

president's report



Dear Colleagues

We are all aware of the expression 'time flies'. Well, I can confirm it is true. This is already my eighth and last presidential report to ICA News. The four years of my ICA

presidency have indeed passed before I realized. They have been wonderful years allowing me to experience the global cartographic family first hand.

At my inauguration in Rio de Janeiro in 2015, I introduced the motto "Make the world a better place with maps". The question is: have we reached our goals? Probably it is difficult to measure, but I strongly believe that we have managed to put cartography firmly on the international map again. This process started with the International Map Year 2015-2016, an

initiative that started before my term, but continued strongly during the first couple of years of my presidency. This was followed by creating a set of Sustainable Development Goals posters that were later displayed at the United Nations. The book *Mapping a Sustainable World*, to be launched at the International Cartographic Conference in Tokyo, will be the next notable step.

The map I have compiled (overleaf) shows all my activities in the 2015-2019 term. I classified them into four categories:

- ICA, i.e. ICC conferences, EC meetings, commission and working group activities
- visits to the ICA member and prospective member states
- UN-GGIM and International and Science Council events
- participation in conferences

This road trip around the cartographic world would not have been possible without the help

> 02

18th general assembly of ica tokyo · japan

As we approach the 29th International Cartographic Conference (ICC) in Tokyo, 15-20 July 2019, the administration of ICA focuses on the associated General Assembly. Various ICA committees are working hard to meet their obligations related to the management of our Association. The General Assembly of ICA has a number of responsibilities and in order to fulfil them, ICA national members must participate and understand their tasks. For example, reports on the work of the ICA Commissions and Working Groups must be received. Similarly, a new Executive Committee must be elected.

The 18th General Assembly of the International Cartographic Association will take place on Monday, 15 July (first session) and on Saturday, 20 July 2019 (second session) at the Tokyo International Exchange Center (Plaza Heisei). The Agenda has now been finalised (see page 3).

> 02

Proceedings of the 17th Extraordinary General Assembly of ICA held on 2 July 2017 in Washington D.C., USA |
Photography László Zentai



Dr Naeema Alhosani facilitates a workshop entitled *Happiness Map* at the United Arab Emirates University | Photography courtesy of Naeema Alhosani

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June 2019 marks the 60th anniversary of the International Cartographic Association. And what a 60 years it was! The numbers speak for themselves: we had 28 international cartographic conferences and 17 general assemblies, 100 countries were at some point our national members, and 51 organisations – our affiliate members. We had Commissions and Working Groups focusing on over 50 broad fields of cartography, and 106 outstanding cartographers and two ICC local organising committees were honoured with ICA awards and diplomas. We recorded an unbroken stream of publications and countless people committed wholeheartedly to ICA. For certain, ICA matured and firmly established itself as a prominent international organisation.

From now on though, our success will not be measured by maintaining what we have achieved, but by our ability to grow as a relevant international organisation that serves our members, as well as our wider community of cartographers. I believe our focus should be on creating an environment where belonging to the ICA is treasured and rewarding. This includes offering our Commissions and Working Groups the tangible support they need to achieve their full potential, creating opportunities for national mapping organisations to contribute and treat ICA as their own organisation, and embracing professional cartographers so they feel welcomed and genuinely appreciated (without their support and involvement 60 years ago, there would have been no ICA). Although we do not operate in a vacuum and establishing relations with other international bodies is important, looking after our own is ICA's fundamental responsibility. Building on the success of the *We love maps* campaign, perhaps it is time for the ICA to launch a ***We love ICA*** campaign! I am certainly for it, so count me in.

This issue features the final President's Report by Menno-Jan Kraak, who in a truly cartographic fashion summarised his term in office. We are reminded about the upcoming General Assembly and treated to another update on ICC 2019 in Tokyo.

Igor Drecki | Editor ICA News | ICA ■

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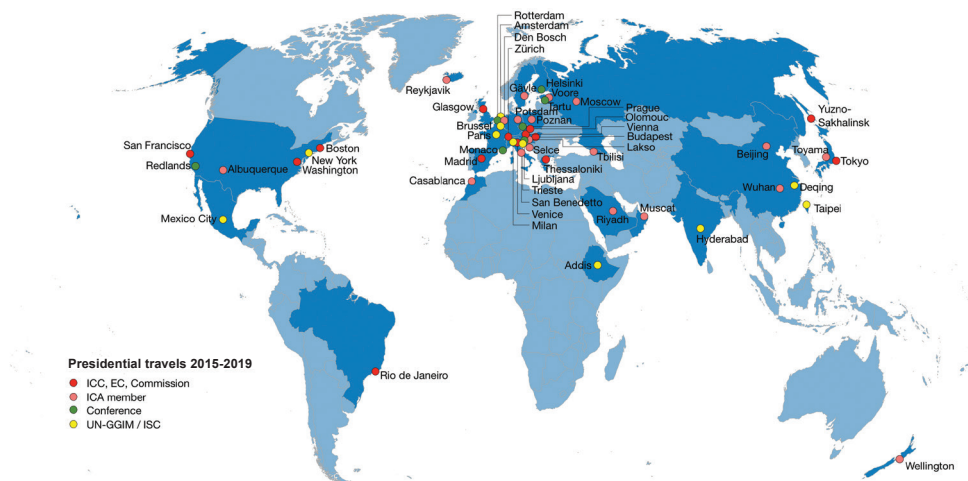
President: **Menno-Jan Kraak** | University of Twente | *The Netherlands*

Secretary General & Treasurer: **László Zentai** | Eötvös Loránd University | *Hungary*

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

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president's report cont...



Presidential travels 2015-2019 showcasing Menno-Jan Kraak's many activities and engagements over the world | Map by Menno-Jan Kraak

of my colleagues. First of all, I have to thank László Zentai, our Secretary General. He had answers to virtually all my organizational, financial and other questions. Thanks also goes to the team, members of the Executive Committee. The EC is there for the cartographic community, for instance by facilitating the CartoBoK, Body of Knowledge for Cartography, and to support the commissions and working groups, whose activities are directly experienced by the global cartographic community. This is of course also true for our biennial International Cartographic Conferences, organized by the ICA national members. We had a successful event in Washington D.C. and are in full preparation for the Tokyo event. Output from ICC 2017 already features in our

new publication series, streamlined by Monika Sester. In communicating with the outside world, we should also thank our colleagues behind the scenes, the ICA webmasters Manuela Schmidt and Felix Ortag, the editors of the *International Journal of Cartography* Anne Ruas and William Cartwright, the editor of *eCARTO News* David Fraser, and the editor of *ICA News* Igor Drecki. Igor will step down from his role this year and we need to thank him for the wonderful work he did, but also for his efforts to preserve ICA's past. I do hope the ICA's future objective will remain unchanged – to “*make the world a better place with maps*”.

Menno-Jan Kraak | President | ICA ■

18th general assembly of ica tokyo · japan cont...

The first session contains a number of items relating to the status and eligibility of national and affiliate members. Of particular importance is the necessity to establish the number of countries eligible to vote at the General Assembly. This process sets the rules for any subsequent voting. Next the adoption of the Minutes of the 17th General Assembly takes place, followed by a vote on new members, both national and affiliate, that applied for ICA membership.

A number of items relating to the ICA operation and budget are scheduled next. The Assembly receives reports from the President, the Secretary General & Treasurer and the Auditors, followed by a vote on adoption of 2015-2019 accounts. Presentation of the proposed budget for the 2019-2023 term concludes this part of the proceedings. The *ICA Statutes and By-laws* is the most important document of the Association. A number of motions concerning changes to the *Statutes* have been received and will require an absolute majority vote to be carried (full details of these proposals are available from icaci.org/general-assembly-2019/). It is therefore critical to have a good representation of the ICA member nations attending the General Assembly having a say in this process.

