Society passed on the responsibility for membership of international associations, and hence The British Cartographic Society became the UK member of ICA. The Cartography sub-committee became the UK Committee for Cartography (UKCC), technically a committee of BCS Council, but membership of the UKCC has always aimed to all of UK cartography, with representatives from government agencies, the industry, academia, map libraries and other societies. The chair of the UKCC is appointed by BCS Council and is normally also the UK National Delegate to ICA general assemblies. The UK have long had a very active role in the ICA, having had a President, several vice-presidents and a Secretary General of the Association. Currently there are 4 commission chairs and 6 vice-chairs from the UK.

Over its first two decades the BCS grew and established its reputation, both nationally and internationally. By its 21st anniversary it had grown to over 1000 individual members and 20 corporate members. The annual symposium had become a major feature of the cartographic calendar. The Society fully embraced the technologic revolution computers were bringing to cartography, with special publications such as Computers in Cartography in 1982, but by the end of the 1980s a dedicated GIS society was established – the Association for Geographic Information – and membership went into a slow decline. This trend was also reflected in the decline of cartographic education in the UK; there are now no technical or undergraduate programmes in cartography and only one MSc programme.

While the core of the Society was still very active, by the early part of this century it recognised the need to reach out more to the GIS community, many of whose newer entrants had no background in cartography. A series of Better Mapping workshops were held around the country, with leading cartographers taking participants through the principles of cartography and the importance of good design. These have been a great success and have seen re-growth of the Society from a low of around 600 members to having just recently passed the 700 mark. Better Mapping also inspired the publication of a small, inexpensive book in 2008, Cartography: an Introduction by M. Spence and J. Darkes, which has received excellent reviews, and has recently been reprinted. Plans are currently in hand for a new series of Better Mapping events.

While Better Mapping has addressed the industry, to reach out to a younger audience a recent initiative has been a series of workshops for schools entitled Restless Earth. Each of the sessions take a group of children through the process of responding to a natural disaster and show how important geospatial information and its appropriate presentation is to managing the responds to such events. These workshops are certainly inspiring young people to be interested in maps which has to be positive for the future of cartography. The only problem is the demand from schools for these workshops!

To celebrate 50 years of the BCS, a magnificently illustrated book has been published celebrating maps over this period. Each year is illustrated by 2 or 3 maps highlighting national and international events. It is interesting not only to reflect on key events over this period, but also how they have been mapped and how cartographic styles have changed and developed.

The British Cartographic Society and UK cartography are very active and the future is bright for the role of cartography. We look forward to our next 50 years and are committed in our support of the ICA. For more information about the BCS and its activities, please visit our website.

David Forrest | British Cartographic Society | United Kingdom

Participants at the BCS 50th Anniversary dinner | Photograph courtesy of David Forrest
The 2015 edition of the Barbara Petchenik Children's World Map Award was officially launched in October 2014. Following the tradition of setting a theme for two consecutive competitions, the current theme is the same as two years ago, i.e. My Place in Today’s World.

The Award is open to children from all ICA member nations. Children from non-ICA member nations cannot participate in the competition, but according to the new rules adopted two years ago, they can send their entries to be displayed (alongside the competition entries) at the International Cartographic Exhibition to be organized during the 27th International Cartographic Conference (ICC) in Rio de Janeiro in August 2015. The entries will be collected in four age groups: under 6 years, 6–8 years, 9–12 years and 13–15 years (only children and young people under 16 years can participate). An international Jury will select a maximum of three winner entries by age group and the ICC 2015 participants will select a public award winner by casting their votes.

The invitation to participate in the 2015 edition of Barbara Petchenik Award, together with relevant documents, has been sent out to all national committees, the mailing list of the ICA Commission on Cartography and Children (CCC) and other interested persons by the ICA Secretary General László Zentai and Chair of the CCC José Jesús Reyes Nuñez. The call for participation was also published on the CCC Facebook page www.facebook.com/icaccic, which was accessed by more than 230 people in the first two days since its release.

A full set of documents is available from the ICA (iaci.org/petchenik/) and the CCC websites:

- Letter of Invitation by ICA President Georg Gartner and Commission Chair Jesús Reyes Nuñez (lazarus.elte.hu/ccc/pdf/invitation2015.pdf)
- Rules for the 2015 competition (lazarus.elte.hu/ccc/pdf/bpcrules2015.pdf)
- Parental permission form (lazarus.elte.hu/ccc/pdf/permission.zip)
- Other relevant resources prepared to help teachers in organizing the competition in their classrooms, as well as materials presenting the organization of the competition in different countries, are available from the Commission website and include:
  - A teacher’s introduction to the Barbara Petchenik International World Map Design Competition by Henry W. Castner (lazarus.elte.hu/ccc/bpc/bbpmc.htm)
  - Map projections: A collection of 32 graticules that can be used in the competition prepared by José Jesús Reyes Nuñez (lazarus.elte.hu/ccc/projections/index.htm)
  - Video about the Barbara Petchenik Competition 2013 in South Africa by Elri Liebenberg (www.youtube.com/watch?v=mPvKTELblu8&feature=autoshare)
  - Presentation about the organization of the Barbara Petchenik Competition 2011 in South Africa by Elri Liebenberg (lazarus.elte.hu/ccc/pdf/southafrica2011.pps)
  - Paper about the organization of the Barbara Petchenik Competition in Indonesia presented by Rizka Windiastuti at the Joint ICA Symposium in Orleans, USA in 2011 (lazarus.elte.hu/ccc/pdf/windiastuti.pdf)

All entries will be digitised and stored in the Archives and Research Collections at Carleton University Library, Canada, and publicly accessible from the Library’s website (children.library.carleton.ca), together with all other entries submitted to the competition since its beginning in 1993.

José Jesús Reyes Nuñez  |  Chair  |  ICA Commission on Cartography and Children  |  Hungary  

Frontpiece of the Children Map Their World website at Carleton University Library | Image courtesy of José Jesús Reyes Nuñez
Art and Cartography
artcarto.wordpress.com/

The ICA Commission on Art and Cartography, in collaboration with the ICA Commission on Maps and Society, is organising a workshop prior to the upcoming 27th International Cartographic Conference in Rio de Janeiro. This workshop entitled Mapping Ephemeralities / Ephemeral Cartographies will take place on 21-22 August 2015 at the University of the State of Rio de Janeiro. The goal of this workshop is to provide an intellectual and creative space to share different ideas and methodologies about mapping evanescent elements such as memories, stories, sensations and perceptions about places, as well as a practical environment to learn how some of these methodologies and technologies can be used and adapted for designing (online) maps of ephemeral phenomenon. Throughout this workshop we hope to involve the participants into some data collection activities and to use these data to design an online collectively-made map of the ephemeralities of the Maracana neighbourhood in Rio de Janeiro. For more details, please visit arcarto.wordpress.com/2014/11/10/mapping-ephemeralities/.

We are also in the process of organizing other events during the ICC 2015; more news soon...

Sébastien Caquard and Barbara Piatti | Chairs | ICA Commission on Art and Cartography | Caracita / Switzerland

Cartography and Children
lazarus.elte.hu/ccc/ccc.htm

Meeting in Riviera, Bulgaria

The ICA Commission on Cartography and Children (CCC) held a meeting at the Bulgarian Riviera during the 5th Jubilee Conference on Cartography and GIS on 16 June 2014. The guests of honour included Barbara J Ryan, Secretariat Director of the inter-governmental Group on Earth Observations (GEO) and Michael Gould, Global Education Manager of Esri.