A report by the Publications Committee summarising ICA publication efforts comes next. Each national member must submit a national report on cartographic and GI science activities undertaken during the last four years. These reports are received by the Secretary General and progressively uploaded to icaci.org/national-reports/. At the conclusion of the 17th General Assembly in Washington D.C., the President announced the release of a new ICA strategic plan by 2019 (see *ICA News*, No 69, December 2017, p 18). The presentation of the *ICA Strategic Plan 2019-2027* is scheduled as Item

18th general assembly of ica

tokyo · japan

cont...

22 in the Agenda. The first session of the General Assembly concludes with brief reports from the ICA Commissions and Working Groups, followed by presentations of the Commissions for the 2019-2023 term, the Executive Committee nominees, and finally the proposal for hosting the next General Assembly in 2023 and associated International Cartographic Conference.

The second session is devoted almost exclusively to the election of the new Executive Committee and Auditors. Other items of the Agenda include voting on the new Commissions and Commission chairs, and the 2019-2023 budget. The last point of the proceedings is the selection of the place of the next General Assembly; only one bid was received – Cape Town, South Africa.

The official nomination of national delegates is an important formal requirement from all member nations to take part and vote at the General Assembly. It will be useful for the Secretary General to receive nominations of the principal and deputy delegates prior to the General Assembly.

We look forward to seeing you in Tokyo!

Igor Drecki | Editor ICA News | ICA ■

General Assembly of ICA · Session One · Monday, 15 July 2019	
01	Opening and addresses
02	Recognition of the memory of members of the ICA community
03	Roll call of members
04	Adoption of the Agenda
05	Nomination of two scrutineers
06	Members ineligible to vote
07	Exclusion from membership
08	Adoption of the Minutes of the 17th General Assembly, 2017
09	New member nations
10	New affiliate members
11	President's report 2015-2019
12	Secretary General's report 2015-2019
13	Treasurer's report 2015-2019
14	Auditors' report
15	Adoption of the accounts 2015-2019
16	Proposed budget 2019-2023
17	ICA Statutes (proposals from the Executive Committee and New Zealand)
18	Publications report
19	National reports
20	Evaluation of ICA News (motion submitted by Switzerland)
21	Domicile of the ICA
22	ICA Strategic Plan 2019-2027
23	Presentation of commissions and working group activities 2015-2019
24	Commission proposals 2019-2023, including presentation of nominations and Terms of Reference
25	Vote on the number of Vice Presidents in 2019-2023 term, presentation of nominations to the Executive Committee (President, Secretary General & Treasurer, Vice Presidents)
26	Future conference proposals (ICC 2023)
27	Any other business
General Assembly of ICA · Session Two · Saturday, 20 July 2019	
28	Roll call of members
29	Voting eligibility
30	Nomination of two scrutineers
31	Vote on the 2019-2023 budget
32	Election of President
33	Election of Secretary General & Treasurer
34	Election of Vice-Presidents
35	Election of Auditors
36	Commissions proposals 2019-2023 and election of Commission chairs
37	Selection of the place of the 19th General Assembly and the 31st International Cartographic Conference

ica news

25 years ago...

The benefits of information exchange workshops between the Executive Committee and ICA national members are clearly demonstrated below (as well as the important role of the *ICA Newsletter* in improving communication). Perhaps it is worth to consider running them again...

Igor Drecki | Editor ICA News | ICA ■

ICA Newsletter, No 23, May 1994

Workshop for National Committee Chairs

During the 16th International Cartographic Conference [in Cologne, Germany – *ed*], a Workshop for National Committee Chairs was held. The purpose of the May 6 Workshop was to exchange information among the chairs and improve the efficiency of communication between the Executive Committee and national committee chairs. The event was the result of discussions during the General Assembly in 1991. [...]

Despite the relatively short notice of the workshop, 17 people attended, with representation from 13 members [...]. National Committees learn of [ICA] activities from a) ICA publications (especially the *ICA Newsletter*), b) correspondence from the Executive Committee, c) participation in ICA conferences and other meetings, and d) communication with participants in committees and working groups. Copies of the newly compiled ICA Directory [...] were presented to Workshop participants and all welcomed it as a useful source of information. Participants suggested that commissions and working groups conference reports be published in the ICA Newsletter. Ways of publicizing the Petchenik competition were discussed, and national committees were encouraged to find appropriate outlets for announcements within their countries. National committees were encouraged to respond to documents circulated and to requests stated in the ICA Newsletter; they in turn asked for timely response from the Secretary-General on letters to the Executive Committee. [...]

The Workshop for National Committee Chairs was a fruitful initiative, and there was a solid consensus that it should become a regular feature at ICA Conferences. Participants agreed that attendance should be expected just as attendance at the ICA General Assemblies is expected.

Judy Olson and Jean-Philippe Grelot

ica executive committee

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ica news contributions

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Submission Deadlines

15 May for June editions

15 November for December editions

icc 2019 tokyo · japan



The program of the 29th International Cartographic Conference (ICC) in Tokyo is now available from www.icc2019.org. Owing to the various circumstances, the Local Organizing Committee (LOC) had to rearrange the original plan of the conference venue and schedule.

Outline of the revised schedule is shown in the table below (see our website for details). Four major venues, i.e. National Museum of Emerging Science and Innovation (Miraikan), Tokyo International Exchange Center (Plaza Heisei), Telecom Center, and Tokyo Metropolitan Industrial Technology Research Institute (TIRI), are located three to six minutes walking distance from each other.

ICC 2019 PRINCIPAL EVENTS

15 July: **ICA General Assembly Session One** and **ICC 2019 Opening Ceremony** in Plaza Heisei
16 July: **Opening Reception** (Ice Breaker) in Miraikan
19 July: **Gala Dinner** at *Happo-en* Japanese Garden Restaurant
20 July: **ICA General Assembly Session Two** and **ICC 2019 Closing Ceremony** in Plaza Heisei

Four keynote speakers from around the world will be giving enlightening presentations at the event concerning a wide range of topics related to the main theme of the ICC 2019: *"Mapping Everything for Everyone."* The scientific program was developed from more than 700 abstracts and papers submitted to the LOC.

The International Cartographic Exhibition to be held at the Telecom Center will become a showcase of the cutting-edge cartographic products from around the world. The Children's Map Competition will be held at the same venue. TIRI will host some novel activities scheduled for the ICC 2019, including the Joint Meeting of the Japan Cartographers Association and the International Cartographic Association, and a special exhibition of Japanese maps that displays the state of the art in cartography.

Cultural activities are planned for delegates and their companions, including technical visits to cartographic organizations, libraries and museums, as well as several tours of Tokyo and neighbouring cities. An ice breaker opening reception will be held in a 'symbol' zone of Miraikan featuring Geo-Cosmos, the world's first globe-like display. We will also have a gala dinner at Japanese Garden Restaurant *Happo-en* that has a traditional Japanese garden. You are cordially invited to participate in this remarkable event.

For those who have not registered yet, there is still time to do so either by visiting the Conference website (www.icc2019.org) or by visiting our registration desk on-site immediately prior to or during the event. We would appreciate your courtesy in registering as soon as possible. You will be able to register for the entire week or for a day of your choice.

The 29th International Cartographic Conference in Tokyo in July 2019 promises to be a great festival for world cartography.

We hope to see you in Tokyo in July!

Yoshiki Wakabayashi | Secretary General | ICC 2019 Local Organizing Committee | *Japan* ■

ICC 2019 Schedule at a Glance

Venue	Monday 15 July	Tuesday 16 July	Wednesday 17 July	Thursday 18 July	Friday 19 July	Saturday 20 July
Miraikan	Pre-ICC workshop	Technical Sessions Poster Sessions				
		Opening Reception	Young Cartographers Social Gathering			
Plaza Heisei	General Assembly Session One Opening Ceremony	Keynote Presentations Technical Sessions Commercial Exhibition				General Assembly Session Two Closing Ceremony
Telecom Center		International Cartographic Exhibition Barbara Petchenik Children's World Map Exhibition Special Exhibition of Floor Maps				
TIRI		JCA-ICA Joint Meeting Special Exhibition of Japanese Maps				
Kiba Park					Orienteering Event	
Happo-en					Gala Dinner	



Venues of the ICC 2019 in Tokyo, Japan: (clockwise from top left) National Museum of Emerging Science and Innovation (Miraikan), Tokyo International Exchange Center (Plaza Heisei), Telecom Center, and Tokyo Metropolitan Industrial Technology Research Institute (TIRI) | Photographs courtesy of ICC 2019 LOC

ica news early ica awards



For a number of years I was intrigued by the dates of the first two ICA Honorary Fellowships awarded by the ICA (see icaci.org/award-medals/). For some time, the 1979-1980 date was given for honouring Konstantin A. Salichtchev and the 1974 date – for awarding Sándor Radó. They seemed rather ambiguous and puzzling, hence I set myself a task to establish the correct dates and chronology.

The ICA Honorary Fellowship was established in response to a proposal for an ICA award that would provide opportunity to acknowledge outstanding cartographers. The proposal was presented by the outgoing Executive Committee at the closing session of the 5th General Assembly of the ICA held in Moscow (*Polish Cartographical Review*, Vol 8, No 4, 1976, pp 207-209). After its acceptance by the ICA national members, the inaugural ICA Honorary Fellowship was awarded to

Professor Konstantin Alekseyevich Salichtchev on 10 August 1976, just before the official closing of the General Assembly, “in acknowledgement of his outstanding pedagogical and scholarly contributions, his experience in the field of atlas making and his service to the cause of cartography, both nationally and internationally” (*IGU Bulletin*, Vol XXVIII, No 1, 1977, p 68).

The *ICA Report 1976-1980* submitted by the ICA President Ferdinand J. Ormeling to the 6th General Assembly of the ICA in Tokyo in August 1980, provides the definitive date for honouring Sándor Radó: “According to the By-Laws, the Executive Committee may grant an Honorary Fellowship of the Association to outstanding cartographers of its choice. By virtue of this right the Committee presented this award last year [1979] to Professor Sándor Radó, Hungary, on the occasion of his 80th birthday, in recognition of his energetic promotion of and invaluable contribution to international cartography. The presentation took place in Budapest during a special session of the Hungarian Geodetic and Cartographic Society on November 8, 1979.” (*The American Cartographer*, Vol 8, Issue 1, 1981, p 67).

I am pleased to report that the ICA website is now showing the correct dates.

ICC 2019 Pre-conference Workshops	
Place	Wednesday-Friday, 10-12 July
Beijing, China	<i>Geospatial and Cartographic Education – Contemporary Challenges and Opportunities</i> Workshop of the ICA Commission on Education and Training
Place	Thursday-Friday, 11-12 July
Beijing, China	<i>User Experience Design for Mobile Cartography: Setting the Agenda</i> Joint Workshop of the ICA Commissions on Cognitive Issues in Geographic Information Visualization, Location Based Services, Visual Analytics, and Use, User and Usability Issues
Place	Saturday-Sunday, 13-14 July
Tokyo, Japan	<i>Reclaiming through Mapping: Olympic Sites of Tokyo</i> Workshop of the ICA Commission on Art and Cartography
Tokyo and Tsukuba, Japan	<i>Disaster Risk Reduction (DRR) Challenges for Cartography in Big Data Era</i> Workshop of the ICA Commission on Cartography for Early Warning and Crisis Management
Place	Sunday, 14 July
Tokyo, Japan	<i>Atlases and Infographics</i> Workshop of the ICA Commission on Atlases
Place	Monday, 15 July
Tokyo, Japan	<i>Abstraction, Scale & Perception</i> Joint Workshop of the ICA Commissions on Cognitive Visualization, and Generalisation and Multiple Representation
Tokyo, Japan	<i>Cartography as a Cultural Encounter: How East and West have Mapped and Influenced Each Other</i> Joint Workshop of the ICA Commissions on History of Cartography, and Topographic Mapping
Tokyo, Japan	<i>Cartography for Specific Users</i> Joint Workshop of the ICA Commissions on Cartography and Children, Maps and Graphics for Blind and Partially Sighted People, and Planetary Cartography
Tokyo, Japan	<i>Location-based Big Data 2019</i> Joint Workshop of the ICA Commissions on Location Based Services, and Geospatial Analysis and Modeling
Tokyo, Japan	<i>Role and Structure of National Names Boards</i> Workshop of the Joint ICA-IGU Commission on Toponymy
Tokyo, Japan	<i>Spatial Data Infrastructures, Standards, Open Source and Open Data for Geospatial (SDI-Open 2019)</i> Joint Workshop of the ICA Commissions on Spatial Data Infrastructures and Standards, Map Production and Geoinformation Management, and Open Source Geospatial Technologies

merve keskin



Unlike many others, my passion for cartography did not start at early childhood. As a child, I was good at math, yet very much interested in design and communication. My

acquaintance with cartography is rather due to my elder cousin, to whom I have always looked up to, when she was studying geomatics engineering. I was very intrigued by their curriculum especially because it combined science and art, allowed working outdoors, and there was a room for creativity. It did not take me a long time to decide to enrol at the Department of Geomatics Engineering at Istanbul Technical University (ITU) in Turkey.

Throughout my studies, I relished many aspects of cartography mostly visualization, map design and image mapping. My masters thesis was devoted to the investigation of the use of remote sensing imagery with different spectral and spatial resolutions for topographic map production at large, medium and small scales. For six years, I worked as a research assistant at ITU and eventually, became more interested in usability issues of maps and cognitive processes related to map use(r). Later, I moved to Belgium to conduct a joint PhD between Ghent University (UGent) and ITU. My studies focus on using eye tracking, electroencephalogram (EEG) and digital sketch maps to understand how expert and non-expert map users read, interpret and use visual information represented on maps. I truly enjoy this interdisciplinary research, since I collaborate with experimental psychologists, EEG experts, and marketing scholars from UGent and Catholic University of Leuven. Witnessing how scientific cartography evolved through years fascinates me, and borrowing from other disciplines helps me to better understand map users and design maps more effectively.

Since I was an undergraduate student, I have closely followed geomatics and cartographic community and actively participated in the International Cartographic Conferences (ICC). In 2015, I received the ICA Young Scientists Research Scholarship to present a paper *A Comparison of Space-Time 2D and 3D Geo-visualization* at the ICC 2015 in Rio de Janeiro.

Merve Keskin | Ghent University / Istanbul Technical University | Belgium / Turkey | keskin@ugent.be ■

profiles revista brasileira de cartografia

www.seer.ufu.br/index.php/revistabrasileiracartografia/

The Brazilian Journal of Cartography is the official peer-reviewed journal of the Brazilian Cartographic Society published since 1970. The journal publishes original manuscripts on the topics that include, but are not limited to: cartography, GIS, remote sensing, photogrammetry, geodesy, geography, survey adjustments, environmental and urban planning, and computer applications in geosciences. The journal's main goal is to disseminate the advances promoted by original investigations developed in Latin America, in compliance with the fields covered by the Brazilian Cartographic Society.

The Brazilian Journal of Cartography accepts manuscripts written in Portuguese and English. However, authors are encouraged to send their original contributions written in English. The journal's editorial board comprises researchers from different Brazilian institutions, distributed all over the country, with distinguished scientific output (national and/or international) in the fields of knowledge covered by the journal. A partnership between the Federal University of Uberlandia (Brazil) and the Brazilian Cartographic Society ensures the online publication. The journal is open-access, indexed on the Directory of Open Access Journals (DOAJ), and there are no fees for submitting and publishing



a manuscript. All manuscripts have the digital object identifiers (DOI), attached to the CrossRef Registration Agency.