In the first part of the meeting, Jesús Reyes summarised the main Commission’s activities since its last meeting at the ICC 2013 in Dresden, August 2013. Topics, such as publications, international contacts, organisation of the Barbara Petchenik Competition and plans for future meetings and events were addressed in his presentation. One of the main proposals related to the Barbara Petchenik Competition was to begin an exchange of opinions and ideas on how to improve the cartographic quality of entries, particularly in the 13-15 years group. The initial proposal is to start a discussion using e-mail, the Commission’s Facebook profile and blog page during the first half of 2015 and then summarise received comments at the CCC next meeting during ICC 2015 in Rio de Janeiro in August 2015.

Meeting participants were also informed about the current status of the next two publications edited by members of the Commission. The first is a book related to the last Barbara Petchenik Award – The World as Seen by Children, containing a selection of 100 drawings from the competitions organized in 2009 and 2011, to be published by the Chinese Sinomaps Press Publishing House. The second is another book Children Map the World Anniversary Edition, which will be published by Esri Press and contain 50 drawings from the 2013 competition and a selection of 20 drawings from the period 1993-2011 that were never published before. In this way Esri Press and ICA wish to commemorate the first 20 years of the competition.

A short report sent by Springer Publishing House about the book Maps for the Future: Children, Education and Internet published as a collaboration of three ICA Commissions in January 2012 was also presented. According to the report, the eBook version had 627 chapter downloads in 2012 and the number of chapter downloads increased to 3738 in 2013. This is a total of 4365 chapter downloads on the SpringerLink website, placing the book in the top 50% most downloaded eBooks in the Springer eBook Collection!

The second part of the meeting was devoted to an interesting and engaging presentation by Shimshon Livni, Kaye College of Education, Israel, who introduced his new e-textbook entitled On the way from the Globe to the Maps of our land.

All participants had the opportunity to visit the exhibition displaying a selection of Bulgarian drawings submitted to the previous Barbara Petchenik Competitions. This initiative gave us an opportunity to appreciate high quality of national entries that missed out on the international competitions.

Meeting in Budapest, Hungary

The Commission met in Budapest, Hungary in the morning of 3 September 2014, as one of the pre-event activities of the 9th ICA Workshop on Digital Approaches to Cartographic Heritage (4-5 September 2014). It was a joint meeting with the ICA Commission on Planetary Cartography and the ICA Working Group on International Map Year. The meeting provided opportunity to exchange general information on activities during the last 12 months.

The programme began with a presentation by Bengt Rystedt, Chair of the ICA Working Group on the International Map Year (IMY), who gave an overview of activities associated with the organization of IMY, including introduction to a dedicated website (internationalmapyear.org).

Next, Henrik Hargitai, Chair of the ICA Commission on Planetary Cartography, introduced the Planetary Map Series for Children, a collection of beautiful maps designed especially for children, which are planned to be printed in poster format. Currently two maps are completed – Mars and the Moon, which were presented by the author and graphic designers. This part finished with a reported on the work undertaken by the Commission since ICC 2013.

Finally, Jesús Reyes, Chair of the ICA Commission on Cartography and Children, talked about Commission activities and announced that the Barbara Petchenik Competition 2015 will be dedicated to the International Map Year.

José Jesús Reyes Nuñez | Chair | ICA Commission on Cartography and Children | Hungary

ICA Commission on Cartography and Children meeting in Budapest | Image courtesy of José Jesús Reyes Nuñez
**Cartography in Early Warning and Crisis Management**

**Participation at InterGeo, Istanbul, Turkey**
On 28 April 2014, Milan Konečný, Chair of the ICA Commission on Cartography in Early Warning and Crisis Management, together with other Commission members, attended the InterGeo Conference in Istanbul, Turkey. On behalf of the Commission he delivered a paper entitled *Early Warning and Crises/Disaster Management in Big Data Era: The Role of Modern Cartography.*

**Seminar in Riviera, Bulgaria**
The Commission organised a European Union Seminar on Early Warning and Crisis Management at the 5th Jubilee International Conference on Cartography and GIS in Riviera, Bulgaria, 15-21 June 2014. The main topics discussed at the Seminar included:
- European concepts for Crises Management (CM) and Early Warning (EW)
- Visualization of geodata and geoinformation in CM and EW
- User needs and context mapping
- From discovery to full interoperability in CM and EW
- SDI and CM: INSPIRE influence
- *Speaking the Same Language* – semantic aspects of CM
- Sensor mapping for EW and CM

Milan Konečný delivered a paper on *How To Develop Cartography Potentials in Early Warning and Crises Management in Big Data Era,* while the Commission Co-chair Christophe Lienert presented a paper entitled *Environmental Data Visualisation EnVIS – Linking Real-time Sensor Data with Spatial Data Infrastructures for Web-based Visualization.*

**Meetings in Beijing, China**
The Commission participated in the IRDR and CODATA events in Beijing, China, between 7-9 July 2014. Milan Konečný delivered a paper *BIG DATA Potentials in Early Warning and Crises Management.*

The Commission was also represented at the EU-China Disaster Risk Management Conference, part of a high level project guaranteed by the EU commissioner and Chinese government, which was held in Beijing, 28-29 September 2014. Milan Konečný propagated the Commission’s research agenda and delivered an address *BIG DATA Concept and Potential Influence for Crises Management.*

**Future Plans**
Commission’s immediate plans include:
- finalising Proceedings from the International Workshop held in Wuhan, China (see ICA News, No 62, June 2014, pp 11-12 for a report) and application of their registration on the Web of Science
- finalising the Commission website
- preparing for the upcoming events, including participation in the 3rd World Conference on Disaster Risk Reduction in Sendai, Japan (14-18 March 2015), Interexpo Geo-Siberia in Novosibirsk, Russia (20-22 April 2015), participation in Geospatial World Forum in Lisbon, Portugal (25-29 May 2015), and ICC 2015 in Rio de Janeiro, Brazil (23-28 August 2015).

**Digital Technologies in Cartographic Heritage**

**Workshop in Budapest, Hungary**
The 9th International Workshop on Digital Approaches to Cartographic Heritage organized by our Commission was held in Budapest, Hungary, 4-5 September 2014, at the National Széchenyi Library, where Workshop participants were greeted by its Director and the staff of this outstanding Library. The Budapest event was superbly organized by colleagues from the Cartography Department of the Eötvös Loránd University, one of the Commission’s six supporting institutions, headed by the ICA Secretary General László Zentai.

78 participants from universities, research institutions, libraries, archives, museums and private entrepreneurship attended the event, representing 16 countries. 42 papers were presented in six sessions covering issues related to theoretical concepts and contexts in cartographic heritage; map collections, digital...
libraries, archives and the web; map projections and georeferencing; digitisation and digital representation; digital analysis and interpretation of historic maps; visualisation, interpretation and publishing; digital processing and map content (see xee.e-web.auth.gr/ICA-Heritage/2011_2015/Budapest2014/Programme.htm for the complete list of papers). Following the tradition established at the first International Workshop in 2006, a selection of papers will appear in the international web journal e-Perimetrion (www.e-perimetrion.org).