João Vitor Meza Bravo | Editor in Chief | Revista Brasileira de Cartografia | Brazil ■



EEG

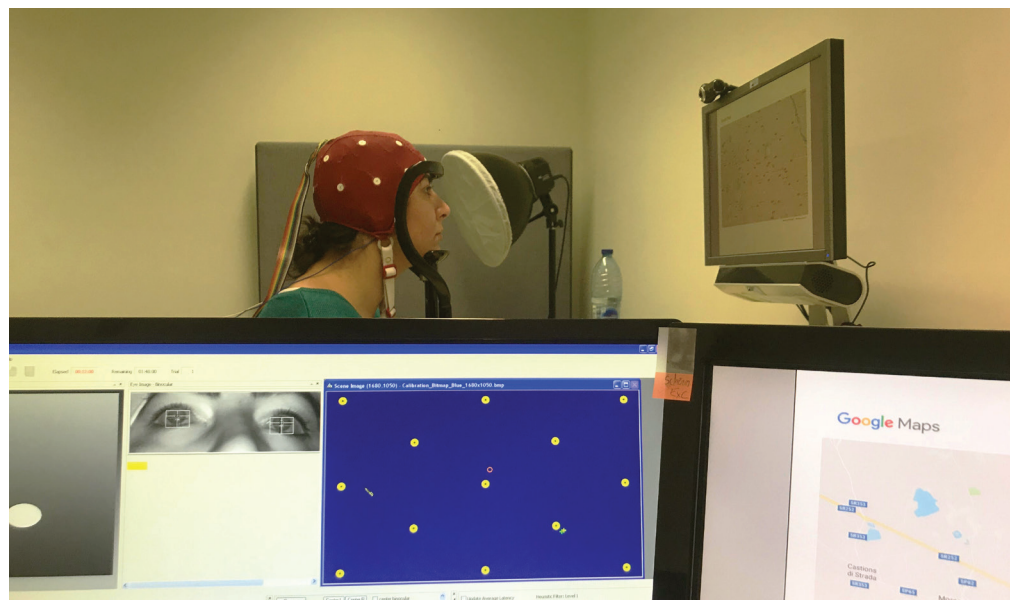


Eye Tracking



Sketch maps

Methods to extract the cognitive load of participants (*above*), footage from a user experiment (*below*).



profiles geospatial information authority of japan

www.gsi.go.jp

The Geospatial Information Authority of Japan (GSI) conducts national surveying and mapping activities, which provide the basis for land management. In 2019, GSI celebrates the 150th anniversary of the founding of the government office that handled cartographic affairs as the originator of modern survey and mapping in Japan. Historically it dates back to 1869 when Cadastral Registration Map Section was established in the Ministry of Civil Service. Later in 1888 it was reorganized as Japanese Imperial Land Survey, and finally in 1945 it became the Geographical Survey Institute. In 2010, the official English appellation was changed to Geospatial Information Authority of Japan.

The role of GSI is to advance utilization of geospatial information through policies related to land surveying and mapping, and to contribute to the improvement of people's lives and the sound development of the national economy. In order to fulfil its role, GSI emphasizes the following four initiatives:

Survey: Determining the Position of Japan – based on the accurate position obtained from VLBI, with 1300 GNSS CORSS, GSI provides the Japanese Geodetic Datum and accurate reference positions; people can know the precise positions anywhere in Japan.

Portray: Mapping Japan – GSI develops a base map for all maps and provides both base maps and thematic maps in digital form and on paper.

Safeguard: Preparing to Fulfil the Mission at the Time of Disaster – GSI promotes disaster response-related measures employing the latest geospatial technology to protect national land and people's lives and assets; GSI acquires geospatial information necessary for grasping the disaster situation by urgently taking aerial photographs and conducting surveys and then promptly disseminating the information.



The recently implemented natural disaster monument symbol on topographic maps of Japan | Image courtesy of GSI

Transmit: Clearly Explaining National Land Characteristics to all Residents – GSI provides geographic information for disaster management that is included as topographic feature information and disaster history information, and is useful for planning disaster prevention and mitigation.

GSI also publishes an accurate map of Japan on the GSI Maps portal (maps.gsi.go.jp), and supports geography and disaster prevention education.

Takuya Nojiri | Geospatial Information Authority of Japan | Japan ■

profiles österreichischen kartographischen kommission

www.oekk.or.at

Austria is one of the founding members of the International Cartographic Association (ICA). In order to have Austria represented as a member nation at the first General Assembly of the ICA in 1961 in Paris, the Austrian Cartographic Commission (ÖKK) was established within the Austrian Geographic Society on 20 March 1961. Hans Bobek the president of the Austrian Geographic Society acted as chair of the ÖKK until 1966 when Erik Arnberger took over, shortly after he had been appointed the first full professor of cartography at the University of Vienna in 1965. Prof Arnberger continued in this role until 1985. Since then the chair of the ÖKK was held by Ferdinand Mayer (1985-1995), Ingrid Kretschmer (1995-2007), and Wolfgang Kainz (from 2007).

The Austrian Cartographic Commission has around 120 individual and institutional members and considers itself the cartographic face of Austria to the world. Members of ÖKK have been actively involved in the work of various ICA Commissions, most recently Commissions on Mountain Cartography, Atlases, and Map Production and Geoinformation Management. Georg Gartner served on the ICA Executive Committee as Vice President (2007-2011), Presi-

dent (2011-2015), and currently as Past President (until 2019).

ÖKK holds member meetings twice a year and organizes scientific events. Highlights of these events are the cartographic conferences of the German-speaking countries – Austria, Germany and Switzerland. Three such conferences were held in Vienna in 1970, 1989 (both included German Democratic Republic), and

2006 (organized jointly with the International Geographical Union and the International Society for Photogrammetry and Remote Sensing). The next conference will take place in Vienna in September next year as EuroCarto 2020.

Wolfgang Kainz | Chair | Austrian Cartographic Commission | Austria ■

Participants of the first China-Sat Workshop co-organized by Austrian Cartographic Commission and held in Vienna, Austria, 11-12 June 2018 | Photography courtesy of ÖKK



Atlases

atlas.icaci.org/

Workshop in Tokyo, Japan

The ICA Commission on Atlases kindly invites you to participate in the ICC 2019 pre-conference workshop on *Atlases and Infographics*. The workshop will take place on Sunday, 14 July 2019, between 14:00-17:00 at ZENRIN (mapping company), Waterras Tower, 2-101 Awaji-cho, Kanda, Chiyoda-ku, Tokyo.

The program has two parts. The first focuses on oral presentations on historical and contemporary advancements in the use of infographics for atlases in two sessions:

- S1-1: *Infographics in Atlases: Concept of definition and classification* by Vít Voženílek et al.
- S1-2: *Erwin Raisz Atlases – an early multi-method approach to cartographic communication* by Eric Losang
- S1-3: *Exploring Personalization of Infographics and Stories in the Atlas of the Ageing Society* by Susanne Bleisch
- S1-4: *Juxtaposing Government and Social Media Data in Delivering Responsive Geospatial Information via an Online Atlas Services: A Case of Criminal Graphics in Jakarta City* by Trias Aditya et al.
- S2-1: *GeoInfographics: an Integrative Information Design Model to Promote Thematic Atlas Innovation* by Xi Tang
- S2-2: *Infographics in Digital Thematic Atlases – Possible Applications* by René Sieber
- S2-3: *Modern storytelling through infographics in early statistical atlases* by Thomas Schulz

The second part consists of an open discussion on recent developments that contribute to new atlas frameworks considering the future use of infographics and the utilization of different graphical techniques.

If you wish to attend the workshop, please visit our website to register your interest: atlas.icaci.org/activities/meetings-and-workshops/.

René Sieber and **Eric Losang** | Chair / Vice Chair | ICA Commission on Atlases | *Switzerland / Germany* ■

Cartography in Early Warning and Crisis Management

map.casm.ac.cn/ewcm/home/

From Rio to Tokyo

During the 2015-2019 term, the ICA Commission on Cartography in Early Warning and Crisis Management organized 21 conferences around the world. The most notable meetings were held in Albena and Sozopol, Bulgaria; Washington D.C., USA; Novosibirsk, Murmansk and Perm, Russia; Wuhan, Nanjing and Shenzhen, China; and in Prague, Czech Republic. Commission members participated in prominent world events, including Geospatial World Forum in Hyderabad and Amsterdam, where they organized special sessions. All conferences and events have been very important, they contributed to the enhancement of the Commission's results and expertise, and highlighted the importance of cartography and GI sciences in Early Warning (EW) and Crisis Management (CM) processes and in Disaster Risk Reduction (DRR). Commission chairs delivered a total of 53 speeches – 31 by Milan Konečný, 14 by Liu Jiping, and 8 by Christophe Lienert.

Our Commission supported activities of the ICA Executive Committee, and actively shared and cooperated with various stakeholders on the outcomes of the United Nations DRR Conference held in Sendai in 2015, to which our Commission, representing ICA, contributed as one of the first organizations. More recently, the Commission developed ideas that contribute to prominent activities of various geospatial organizations and the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) concerning issues relevant to DRR, EW and CM. Another area of involvement concerned challenges associated with big cities and megacities and their need for robust EW and CM. This prompted our Commission to elaborate on and apply the outcomes of the UN-Habitat III, the United Nations Conference on Housing and Sustainable Urban Development held in Quito, Ecuador in 2016. It is very important to cooperate with representatives from public administration of megacities and we had such an opportunity in Shenzhen and Wuhan. We are also analysing the potential of supporting the Red Cross missions (our meetings in Beijing and Sozopol were devoted to this topic).

The Commission also discussed the new scientific and technological trends, especially associated with a dawn of Big Data era. Our research so far focused on developing and demonstrating the potential of cartography to visualize data for various phases of DRR. The above trends and developments should continue in the next four years.

Commission activities

Since our last report (see *ICA News*, No 71, December 2018, pp 8-10), the Commission was involved in a number of meetings and events.

Christophe Lienert, Commission Vice Chair, delivered an invited talk *Multi-use of rain gauges for longterm forest-monitoring and flood management* on 30 October 2018 at the Swiss Federal Institute for Forest, Snow and Landscape Research in Birmensdorf, Switzerland.

On 28 November 2018, Milan Konečný, Commission Chair, delivered a talk on *Disaster Risk Reduction Agenda: Challenges for Modern Cartography in Big Data Era* at the Cartography and GIS Conference organized by the Chinese Society of Geodesy, Photogrammetry and Cartography and the Chinese Association of GIS in Wuhan, China. At the same time, our Commission organized a conference titled *DRR Challenges and Smart Cities* in Shenzhen, China, where Milan Konečný presented a speech on *Risk Reduction Challenges and Concepts for Smart Cities*.

Between 30 January and 2 February 2019, the joint International Conference InterCarto/ InterGIS-25 *GIS Support of Sustainable Development of Territories* and the 3rd International Conference SilkGIS were held in Murmansk, Russia. Milan Konečný delivered two presentations: *Cartography for Disaster Risk Reduction: New potentials in Big Data Era* and an introduction speech of the Round table titled *Disaster Risk Reduction for North and Polar Regions: potentials of geoinformatics and cartography*. The conference keynotes included Vladimir Tikunov, organizer of the event and Chair of the ICA Commission on Geographic Information for Sustainability, and Wolfgang Kainz who delivered a presentation about the position of cartography in the society offering influential solutions. The curious fact about the event was that part of proceedings were held inside the famous and first nuclear power icebreaker ship *Lenin*, which is today a museum.

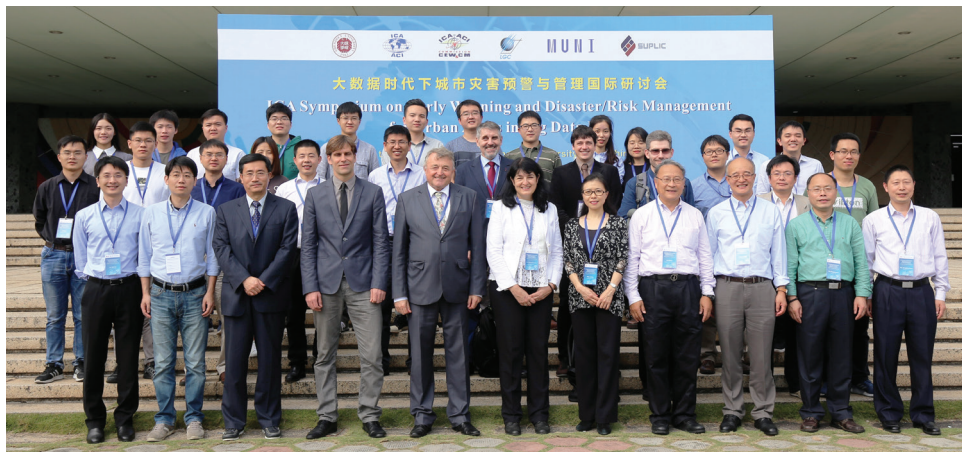
On 19 February 2019, the Swiss Conference on Swiss Lake Level Regulation was held in Zurich, where Christophe Lienert gave an invited talk on *Lake Level Regulation: uncertainties in forecasts and technical methods of downstream actors*.

The Geobuilding-2019: Geospatial Support of Design, Construction and Operation Engineering Structures conference was held in Novosibirsk, Russia, 27-29 March 2019. The event was organized with the support of Novosibirsk State University of Architecture and Civil Engineering,

Source: savedelete.com.

MOST POPULAR INFOGRAPHICS





Participants of the ICA Symposium on Early Warning and Disaster/Risk Management held in Shenzhen, China | Photography Jie Shen

the Association of Construction Organizations of the Novosibirsk Region, the Ministry of Construction of the Novosibirsk Region, and the ISPRS Working Group VII, amongst others. Vladimir Seredovich and Argina Novickaya led the Local Organizing Committee. The conference highlighted the potential of cartography and GIS in new building trends, like elaborations of Building Information Management approaches and issues associated with disaster risk management in cities. Our Commission contributed to the programme by providing a keynote speaker Milan Konečný who spoke about *Emergency Management in the Cities*.

On 18 April 2019, Christophe Lienert delivered an invited talk on *Flood response: challenges in the fields of technological changes, increase of extreme events and real-time communication* to the Overall Report Board with Directors Steering Committee Intervention Natural Hazard held at the ETH Zurich.

The 10th Jubilee International Conference of the ICA Commission on Cartography in Early Warning and Crisis Management with a theme *Early Warning and Crisis Management in the Big Data Era* was held in Novosibirsk, Russia, on 26 April 2019. The event was organized by the Siberian State University of Geosystems and Technologies and coordinated by Igor Musichin, Dimitrij Lisickij, Svetla Yankelevich and Yaroslava Poshivaylo. Milan Konečný delivered a keynote address *Disaster Risk Reduction Challenges: Cartography and Geoinformatics Agenda to Support Complex Solutions*.

Between 11-12 May 2019, the International Conference on Silk-road Disaster Risk Reduction and Sustainable Development was held in Beijing, China. Two invited speeches were delivered by Milan Konečný: *Disaster Risk Reduction and Sustainable Development: how to share and apply international knowledge for better solutions* (Session 5) and *Disaster Risk Reduction: how to design spatial data and knowledge strategy for Silk Road?* (Session 10).