Evangelos Livieratos, Commission Chair, presented new perspectives on expanding the concept and context of cartographic heritage in the digital domain. He also referred to the recent developments concerning the cooperation between the Commission and the Map and Geoinformation Curators (MAGIC) Group (xxee.web.auth.gr/ICA-Heritage/MAGIC). New schemes were described for the design and development of conceptually and technologically innovative strategies, models, mechanisms, tools and actions embedded into the digital manifold, for the transformation and congruence of an important component of cultural heritage, including that of cartographic heritage ecosystems dealing with the management, implementation and a broader dissemination of cartodiversity legacy assets in the networked world (xxee.web.auth.gr/ICA-Heritage/Budapest_2014.htm).

During the Workshop, the National Széchényi Library organized an interesting visit and presentation of its historic map collection containing rare maps, globes and atlases.

### Participation at Greek Cartographic Conference in Patras, Greece

Our Commission supported the ICA endorsed 13th Greek Cartographic Conference held in Patras, 22-24 October 2014, organized by the Hellenic Cartographic Society (HCS). HCS celebrated 20 years of the national conferences and the ICA President Georg Gartner honoured Evangelos Livieratos, the founder of the Society in 1993, at this event.

### Future Plans

The Commission has already announced its 10th Jubilee International Conference and Workshop on Digital Approaches to Cartographic Heritage to be held in Corfu, Greece between 27-29 May 2015. It is organized in cooperation of the History Department of the Ionian University, one of the Commission’s six supporting institutions. The meeting will also offer an optional 6-hour intensive course Georeferencing for Non-experts aimed at scholars and students in digital humanities dealing with historical maps, their reading and historical research, as well as their use in analysis and interpretation. The course will also be of interest to map curators, map librarians and relevant professionals. Digital transformations of historical maps, georeferencing alternatives and good practice with actual examples are among the topics covered by the course. For more information regarding the Conference, including call for papers and pre-registration, please visit xee.e-web.auth.gr/ICA-Heritage/Corfu_2015.htm.

The Commission will be organizing a meeting at the ICC 2015 of Rio de Janeiro, presenting its work and activities, as well as the experiences from the recent cooperation with the MAGIC Group, which joined the Commission in May 2014.

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

### Generalisation and Multiple Representation

generalisation.icaci.org/

### Workshop in Vienna, Austria

This year, the Commission’s traditional annual International Workshop was organised together with the Austrian Federal Office for Meteorology and Surveying and facilitated by Markus Jobst. A special focus was on Integration, Filtering and Abstraction of User Generated or Multi-Source Spatial Content. Further details are available from the workshop website generalisation.icaci.org/index.php/prerevents.

One of the findings from the Workshop was a need to further explore the application of ontologies as a way of modelling various aspects of the generalisation process.

### Upcoming Workshop in Paris, France

Great progress has been made in recent years in automatic generalisation for map production. However, to extend this progress into on-demand and thematic mapping it is necessary to capture the semantics of generalisation. The representation in an ontology of geographic features and the semantic and spatial relations between them, along with concepts such as generalisation operators and algorithms, will enable higher levels of reasoning about the domain and thus support greater sophistication in automation.

The aim of the Workshop is to encourage collaboration in the development of such an ontology. This will be achieved by identifying the relevant skills within the community, ontology design methodologies, potential tools, and potential use cases. The Workshop will also include a Web Ontology Language (OWL) tutorial based on Protégé. By the end of the Workshop we hope to have agreed on a method for the development of the ontology, including tools and standards, and to have identified groups to work on particular tasks.

The ICA Commission on Generalisation and Multiple Representation will organise the 1½-day meeting in Paris, France, 26-27 March 2015. The workshop will be hosted by the Institut National de l’Information Géographique et Forestière (IGN). For more information, please visit the Workshop website at generalisation.icaci.org/index.php/nexetvents.

### Future Plans

Further activities will include a Workshop with the ISPRS Working Group WGII/2 (Multi-dimensional Spatial Data Representations, Data Structures and Algorithms); they will join us in the organisation of the Rio de Janeiro Workshop prior to the ICC 2015. We might join in the organisation of a Workshop at the next ISPRS congress (2016) on a theme that links representation of spatial data with spatial ontologies.

Dirk Burghardt | Chair | ICA Commission on Generalisation and Multiple Representation | Germany

Participants of the Generalisation Workshop at Austrian Federal Office for Metrology and Surveying in Vienna 2014 | Photograph courtesy of Dirk Burghardt
Geospatial Analysis and Modeling
sites.google.com/site/commissionofica/

Tutorial in Vienna, Austria
The ICA Commission on Geospatial Analysis and Modeling conducted a tutorial on Scaling or Fractal Analysis of Geographic Information in the Big Data Era at GIScience 2014 in Vienna, Austria, 23 September 2014. The participants were a mix of senior and young researchers. All the materials are available online from sites.google.com/site/giscience2014tutorial/.

Future Plans
The Commission is working on a special issue of the International Journal of Geographical Information Science on big data and complexity science.

The other planned activity is the International Conference on Location-based Social Media in Athens, Georgia, USA, 13-14 March 2015 (research.franklin.uga.edu/iclsm/). In the era of big data, increasingly sizeable datasets come from social media, particularly location-based social media, in the form that is widely known as user-generated contents. Many social media datasets are made available at the finest spatial and temporal scales. The availability of such data creates unprecedented opportunities for researchers to uncover what were previously hidden in the era of small data. What kind of new research questions may be addressed with the available social media data? What are the social, ethical, and political implications of the wide use of social media platforms and the availability of such data? Particularly, what can geographers, GIScientists, and social scientists in general contribute in response to the unique research opportunities and challenges with social media data?

This Conference is designed to bring together researchers from various fields and perspectives to share ideas and findings of their research related to social media data. The aim is to provide a forum for participants to reflect upon what has been accomplished and to discuss what can be pursued in the future. We look forward to your participation.

Bin Jiang and Xiaobai Yao | Chair / Vice-chair | ICA Commission on Geospatial Analysis and Modeling | Sweden / USA

Map Design
mapdesign.icaci.org/

Commission Activities
The focus of the Commission’s work for the second half of 2014 has been the continuation of the MapCarte initiative. MapCarte is a daily blog post on the Commission’s web site that highlights great historical and contemporary cartographic design. This is the first collection of its type and goes beyond simply posting an image. Its content curated by cartographic experts. It also provides a brief accompanying commentary that explores the work in map design terms, noting its general importance to cartography as well as how we can see and learn from the inherent design decisions.

The Commission was represented at the GeoCart/2014 Conference in Auckland, New Zealand in September as Kenneth Field delivered a keynote address that focused on the work of the Commission and the value of map design going forward. He also won a prestigious award at the GeoCart cartographic exhibition for his Socio-Economic Tectonics map that explored new ways of visualizing thematic data. This was followed up by a talk to students at RMIT University in Melbourne, Australia that again explored map design and showcased the work of the Commission.

Bernie Jenny represented the Commission at the FOSS4G Conference in Portland, Oregon in September where, alongside other researchers, his Plan Oblique Europe map won the People’s Choice and Most Unique Awards. The same map also won the NACIS Student Dynamic Map Competition.