Between 22-23 May 2019, the Asia-Pacific Annual General Meeting of the International

Association of Emergency Managers was held in Shanghai, China. Commission chair Milan Konečný delivered two keynote presentations at the event: *Geospatial Data Support of Emergency Operations in Mega Cities* and *Emergency Operations and New Concepts and Technologies*.

From the outgoing Chair

After 12 years, my leadership of the ICA Commission on Cartography in Early Warning and Crisis Management comes to an end. At this point, I would like to thank the ICA community for their continuous support and for many appreciations we have received over the years for our work. Our contributions, both academic and applied, were always oriented towards the real needs of people harnessing our specialised cartographic approaches and support. Our Commission's interests are very important, although not easy to resolve in many parts of the world.

I would also like to acknowledge the support and interest of three members of the ICA Executive Committee: our liaison Liu Yaolin, Secretary General László Zentai and Past President Georg Gartner. Excellent work was done also by Igor Drecki, editor of *ICA News*, who was always happy to help in propagating our work in this newsletter.

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

Location Based Services

lbs.icaci.org/

Summary of Commission activities 2015-2019

This is a brief summary of the ICA Commission on Location Based Services (LBS) activities

since its establishment by the 16th General Assembly of the ICA held in Rio de Janeiro in August 2015.

LBS Conferences, Workshops and Sessions

Since its initiation by Professor Georg Gartner from TU Wien (Austria) in 2002, the LBS conference series has become one of the most important scientific events devoted to LBS (lbsconference.org). In the past several years, the LBS conferences travelled around the world – with meetings in Hong Kong, Salzburg, Nottingham, Guangzhou, Munich, Shanghai, Vienna, Augsburg, and Zurich. Since 2015, the LBS conference series has become the annual conference of the LBS Commission:

- LBS 2015 held in Augsburg, Germany, 16-18 September 2015 (for conference report see *ICA News*, No 65, December 2015, pp 11-12)
- LBS 2016 held in Vienna, Austria, 14-16 November 2016 (*ICA News*, No 67, December 2016, pp 9-10)
- LBS 2018 held in Zurich, Switzerland, 15-17 January 2018 (*ICA News*, No 70, June 2018, p 9)

Our Commission, together with the ICA Commissions on Geospatial Analysis and Modeling, and Visual Analytics, organized an international symposium on location-based social media and tracking data (LSMTD 2017). The event was run as a pre-ICC 2017 workshop on 1-2 July 2017 in Washington D.C., USA. In addition, the ICC 2017 programme featured five oral sessions dedicated to LBS (for reports see *ICA News*, No 69, December 2017, pp 10-11).

Publications

During the last four years, several publications were developed by the LBS Commission. They provide a general picture of recent research activities within the domain of LBS. Such activities emerged in the last years, especially concerning issues of outdoor/indoor positioning, smart environment, spatial modelling, personalization, context-awareness, cartographic communication, novel user interfaces, crowdsourcing, social media, big data analysis, usability and privacy.

- Yao, X., Huang, H., Jiang, B., Krisp, J. (eds) (2019): Special Section "Social Media and Tracking Data", *International Journal of Geographical Information Science*, 33(4).
- Gartner, G., Huang, H. (eds) (2018): Special Issue "Location-Based Services", *ISPRS International Journal of Geo-Information*.
- Kiefer, P., Huang, H., Van de Weghe, N., and Raubal, M. (eds.) (2018): *Progress in Location-Based Services 2018*, Lecture Notes in Geoinformation and Cartography, Springer, Cham (DOI: 10.1007/978-3-319-71470-7).
- Kiefer, K., Huang, H., Van de Weghe, N., Raubal, M. (eds.) (2018): *Adjunct Proceedings of the 14th International Conference on Location Based Services*, ETH Zurich (DOI:10.3929/ethz-b-000224043).

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- Gartner, G. and Huang, H. (eds.) (2017): *Progress in Location-Based Services 2016*, Lecture Notes in Geoinformation and Cartography, Berlin/Heidelberg, Springer.
- Gartner, G., Huang, H. (eds.) (2016): *Proceedings of 13th International Conference on Location Based Services*, Vienna, Austria, November 14-16, 2016 (ISBN 978-1-907075-02-5).
- Krisp, J. (eds) (2016): Special issue on Progress in Location-Based Services 2015, *Journal of Location Based Services*, 10(1).

Research Agenda

In May 2016, the LBS Commission started developing a cross-cutting research agenda, identifying key research questions and challenges that are essential for the LBS development in the next 5 to 10 years (see *ICA News*, No 71, December 2018, p 11). It is a joint activity of the LBS research community. After revision, the agenda was published as an open access paper at the end of August 2018:

- Haosheng Huang, Georg Gartner, Jukka M. Krisp, Martin Raubal & Nico Van de Weghe (2018): Location based services: ongoing evolution and research agenda, *Journal of Location Based Services* (DOI: 10.1080/17489725.2018.1508763).

For more detail of the LBS research agenda, please refer to lbs.icaci.org/research-agenda/; we encourage you to provide comments.

Website and Mailing List

The regularly updated Commission website (lbs.icaci.org) provides its members with the opportunity to exchange information, as well as informs the wider public about its activities, such as the LBS conference series, and research, e.g. the LBS Research Agenda.

A moderated email list (ica_com_lbs@googlegroups.com) is also available to facilitate communication between Commission members. Currently, 158 members from all over the world have registered and the number is still growing.

Future plans

Several activities have been planned for the coming months:

- Pre-ICC 2019 workshop on *Mobile Map User Experience (UX) Design* to be held in Beijing, China, 11-12 July 2019; together with the ICA Commission on Use, User and Usability Issues, the ICA Commission on Cognitive Visualization, and the ICA Commission on Visual Analytics; more details are available at

use.icaci.org/user-experience-design-for-mobile-cartography-setting-the-agenda/

- Pre-ICC 2019 Symposium on Location-Based Big Data 2019 (LocBigData 2019) to be held in Tokyo, Japan, 15 July 2019; organized jointly with the ICA Commission on Geospatial Analysis and Modeling; more than 25 oral submissions have been accepted and authors of selected contributions will be invited to submit full papers for consideration to the Special Issue of Computers, Environment and Urban Systems interdisciplinary journal on *Geospatial Big Data Analytics for Smart Cities*; more details are available from lbs.icaci.org/locbigdata/.
- LBS sessions at ICC 2019; in addition to the regular oral sessions dedicated to LBS, we will also hold a business meeting at ICC 2019.
- LBS 2019 to be held in Vienna, Austria, 11-13 November 2019; the event will be hosted by TU Wien and the call for full papers, work in progress, and showcases is currently open; high-quality full paper submissions are intended to be published in the *Advances in Cartography and GIScience* of the ICA Series; submission deadlines are 1 June for full papers, 15 July for work in progress, and 15 September for showcases; please refer to lbs2019.lbsconference.org for more information.

Haosheng Huang | Chair | ICA Commission on Location Based Services | Switzerland / China ■

Map Production and Geoinformation Management

mapproduction.icaci.org/

Commission activities

Activities of the ICA Commission on Map Production and Geoinformation Management are increasingly influenced by automated processes, service-oriented architectures and requirements for artificial intelligence. Our efforts to bring together research, government and commercial sectors lead to specific actions, which cover pragmatic hackathons, academic workshops, and scientific publications.

In 2018 we produced a Springer book on *Service-Oriented Mapping: Changing Paradigm in Map Production and Geoinformation Management* (www.springer.com/de/

[book/9783319724331](https://doi.org/10.1007/9783319724331)). The book was published at the beginning of 2019. It addresses a range of issues, including the implementation of semantic web in geoinformatics using big data for geospatial visualization, standardization initiatives, and the European spatial data infrastructure.

The book offers a comprehensive introduction to decentralized map production. Its primary focus is on the new paradigm of “sharing and reuse,” which is based on decentralized, service-oriented access to spatial data sources. The contributing authors have a diverse background, ranging from government and the United Nations, to academia and spatially driven companies.

At the invitation of the ICA Commission on Map Production and Geoinformation Management and the Austrian INSPIRE Maintenance Implementing Group (inspire.ec.europa.eu/inspire-maintenance-and-implementation/), 52 Austrian geoinformation experts met on 6 May 2019 at the Federal Office for Metrology and Surveying to conduct a hackathon on technology geopackage. The intention of the Geopackage Hackathon was to try a specific database technology with simple examples, in order to evaluate the geopackage and build a common understanding of the geopackage encoding.

Geopackage is a file-based database technology (SQLite, www.geopackage.org) that is widely used on mobile devices. It allows data to be cached in order to provide the user with information in situations where there is no Internet connection. In context of geoinformation management, the packaging of geodata and embedding of visualization styles and metadata concerning the content are of high interest to map production. As a result, in addition to geometry, thematic data can be stored in several tables within a single file, thus incorporating the normalized data structures in accordance with e.g. the specifications of the spatial data infrastructure INSPIRE or even requirements for spatial archiving.

The Geopackage Hackathon focused on introducing the current OGC Geopackage Encoding Standard; listing the pragmatic advantages and disadvantages of a geopackage; checking the embedding of geopackage in QGIS, ArcGIS and FME; and evaluating the integration of styles, (INSPIRE) metadata and rasters. Both, the use of a geopackage as a data source for map servers, as well as in Office applications or automated processes for the protection of water sources were presented and set up as examples.

At the hackathon, a clear picture of the geopackage functionality has emerged. Both, possible perspectives and currently existing disadvantages were pointed out. Geopackage standardization is still at an early stage of development with version 1.2 (www.geopackage.org/spec/). With robust requirements and community engagement, useful extensions in



Lukas Kuenzel from ms.GIS (www.msgis.com) introduces mapping procedures with Geopackage | Photography @SquatBird (Karin Wannemacher)

terms of map production processes could be introduced into the standard.

Future plans

The pre-ICC 2019 workshop on *Spatial Data Infrastructures, Standards, Open Source and Open Data for Geospatial (SDI-Open 2019)* is being organised jointly by our Commission, the ICA Commission on Spatial Data Infrastructures (SDI) and Standards, and the ICA Commission on Open Source Geospatial Technologies. The event will be held on 15 July 2019 in Tokyo, Japan. For more information and a registration form please refer to our website or the website of the ICA Commission on SDI and Standards (sdistandards.icaci.org). We are looking forward to your participation.

Markus Jobst and Peter Schmitz | Vice Chair / Chair | ICA Commission on Map Production and Geoinformation Management | *Austria / South Africa* ■

Maps and Graphics for Blind and Partially Sighted People

visualdisabilities.wixsite.com/icahome/

Commission activities

The ICA Commission on Maps and Graphics for Blind and Partially Sighted People has recently published Newsletter No 5 and distributed to its contact list. The newsletter contains articles and short reports about initiatives and programs in Brazil, Chile and other countries. Copies of the newsletter can be requested from Edwin Hunt, Technical Secretary (rrii@igm.cl).

From the outgoing Chair

After eight years of service as the Commission Chair, Alejandra Coll Escanilla is stepping down at the end of this term. She wishes to express her thanks to those colleagues and organisations who have made major contributions to

the Commission and supported its work over the years:

- the ICA authorities, Executive Committee members, other Commission chairs and other active participants in the ICA who have supported the activities of this Commission
- Professor Waldirene Ribeiro Do Carmo for her constant support and participation as Vice Chair of the Commission
- Mr S. Edwin Hunt Wallis, for his dedication in working as Technical Secretary of the Commission
- Mrs Teresa Barrientos and to Miss Jennifer Pinto for their contributions to the active nucleus of the Commission
- authors, in various countries, of the articles and reports published in the Commission's Newsletter
- the organizers of the International Cartographic Conferences for including our Commission in preparations of these events

Professor Escanilla is certain that the Commission will continue to grow and develop further its important contributions in the area of improving access to geospatial information for blind and partially sighted people. She considers that her role of the Commission Chair between 2011-2019 was a challenge but also an honour.

Edwin Hunt | Technical Secretary | ICA Commission on Maps and Graphics for Blind and Partially Sighted People | *Chile* ■

SDI and Standards

sdistandards.icaci.org/

Workshop in Tokyo, Japan

A pre-conference workshop on *Spatial Data Infrastructures, Standards, Open Source and Open Data for Geospatial (SDI-Open 2019)* will be held on 15 July 2019 in Tokyo, Japan, immediately before the 29th International Cartographic Conference. The workshop is jointly organized by the ICA Commission on SDI

and Standards, the ICA Commission on Open Source Geospatial Technologies and the ICA Commission on Map Production and Geoinformation Management.

Mr Reese Plews from Japan, who chairs the ISO/TC 211 Terminology Maintenance Group, will make a special contribution with a presentation about the standardization and harmonization of geospatial information terminology in ISO standards, including the maintenance of a multi-lingual register of terms.

Other presentations on the program cover topics, such as international geospatial information standards and interoperability, UN-GGIM Europe and GeoSTAT requirements for spatial data integration, academic SDIs and open science, open source components for service-oriented mapping, and supply chains.

The day is concluded with an interactive and collaborative mapping session in OpenStreetMap. Delegates should bring their own laptops! Details, including a link for registration, are available on the Commission website.

Serena Coetzee | Chair | ICA Commission on SDI and Standards | *South Africa* ■

Toponymy

www.igu-icatoponymy.org/

UNGEGN Session in New York, USA

The first session according to the new organization model merging the functions of United Nations Conferences on Geographical Names and sessions of the United Nations Group of Experts on Geographical Names (UNGEGN) was held between 29 April and 3 May 2019 in New York, USA. It was thus the first time that an UNGEGN session had potentially the power to pass UN resolutions to be confirmed by the UN's Economic and Social Council (ECOSOC). The merger was a response to the demand for cooperation with the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) that had been established in 2011 also under the umbrella of ECOSOC. Like UN-GGIM, UNGEGN sessions take place twice a year.

In practice, the first new UNGEGN Session proved to be very similar to the 30 sessions held since 1967. Also fears that it may assume a more political rather than expert character did not come true. As usual, reports from countries, divisions, working groups and organizations were complemented by scientific discussions capitalizing on the fact that UNGEGN is a body composed of experts from all sciences relevant to toponymy, i.e. linguists, historians, geographers, cartographers, geodesists, cultural anthropologists and lawyers.

Thus, it provides a forum for comprehensive approaches to toponymy, albeit with a focus on standardization issues, taking into account

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Peter Jordan and Adriana Vescovo representing ICA at the UNGEGN Session in New York, USA | Photography Matjaž Geršič

the cultural perspective that emphasizes the symbolic meaning of place names so relevant in conflict situations.