The Commission was represented at the AutoCarto 2014 and North American Cartographic Information Society (NACIS) meetings in Pittsburgh, Pennsylvania in October by Kenneth Field and Bernie Jenny. We promoted a joint activity to promote the NACIS Atlas of Design Volume II as part of the MapCarte series for the week. The blog posts showcased excellent examples of contemporary design that were published in the atlas. Kenneth Field was also the lead writer for the Atlas of Design.

Kenneth Field delivered a keynote to the International Map Industry Association (Americas) meeting in Denver, Colorado in November on how design has become of importance in the changing face of map-making. He also delivered a keynote to the Geospatial Science Research _3 on a similar theme in early December as well as a public lecture on the design of the London Underground map.

Alexander Kent and co-author Peter Vujakovic are in the initial stages of preparing a Handbook on Cartography in which Design will feature as a core component. Kenneth Field will be a contributing author.

Kenneth Field and William Cartwright have a paper published in the last issue of The Cartographic Journal in 2014 on the design of the London Underground map and its use and exploitation in cartography, design and marketing.

Kenneth Field is in discussions with Esri Press (along with Damien Demaj) for the development of a new textbook on cartography focusing on design and the intersection of map-making with other design environments.

Kenneth Field | Chair | ICA Commission on Map Design | USA

Map Projections
ica-proj.kartografija.hr/

Meeting in Riviera, Bulgaria
The meeting was held at the 5th International Conference on Cartography and GIS in Riviera, Bulgaria, 15-21 June 2014. The conference was organised by the Bulgarian Cartographic Association, ICA and University of Architecture, Civil Engineering and Geodesy, Sofia, Bulgaria. Prof Milan Konečny was the President of the International Organizing Committee and Prof Temenoujka Bandrova was the President of the Local Organizing Committee.

It was an excellent conference with many participants from all over the world. The Commission meeting was attended by ten participants. After a welcome and short introduction, Miljenko Lapaine, Commission Chair presented a report, including an update on the book Choosing a Map Projection, which is being prepared. Then, he presented a new tool for visualizing distortions in cylindrical map projections which is available from the Commission website. The meeting finished with the announcement of places and dates for future Commission meetings.

Meeting in Pittsburgh, PA, USA
Miljenko Lapaine conducted a meeting of the Commission at the AutoCarto 2014 Conference in Pittsburgh, Pennsylvania, United States, on 5 October 2014. He provided a welcome and short introduction followed by a report of Commission activities, including the status of the Commission book Choosing a Map Projection, edited by Miljenko Lapaine and E Lynn Usery. He also reported on the Map Projection of Mapa Mundi by Leonardo da Vinci and Visualization of Distribution of Distortions in Cylindrical Map Projections. Bojan Šavić, Oregon State University, presented research on an Aspect-adaptive Cylindrical Projection and The Real-time Projection of Video and Raster Data for Web Maps. E Lynn Usery, United States Geological Survey presented Map Projections using Parallel and Supercomputers and Mike Finn, United States Geological Survey concluded the Commission meeting presentations with pRasterBlaster – A Parallel Implementation for Map Projection. The Commission meeting ended with open discussion including plans for proposing the Commission to continue in the
next term 2015 to 2019 at the ICA General Assembly in Rio de Janeiro, Brazil, in August 2015. Miljenko Lapaine of Croatia will be proposed as Chair with Keith Clarke of the United States as Vice-chair. The Commission also conducted a special technical session of the AutoCarto 2014 Conference on 7 October 2014 including five papers on map projections:

- Revisiting the Mercator influence on Global-Scale Cognitive Maps: Studies from a Web Mercator World by Sarah E Battersby, University of South Carolina and Daniel R Montello, University of California at Santa Barbara
- Snyder’s GS50 Projection for the Mapping of all 50 United States by Keith C Clarke, University of California at Santa Barbara
- Map Projection Education in World Atlases: A Survey by Fritz Kessler, University of California at Santa Barbara
- Azimuthal Projection with 3 Standard Parallels by Miljenko Lapaine, University of Zagreb
- User Preference for World Map Projections by Bojan Savić, Bernhard Jenny and Denis White, Oregon State University

Meeting in Zagreb, Croatia

The third Commission meeting in 2014 was held on 11 October, within the 10th Jubilee Cartography and Geoinformation conference in Zagreb, organized by the Croatian Cartographic Society. Miljenko Lapaine reported on the Commission activities during a special session on map projections. After that, he presented his papers on azimuthal projection with three standard parallels and visualization of distribution of distortions in cylindrical map projections. Ž. Tutek held a lecture on the application of 2D bisection method for the inverse Winkel Tripel projection.

Future Plans

The next meeting of the ICA Commission on Map Projections is planned for the 10th Conference and Workshop on Digital Approaches to Cartographic Heritage organized by the ICA Commission on Digital Technologies in Cartographic Heritage in Corfu, Greece, 27-29 May 2015. The meeting of the ICA Commission on Map Projections will take place on Friday, 29 May 2015 at 17:00 at the Ionian University Aula Magna – Ionian Academy in the historical centre of Corfu. The meeting is open to everyone. Welcome!

Miljenko Lapaine and E Lynn Usery | Chair / Vice Chair | ICA Commission on Map Projections | Croatia / USA

Mapping from Remote Sensor Imagery

mailer.fsu.edu/~xyang/ica/

Commission Activities

A major project of the ICA Commission on Mapping from Remote Sensor Imagery in the last couple of years is to produce an edited book with a collection of research papers discussing the development and use of remote sensing and geospatial information technologies in environmental change studies. The book Monitoring and Modeling of Global Changes: A Geomatics Perspective is edited by Jonathan Li and Xiaojun Yang, Vice Chair and Chair of the Commission respectively. We have now completed the peer review process and forwarded the final version of the manuscript to the publisher (Springer).

Yifang Ban, Vice Chair of the Commission, from Sweden’s Royal Institute of Technology (RIT) is playing a critical role in planning and organizing the Annual Symposium of European Association of Remote Sensing Laboratories that will be hosted by RIT in June 2015. Finally, Jan Feranec, Vice Chair of the Commission, from Slovakia Academy of Sciences has completed a book chapter that offers an overview of landscape changes in

Central Europe. The chapter is entitled Land cover and land use change in Eastern Europe 1990-2010: Impacts of the breakup of the Soviet Union. The book is scheduled to be published by Springer.

Xiaojun Yang | Chair | ICA Commission on Mapping from Remote Sensor Imagery | USA

Maps and the Internet

maps.unomaha.edu/ica/

Commission Activities

The ICA Commission on Maps and the Internet is sponsoring the International Symposium on Cartography in Internet and Ubiquitous Environments, 17-19 March 2015 in Tokyo, Japan (ubimap.csis.u-tokyo.ac.jp/index.php/topic-ci2015). Selected papers from this symposium will be published as a book in the ICA series of Springer’s Lecture Notes in Geoinformation and Cartography. On 21 and 22 August 2015, prior to the International Cartographic Conference in Rio de Janeiro, the Commission is holding a joint workshop with the ICA Commission on Education and Training in Curitiba, Brazil. This workshop is for anyone interested in Internet mapping and educational cartography issues. Researchers are welcome to present papers on their latest research idea and works. The ICA Commissions on Map Use and User Issues, and Cognitive Visualization are also meeting at the same location in Curitiba, Brazil. We welcome individuals to attend any combination of sessions at both workshops. Selected works presented at the workshop will be combined into a book for the ICA series of Springer’s Lecture Notes in Geoinformation and Cartography. For more information, please visit the Commission website.

The Commission is looking to create a new membership directory. We invite all new and longtime friends of the Commission to sign up on the membership tab of our website. By adding your name to the membership list you will receive the latest correspondence from the Commission. In addition to the new membership list, the Commission on Maps and the Internet would like to expand its list of topics and individuals to lead active learning workshops all around the world. If you are interested in adding your name and specific workshop topics to the list, please contact Rex Cammack, Chair, at rcammack@unomaha.edu.

We are looking forward to seeing you at our meetings in Japan and Brazil.

Rex Cammack | Chair | ICA Commission on Maps and the Internet | USA

Participants of the ICA Commission on Map Projections meeting in Pittsburgh, Pennsylvania | Photography Eric Anderson
**Theoretical Cartography**

**Joint Workshop in Beijing, China**

A joint commission workshop on Theoretical Cartography and Geo-Information Science in Beijing organised by the ICA Commission on Theoretical Cartography, the ICA Commission on Atlases and several Chinese Society commissions was held in Beijing, 17-19 October 2014. More than 30 commission members and participants from Austria, Czech Republic, India, Columbia, Hong Kong and China attended the Workshop. Prof Liu Yaolin and Dr Lu Feng welcomed the participants on behalf of the ICA Executive Committee and the local hosts respectively, while Prof Peter Jordan addressed the audience on behalf of the ICA Commission on Atlases.

The Workshop took place in the Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, which is traditionally one of the strongest cartographic institutes in China. During the Workshop, a total of 13 oral presentations were given with topics covering ethnic cartography, cartographic language, smart spatial computing, spatial shape cognition, map semiotics, geographic research functions of atlases, national economic mapping, spatial cognition based on an online atlas, resource mapping for animal husbandry, semantic classification of multi-source POIs, cognition and emergency response, GIS education and GIS industry. The event has brought together cartographers from universities, research institutes and businesses across continents to present status and perspectives of theoretical cartography and atlas design.

**Future Plans**

The Commission on Theoretical Cartography is planning a joint workshop with the ICA Commissions on Ubiquitous Mapping and Maps and Internet at the University of Tokyo, Japan, 17-19 March 2015. We are also planning a pre-ICC 2015 gathering in Brazil.

Peter Jordan and Du Qingyun | Chairs | ICA Commission on Atlases / ICA Commission on Theoretical Cartography | Austria / China

**Ubiquitous Mapping**

http://www.ubimap.net/

**International Symposium in Tokyo, Japan**

The ICA Commissions on Ubiquitous Mapping, Maps and the Internet and Theoretical Cartography, together with the Japan Cartographers Association and the Center for Spatial Information Science, the University of Tokyo are organising the International Symposium on Cartography in Internet and Ubiquitous Environments in Tokyo, Japan, 17-19 March 2015. Due to the emergence of information technology, maps are more useful and essential in our lives. Maps can be regarded as a basic need in this new services-based world of Internet and Ubiquitous Environments. This symposium focuses on rethinking the concept of maps, mapping and Cartography from theoretical, pragmatic and technical viewpoints in this changing information environment. The programme will include oral and poster presentations about web, mobile and ubiquitous mappings. A book with selected papers from the Symposium will be published in the Springer ICA series of the Lecture Notes in Geoinformation and Cartography.

For more information, please visit the Symposium website at ubimap.csis.u-tokyo.ac.jp/ciu2015/.

Masatoshi Arikawa | Chair | ICA Commission on Ubiquitous Mapping | Japan

**Use and User Issues**

www.univie.ac.at/icacomuse/

**Commission Activities**

Rejuvenation ahead! At the 16th General Assembly of the ICA in Rio de Janeiro, the second 4-year term of the Commission on Use and User Issues comes to an end. During these eight years, the Commission was highly successful in meeting its terms of reference, particularly in involving more young (PhD) researchers in all commission activities. A logical consequence of this policy is that the “older” members who maintained the Commission’s core group for eight years will now withdraw and make room for younger members. There is no doubt that the Commission needs to continue its work into the future. As we witness an exponentially growing increase of interest in use and user issues and related research, these days most of the Commission’s attention is focused on formulating up-to-date terms of reference and establishing a new Commission core group. Please contact us if you want to be involved in this process.

The Commission is preparing for yet another successful contribution to the International Cartographic Conference (ICC 2015) in Rio de Janeiro. We will assist in moderating the oral and poster sessions on use and user issues and have open and business meetings. We also hope to welcome many colleagues at the pre-ICC 2015 Workshops which we coorganize at the Federal University of Paraná in Curitiba, Brazil, from 20 to 22 August 2015. Curitiba is not too far from Rio de Janeiro and the airfare is very cheap.

The two workshops are of a completely different nature, they both last one day and will be held one after the other. The first Workshop is meant for researchers and students who want to know more about How to Design and Conduct User Studies. It will take place on 20 August and will be organized together with the ICA Commission on Cognitive Visualization.

The central theme of the second Workshop is Envisioning the Future of Cartographic Research. We will be focusing on the Research Agenda that relates to use and user issues with, hopefully, as many interested researchers and students as possible. The discussion will not follow the traditional format of presentations and questions but assume an active participation of all present. The Workshop is planned for 21 August and will be organized together with the ICA Commissions on Cognitive Visualization and on GeoVisualization. For more information, please visit www.geo.uzh.ch/microsite/icacomugis/icc15_ef.html or our website.

For Saturday, 22 August various other activities are planned.

Corné van Elzakker | Chair | ICA Commission on Use and User Issues | The Netherlands
5th International Conference on Cartography and GIS

The Bulgarian Cartographic Association, the International Cartographic Association (ICA) and the University of Architecture, Civil Engineering and Geodesy in Sofia organized the 5th Jubilee International Conference on Cartography and GIS in Riviera Resort near Varna, Bulgaria from 15 to 20 June 2014. The Conference was attended by 170 colleagues from 42 countries, including representatives of the ICA Executive Prof László Zentai, Secretary General and Treasurer and Prof Paulo Menezes, Vice President, as well as the ICA Commission Chairs Prof Milan Konečný (Cartography in Early Warning and Crisis Management), Prof Miljenko Lapaine (Map Projections), Prof Jesús Núñez (Cartography in Early Warning and Crisis Management), Prof Miljenko Lapaine (Map Projections), Prof Jesus Nunez (Cartography in Early Warning and Crisis Management), and Prof Vladimir Tikunov (GI for Sustainability).

The Conference program featured five keynote presentations, which attracted the greatest interest amongst participants:

- From the Early Digital Technologies to Web 2.0 Based Cartography in the Thematic Maps by László Zentai, Hungary
- Building a Global Earth Observation System of Systems (GEOSS) by Barbara Ryan, Director of GEO, USA
- Cartography and Other Key Components of the GIS Platform for a Mobile First World by Michael Gould, Esri, USA
- 21 Century GIS Workflows – Fusing the Real and Digital World by Robert Nagy, Intergraph, Hungary
- 3D GIS: the Technology behind the Pretty 3D Picture by Sisi Zlatanova, the Netherlands

The remaining 107 reports were presented in 18 oral sessions and 27 reports in 5 poster sessions. The best 25 reports were published by Springer Verlag in the book Thematic Cartography for the Society edited by Temenoujka Bandrova. Other reports have been published in the Conference Proceedings (cartography-gis.com/docs/bca/SICandGIS_Proceedings.pdf).

The conference was accompanied by three exhibitions enjoyed by all participants and guests. The Discovering Black Sea (II - XIX centuries) exhibition, authored by Dr Stefan Pantaleev and his students, got a lot of attention. Finally, the Military Geographic Service displayed the latest published topographic maps of the Bulgarian territories.

During the conference three ICA Commission organized their meetings: Cartography and Children, Cartography in Early Warning and Crises Management, and Map Projections. The Executive Board of Bulgarian Cartographic Association (BCA) awarded Prof Milan Konečný and Prof Miljenko Lapaine with a special bronze statuettes for their contribution to the creation and development of BCA and cartography in Bulgaria. Sponsors and all the organizations that have been contributed to the organization of the conference were also rewarded with Bulgarian traditional souvenirs.

Kremena Boyanova from Bulgaria and Naiara Aginako from Spain won the young scientist award. Competition was extremely tight, with 28 PhD students contending the award. The international jury consisting of Lyubka Pashova (Bulgaria), Prof Dariusz Dukaczewski (Poland) and Prof Rufino Perez (Spain) had a difficult task to select the winner. Each member of the jury gave two ratings, one for the report and one for presentation by each contestant. This time, only the two winners gathered maximum points.

Besides the traditional tours to Balchik, Nessebar and Cape Kaliakra, two social evenings were organized. During the Welcome reception all participants had a chance to share experiences and ideas, enjoying the background music of Mozart, Gershwin, jazz and film music performed by classical Dobrich quartet. Gala dinner was held at the National Restaurant Chukurovo, near the village of Prilep, complemented by extremely rich folklore program showcasing Bulgarian traditions and culture.

At the end of the gala dinner an unexpected natural disaster happened, which stranded all guests and forced them to an overnight stay at the restaurant. 19 June 2014 was a black day for Varna and Bulgaria. Big floods caused by a storm and heavy rain led the Batovska River to rise by 5 meters. The roads were destroyed and nearly 100 people were stranded without life-saving medicine and essential belongings. There was insufficient food available at the restaurant. It was a crisis situation in practice! After repeated attempts to resolve the situation and evacuate participants, Bulgarian Army came to the rescue with two military helicopters. We expressed our extreme gratitude for the entire rescue operation to Colonels Gladkov, Danchev and Markov from the Military Geographic Service and the Minister of Defence Mr Angel Naydenov. The crew of both helicopters will be awarded by the Bulgarian Cartographic Association with certificates.
GeoCart’2014 Conference

Cartographic Journeys through Space and Time

The 7th National Cartographic Conference, GeoCart’2014, the 42nd ANZMapS Conference and the 3rd ICA Regional Symposium on Cartography for Australasia and Oceania, were jointly held at the University of Auckland, New Zealand, between 3-5 September 2014. The Conference attracted 74 delegates from New Zealand and overseas, including Australia, Austria, Canada, Norway, United Kingdom and USA.

The Conference was jointly organised by the New Zealand Cartographic Society (NZCS, www.cartography.org.nz) and the Australian and New Zealand Map Society (ANZMapS, www.anzmaps.org), with support of the School of Environment, University of Auckland and the University of Auckland Library. It had an interesting mix of modern and historic mapping related topics – spanning the 16th to the 21st centuries!

GeoCart’2014 delivered 51 keynote, paper and poster presentations across the three days, and included the National Cartographic Exhibition which provided a sampling of the current state of map design and production that New Zealand has to offer, the best of which were adjudged in the NZCS Map Awards 2014. The winning entries, together with a selection of other entries from the Exhibition, are to represent New Zealand at the International Cartographic Exhibition 2015 in Rio de Janeiro, Brazil. The programme also included GeoExpo/2014, the commercial exhibition, and a rich social schedule, including excursions around Auckland, and the much anticipated Gala Dinner.

Dr Will van den Hoonoord, Saint Thomas University, Canada, opened the Conference with a quick journey through the history of women in cartography, which stimulated many subsequent discussions. The difficult decisions then had to be made about what to attend, with the programme splitting into two streams, Historical, and Social and Natural Environment. The second Plenary session was kicked off after lunch by Prof Georg Gartner, President of the ICA, whose talk on the relevance of cartography was thoughtfully received by many, and the programme branched into a Historical (part II) and National and Environmental Mapping streams. The first day was rounded off by the Poster Session, and then the social calendar started with the Ice Breaker Reception drinks where people could mingle in the Conference foyer surrounded by beautiful examples of maps!

The second day began with an entertaining romp through the world of Dr Kenneth Field, Esri, who also had a serious point to make about the persisting relevance of cartography today. The paper sessions then split off into two themes, Archiving and Mapping of Environment, Visualisation and Modelling, with some wishing they could be in two places at once! The afternoon session was started by Kristoffer Kristiansen, who presented some fascinating insights into the workings of the Cartography section at the Norwegian Mapping Authority. The paper sessions were again split into two themes, Mapping of Conflict and Disaster, and Remote Sensing and Georeferencing, the latter having a New Zealand focus giving many locals the opportunity to catch up on the local happenings. The Social programme continued in the evening with the Gala Dinner, during which Bill Cartwright was awarded inaugural Honorary Membership of the NZCS, amidst the fine dining and live entertainment provided by the local high school students.

The final day was started by an interesting history of the changes in representation of the island of Java on maps, given by G Allen Mawer, independent historian from Australia, which made a few think about the difference in how maps are often viewed as reality, when they always are only abstractions of reality. The paper sessions split into Urban Mapping, and Crowdsourcing and Usability themes, with many presentations relating to the application of newer technologies to modern cartography.

The range of the presentations at the conference was impressive, from the data complexity of Hector’s Dolphin behaviour in space and time, to the beautiful and informative snapshots of Australian and New Zealand cartographic heritage. A particularly relevant and poignant reminder of the impact that war has on individuals and communities from both sides was delivered by Dr Amy Griffin, by mapping military incident records to create a Vietnam webmap, is bringing some measure of closure to both sides.

The Conference proceedings are being published as an occasional publication in the NZCS CartoPRESS series, and will be available in 2015. A publication of expanded abstracts and presentations, particularly relating to the historical mapping and research will appear in the Australian and New Zealand Map Society’s journal The Globe (www.anzmaps.org/publications/).

The National Cartographic Exhibition and GeoExpo displays were attractive and the focus of a lot of discussion, with an opportunity to view a selection of the best entries to represent New Zealand at ICC 2015 in Rio de Janeiro in August. Tinged with a little sadness the Conference was brought to a close, and the excursions around Auckland set off. Participants had a chance to marvel at the Civic Theatre starry ceiling followed by a visit to the Auckland City Library or to take a look at exhibitions and collections housed at the Auckland War Memorial Museum.

A video produced by Marney Brosnan provides highlights from the GeoCart’2014 (www.cartography.org.nz/component/k2/item/48-geocart-2014-highlights). We look forward to the next Conference in two years!

Tim Nolan and Igor Dreczki | New Zealand Cartographic Society | New Zealand
10th International Conference about Cartography and Geoinformation

The 10th Jubilee International Conference about Cartography and Geoinformation was organized by the Croatian Cartographic Society, 10-12 October 2014 in Zagreb, Croatia. It was endorsed by the Croatian Academy of Engineering, International Cartographic Association (ICA), International Federation of Surveyors (FIG) and European Spatial Data Research Network (EuroSDR).

The Republic of Croatia has been a regular member of the ICA since 1995, and the Croatian Cartographic Society represents Croatia in that Association. This Conference was a continuation of the intensive work undertaken by the Croatian cartographers internationally and provided opportunity to continue this series of conferences related to cartography.

The Conference program featured five keynote lectures delivered by:
• Prof Georg Gartner, President of the ICA
• Dr Suchith Anand, Chair of the ICA Commission on Open Source Geospatial Technologies
• Prof Joep Crompvoets, Secretary-General of EuroSDR
• Assist Prof Dušan Petrović, member of the ICA Commission on Mountain Cartography
• Prof Yerach Doytsher, Chair of FIG Commission 3 on Spatial Information Management and the President of the Association of Licensed Surveyors in Israel

The three-day conference included 20 lectures, an exhibition of geological maps, an orienteering competition, an awards ceremony for the best children’s drawings, and a full day walking tour to the Medvednica Mountain.

The Conference was followed by the seminar The Role of Geodesy and Geoinformatics in Sustainable Development, which was organized by the IT Section of Student Council of the Faculty of Geodesy, University of Zagreb.

Keynotes at the seminar were delivered by Dr Suchith Anand, Prof Yerach Doytsher and Prof Vladimir Tikunov, Chair of the ICA Commission on Cartography and Sustainable Development.

For more information, including all abstracts and presentations from the Conference, please visit the Croatian Cartographic Society website (www.kartografija.hr).

Miljenko Lapaine | Croatian Cartographic Society | Croatia

AutoCarto 2014

AutoCarto 2014 was held in Pittsburgh, Pennsylvania, USA, 5-7 October 2014. On 5 October, two ICA workshops were held. Prof Dr Miljenko Lapaine, Chair of the ICA Commission on Map Projections, held a workshop with 15 attendees. Dr Paulo Marcio Leal de Menezes, Chair of the ICA Working Group on Toponymy, held a workshop with 8 attendees.

Nearly 100 participants convened on 6 and 7 October for 72 paper presentations in 16 concurrent sessions, plus nine poster presentations. Attendance included a very international audience with a number of attendees from Europe and Asia.

The plenary session opened with a presentation by Dr Paulo Marcio Leal de Menezes on the ICC 2015 in Rio de Janeiro. Dr Duane Marble, a pioneer in GIS gave the keynote speech entitled Through a Glass Darkly: Historical reflections on the Birth of a New Modality. It was an intriguing look back at the evolution of GIS and the implications for the future of this rapidly evolving technology.

AutoCarto 2014 was held sequentially with the annual North American Cartographic Information Society (NACIS) Conference, with the latter starting on 8 October with Practical Cartography Day followed by two days of paper presentations, a large map gallery with poster presentations, plus four half-day workshops on 11 October. During the evening banquet on 10 October, Dr Anne Kelly Knowles gave the keynote speech titled Do maps really Tell Stories? The problem of Narrative Time in Cartography.

The Conference was well received by attendees with many opportunities for interaction and critical discussions of the presentations. Thanks are extended to Dan Cole, Program Director for AutoCarto 2014 and the international program committee he assembled. The Cartography and Geographic Information Society is grateful to our Gold sponsor Esri, our Silver sponsor USGIF, our Bronze sponsor Taylor and Francis, and to the ICA for its endorsement and support.

Eric Anderson | Cartography and Geographic Information Society | USA

INCA Executive Meeting and Map Quiz

The 145th Executive Committee meeting of the Indian National Cartographic Association (INCA), an affiliate member of ICA, was held on 22 September 2014 at Hyderabad, India, prior to the INCA Congress. The meeting was chaired by Dr Swarna Subbarao, President of INCA and Surveyor General of India.

The annual INCA Map Quiz for high school students was held on 9 November 2014 at eleven centres throughout India. In total, 1,100 students took part in the Quiz.

Amod Srivastava | Indian National Cartographic Association | India
President of the ICA, who wrote: "My sincere congratulations! We are all aware of your work in China, but this award, which recognises your contribution on such a high level is both, a testimony to your successful work and that Cartography and Cartographers are recognised internationally."

In joining Prof Gartner, the entire ICA community sends its congratulations!

Igor Drecki | Editor ICA News | ICA

New Editor for CaGIS Journal

The Board of the Cartography and Geographic Information Society (CaGIS) has selected Dr Nicholas Chrisman as the new Editor of Cartography and Geographic Information Science journal, the official publication of CaGIS (see journal’s profile in ICA News, No 51, December 2008, p 6).

Dr Chrisman officially began his appointment on 1 October 2014. He has worked in the domain of geographic information for 42 years, developing innovative techniques to analyze and display information about the earth and the people who inhabit it. Themes in his work have included addressing data quality, dealing with time and change, and examining institutional and social settings of technology. He was a member of the innovative team at the Harvard Laboratory for Computer Graphics and Spatial Analysis from 1972-82. He then worked with the Dane County Land Records Project in Wisconsin. He was a professor at the University of Washington from 1987 to 2014. From 2005-2012, he led the GEOIDE Network, a network of researchers and user communities across Canada. In 2013, he became Discipline Head, Geospatial Sciences at RMIT University in Melbourne, Australia.

Dr Chrisman published his first article (with Tom Peucker) in 1975 in The American Cartographer, the predecessor of Cartography and Geographic Information Science. His specialities include geographic information analysis, geospatial sciences, geomatics, data quality investigations, analytical cartography, network of scientists, collaboration, research and innovation networks.

Dr Chrisman replaces Dr Michael Leitner who served as Editor of Cartography and Geographic Information Science for six years and made many improvements to the journal. Dr Chrisman’s broad knowledge and experience, coupled with his distinguished career in the spatial sciences, will continue to enhance the reputation of Cartography and Geographic Information Science.

E Lynn Usery | Cartography and Geographic Information Society | USA

obituary

Ramón M Lorenzo
06.07.1945 – 12.09.2014

Ramón M Lorenzo was born on 6 July 1945 in Foz, Lugo Province, Spain. His education was influenced by the world of cartography and geographic information since his studies at the Naval School where he became an officer in the general Navy corps. His first specialization was nautical charting, which he studied between 1973-1974 at the Hydrographic Institute in San Fernando, Cadiz. At that time he was also a lecturer aboard the Juan Sebastian Elcano training ship and until 1976 participated in drawing nautical charts for the island of Mallorca.

He joined the corps of geographical engineers and between 1976-1977 attended the specialization course at the National Geographic Institute (IGN). Upon completing the course he started his professional career at IGN, first being in charge of the National Topographic Map 1:25,000. Two years later, he took up the position of Director at the new IGN office in Galicia, located in A Coruña, where he carried out extensive cartographic activities until 1989.

From 1989, he was Director of the National Geographic Information Centre, where he promoted a wide-ranging project for the development, implementation and use of new geographic information technologies in both the public and private sectors.

During 1998-1999, he was a Spanish delegate to the European Commission for the development of the Galileo project, a European Satellite Navigation System, and participated in numerous meetings of its Steering Committee. In 1999, he was a Spanish delegate to the United Nations Conference on the exploitation and peaceful use of outer space (UNISPACE III).

From 2000-2012, he was Director of the Publications Office at the Spanish Ministry of Public Works. He was responsible for the Official Road Map of Spain, published in both CD-Rom and printed book formats.

He spoke at numerous conferences about cartographic developments and their application in his career. He also published widely, primarily in journals specialising in geographic information. In 2001, he produced a book Cartography: Urban Planning and Property Development, published by CIE-Dossat.

His teaching experience was extended as a lecturer in cartography on the Advanced Course on Property Management and Analysis, at the Comillas Pontifical University in Madrid. In 2002 he started teaching the cartography module in the “Advanced Course for Specialisation in Planning and Territorial Development” at the University of Santiago de Compostela as well.

Ramón M Lorenzo was decorated the Knight Commander of the Spanish Order of Civil Merit in 1982 and of Spanish Order of Isabel la Católica in 2003.

Between 2003-2007, he served as Vice President of the International Cartographic Association (ICA) and in 2005 received a Diploma for outstanding services to the ICA. He was President of the 22nd International Cartographic Conference organized in A Coruña in July 2005.

Ramón M Lorenzo was President of the Spanish Society of Cartography, Photogrammetry and Remote Sensing from 1996 to 2014.

Pilar Sanchez-Ortiz | Spanish Society of Cartography, Photogrammetry and Remote Sensing | Spain
ica affiliate members

Association of Polish Cartographers | Poland
Attn: Assoc Prof Joanna Bac-Bronowicz | joanna.bac-bronowicz@swr.wroc.pl

Bundesamt für Kartographie und Geodäsie | Germany
Attn: Prof Dr Ing Hansjörg Kutterer | hansjörg.kutterer@bkg.bund.de

Centro Argentino de Cartografía | Argentina
Attn: Prof Carmen Alicia Riazi | cac@centroargentinodecartografia.com

Chinese Cartographic Association (Chinese Taipei) | Taiwan-China
Attn: Dr Ching Jen Kao | ccartoa@gmail.com

Dubai Municipality | United Arab Emirates
Attn: Ali Mohammed Alameri | aameri@dm.gov.ae

East View Geospatial | United States of America
Attn: Kent Lee | matthew.tanaka@cartographic.com

Eko-Graf Cartographic Publishing House | Poland
Attn: Roman Janusiewicz | roman.janusiewicz@eko-graf.pl

Escuela de Ciencias Geográficas, Universidad Nacional | Costa Rica
Attn: Marwin Alfaro Sanchez | marwin.alfaro.sanchez@una.cr

Esri | United States of America
Attn: Mark Cogan | mcygan@esri.com

Faculty of Geo-Information Science and Earth Observation (ITC), University of Twente | The Netherlands
Attn: Comé van Elzakker | c.vanelzakker@utwente.nl

Faculty of Information Engineering, China University of Geosciences | China
Attn: www.cug.edu.cn

GeotechniVision Enterprise Limited | Jamaica
Attn: Valerie Grant | valerie@technivisions.com

HERE | Germany
Attn: Astrid Dawson | astrid.dawson@here.com

Indian National Cartographic Association (INCA) | India
Attn: Shri Radhakrishnan Nanda | secretarygeneral@incaindia.org

Inland Waterways Authority of India | India
Attn: www.iwai.gov.in

Institut Cartogràfic i Geològic de Catalunya (ICGC) | Spain
Attn: Jaume Miranda i Canals | jaume.miranda@icgc.es

Instituto Geográfico Nacional España | Spain
Attn: www.ign.es

Institut National de l’Information Géographique et Forestière | France
Attn: www.ign.fr

Intergraph | United States of America
Attn: Jon Thies | jon.thies@hexagongeospatial.com

Land Information New Zealand | New Zealand
Attn: Chris Kinzett | media@linfo.govt.nz

Moscow State University of Geodey and Cartography | Russia
Attn: Prof Vasily A Malininkov | lgm@milga.ru

National Hydrographic Office | India
Attn: www.hydrobharat.nic.in

National Land Survey of Finland | Finland
Attn: www.nls.fi

Ordnance Survey | United Kingdom
Attn: Paul Naylor | paul.naylor@ordnancesurvey.co.uk

UNGIS International Association | Austria
Attn: www.ungis.net

Union of Chambers of Turkish Engineers and Architects, Chamber of Surveying and Cadastre Engineers (UCTEA-CSCE) | Turkey
Attn: www.hkimo.org.tr

United Nations Cartographic Section | United Nations
Attn: Penny Baldock | chair.sicc@un.org

University of Architecture, Civil Engineering and Geodesy, Department of Photogrammetry and Cartography | Bulgaria
Attn: www.uacg.bg

University of Balamand | Lebanon
Attn: Prof Oussama Jadayel | info@balamand.edu.lb

Wuda Geoinformatics | China
Attn: info@wuda.com.cn

Wuda Geoinformatics | China
Attn: www.geostar.com.cn

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

László Zentai | Secretary General & Treasurer | ICA | sz@icaci.org

calendar

march 2015
17-19 | International Symposium on Cartography in Internet and Ubiquitous Environments (CIU 2015) | Tokyo | Japan | ubimap.csis.u-tokyo.ac.jp/ciu2015/

June 20 | INTEREXPO Geo-Siberia-2015 | Open-Source Geospatial Solutions for Public Benefits | Novosibirsk, Russia | expo.geo.ru/event/4-interexpo_geo-sibir/

July 20 | 2nd Jubilee Conference and Workshop on Digital Approaches to Cartographic Heritage | Corfu | Greece | xeee.web.auth.gr/ica-heritage/corfu_2015.htm

August 2015

20-21 | ICA Commissions on Maps and the Internet & Education and Training Joint Workshop | Curitiba | Brazil

21 | ICA Commissions on Cognitive Visualization, Use and User Issues, GeoVisualization & Map Design Joint Workshop | Curitiba | Brazil

21 | ICA Commissions on Geoinformation Infrastructures and Standards & Open Source Geospatial Technologies Joint Workshop | Rio de Janeiro | Brazil | sidstdards.icaci.org


21-22 | 18th ICA Workshop on Generalisation and Multiple Representation | Rio de Janeiro | Brazil | http://generalisation.icaci.org/index.php

21-22 | ICA Commissions on Cartography and Children, Maps for Blind and Partially Sighted People, Planetary Cartography & Cartography in Early Warning and Crisis Management Joint Workshop | Niterói | Brazil | niteroi2015.elsevier.com

children’s map gallery  2013 winners and participants

Ivana Korucová | 13 | The Most Beautiful Tattoo | Základná Umelecká Škola | Slovakia

Allison Lee | 9 | The World in My Hand | Eagle Heights Public School | Canada

Altuğ Namık Yavaş | 8 | The World of My Dreams | Ahmet Haşim Primary School | Turkey

Karina Balitskaya | 13 | Big Miracle by Little Hands | School No 2 | Russia

Hana Klincov | 12 | | OŠ Koroška Bela | Slovenia

winner

winner