The Session was attended by over 250 participants from 64 countries, as well as several international organizations such as the International Geographical Union (IGU), the International Council of Onomastic Sciences (ICOS), the International Hydrographic Organization (IHO), and the ICA (represented by Peter Jordan (Austria) as the liaison officer and Adriana Vescovo (Argentina) as observer). Peter Jordan presented the ICA/IGU Commission report and spoke, in a side event sponsored by the Commission, on main toponymic research directions in geography and cartography. In his report he referred to the toponymic symposium and the two toponymic sessions held at conferences coorganized by the Commission since the last UNGEGN session in August 2017 and the latest published proceedings. He also presented a plan for holding four symposia and four sessions in 2019:

- a pre-conference symposium *Role and Structure of National Name Boards* to be held on 15 July prior to the ICC 2019 in Tokyo
- four toponymic sessions held at the ICC 2019
- a symposium on place names and indigenous languages to be held in Clarens, South Africa, 18-20 September
- the 2nd Pan-American Symposium on Toponymy in Rio de Janeiro, 9-11 October
- a symposium *Place Names and Migration* organised on the occasion of the 50th anniversary of the Austrian Board on Geographical Names, Vienna, 6-8 November

Papers and discussions addressed topics associated with 'place names as cultural heritage' including the critical questions of commercial and commemorative names replacing the traditional ones, as well as 'urban naming', again with similar considerations. The most impressive paper in this context was presented by Ingvil Nordland from Norway highlighting Norway's language and place-name policy and pointing at the fact that

arriving at a consistent rule is not an easy task, since widely accepted principles are partly contradictory. She posed a question for whom we standardize names – the local and regional community (perhaps by standardizing place names in their dialect form), the national or the international community?

As usual, special presentations by experts from outside the UNGEGN community augmented the scientific scope. Of the four papers presented, the topic of 'indigenous issues and cultural heritage' delivered by a representative of the Permanent Forum on Indigenous Issues received the widest interest. Describing public representation of minority language names in the northeastern Baltic area (Estonia, Leningrad Region, Karelia), he demonstrated that movements supporting this goal are very much driven by young people, making a comparison to a kind of youth culture. He also convincingly pointed out that minority language names in public space can be the first step on a path to the revitalisation of already abandoned or near extinct languages, since their use triggers public recognition not only of the names, but also of the language the names are expressed in, and this makes people more inclined to learn and practise the language.

The Session concluded with a gesture of gratitude for the outgoing UNGEGN chair William Watt (Australia), who had successfully managed the critical transition process from the old to the new UNGEGN. This was followed by the election of the new Bureau: Pierre Jaillard (France) as the new chair, Hasanuddin Z. Abidin (Indonesia) and Sungjae Choo (Republic of Korea) as vice-chairs, and Trent Palmer (USA) and Wendy Shaw (New Zealand) as rapporteurs.

Peter Jordan | ICA Chair | Joint ICA/IGU Commission on Toponymy | Austria ■

reports ica working groups

Marine Cartography

Nautical Cartography Standards

The authors, representing ICA as members, attended the 42nd meeting of the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (the Board) held in Honolulu, Hawaii between 25 March and 5 April 2019. It was a busy and intense two weeks where the Board met the whole time in plenary to examine fifteen presented submissions and one regional Scheme for certification of hydrographic surveyors and nautical cartographers seeking recognition against the Standards

promulgated by the Board. It was pleasing that two programmes from China at both Category A and B levels and one from Argentina at Category A level were received for consideration against the Standards for Nautical Cartography. The remainder of the agenda was taken up with the business of the Board, with a focus on clarifying its published Guidelines for submissions. IBSC43 will be held in Cartagena de Indias, Colombia (9-20 March 2020).

Focus now is on participation in ICC 2019 where a proposal has been made to the ICA General Assembly to elevate the Working Group to the status of Commission on Marine Cartography. A business meeting has been scheduled and, all things being equal, it will be

the first Commission meeting. The proposed terms of reference will be considered and an action plan drafted. Date and venue will be advised during ICC 2019.

The authors will make a short presentation during the business meeting relating to the work of the IBSC, its membership representing ICA and will seek to encourage future participation from suitably qualified and experience cartographers from within the ICA family.

Two Marine Cartography focused sessions are scheduled within the programme for ICC 2019.

Ron Furness and Lysandros Tsoulos | Chair / Vice Chair | ICA Working Group on Marine Cartography | Australia / Greece ■

Czech Cartography

Although the Czech cartographic community is relatively small in number, it has a long tradition and is still active today. The names of Czech cartographers appear at many ICA events, and most cartographers around the world are regularly invited to conferences, workshops and lectures at Czech universities.

Since 1918, the year when Czechoslovakia was founded, cartography played an important role in the society. During the last 100 years several national atlases were published, cartographic programmes at universities were opened, state mapping agencies were established and a huge number of maps and atlases were produced. 2018 was very important year for Czech cartography and 2019 promises to be no different!

Olomouc ICA spring 2018

The ICA Joint Workshop *ATLASES-COGNITION-USABILITY* took place at Palacky University in Olomouc, Czech Republic, between 27-30 April 2018. It received endorsement of the ICA Executive Committee. The workshop was coorganized by three ICA commissions, the Commission on Atlases, the Commission on Cognitive Issues in Geographic Information Visualization and the Commission on Use, User and Usability Issues. The event aimed at linking the achievements, ideas and research activities of the three cartographic groups and engaging the participants in creative discussions on all the possible themes the commissions deal with. The discussions contributed to the development of cartography as a science. The workshop program consisted of one day seminar, five discussion panels, 21 papers and three practical seminars. The event was attended by 50 participants from 15 countries, headed by ICA President Menno-Jan Kraak, Secretary General and Treasurer László Zentai, and Vice Presidents Pilar Sánchez-Ortiz Rodríguez and

Vít Voženílek. The ICA Commission on Atlases used the event to hold their business meeting. The participants enjoyed the social program, including a historic Olomouc city walk, a visit to the most precious organs in the Czech Republic, a trip to the Macocha Abyss and the Punkva Caves, and a dinner at the Černá hora brewery. The workshop was a great event appreciated by everyone and a wish was expressed to continue with similar joint events in the future. For more information, including abstracts of contributions and photos, please visit spring2018.upol.cz.

500 years of the oldest map of Bohemia

In 2018, Czech cartographers celebrated 500 years of Klaudyán's map depicting Bohemia. At a special event, they presented papers on the evaluation of the map from a cartographic, iconographic and historical point of view. The map is in good physical condition, although it had to be rescued in 1956 by conservators. The map itself faces south and is located in the lower third of the sheet. It depicts the most important Czech rivers, as well as forests, mountain ranges, and main land paths. There are pictorial decorations in the upper two thirds of the sheet; at the top is the Czech and Hungarian King Louis of the Jagiellonian and a gallery of the coats of arms of the countries in which he ruled. Below are allegorically processed images, including provincial dignitaries and cities. The only copy of the map is owned by the diocese in Litoměřice and is kept by the local archive.

Czech National Cartographic Conference

The 23rd Czech National Cartographic Conference will take place between 18-20 September 2019 in Kutná Hora (UNESCO site). The theme of the conference is *Cartography in the Time of Change*. The program committee has identified ten key conference topics and invites all Czech and foreign cartographers to

join us. More information is available from the conference website: 23kk.natur.cuni.cz.

Vít Voženílek | Czech Cartographic Society | Czech Republic ■

Cartographic Events at United Arab Emirates University

In early 2019, Dr Naeema Alhosani and the Geography and Urban Planning Department at the United Arab Emirates University she chairs, organised or coordinated the following events:

- 6, 8, and 10 January 2019: in collaboration with the United Arab Emirates Ministry of Education, Dr Naeema delivered a training workshop *Cartography and Map Design for School Teachers*.
- 17 January 2019: in collaboration with Mr Eric Ray from Esri, the Department delivered a workshop *GIS for Education*
- 4 February 2019: during the Innovation Month at United Arab Emirates University, the Department organized a symposium *Drone Applications in Smart Cities*, during which Dr Naeema delivered a presentation entitled *Learning Takes to the Skies: How to Use Drones in Education*
- 25 February 2019: the Geography and Urban Planning Department organized a session for male students entitled *GIS: Majors, Jobs, and Careers* to encourage the United Arab Emirates University students to apply for studies in geography and urban planning
- 20 March 2019: the Department participated in the International Happy Day during which Dr Naeema delivered a workshop *Happiness Map* to the students.

Naeema Alhosani | United Arab Emirates University | United Arab Emirates ■

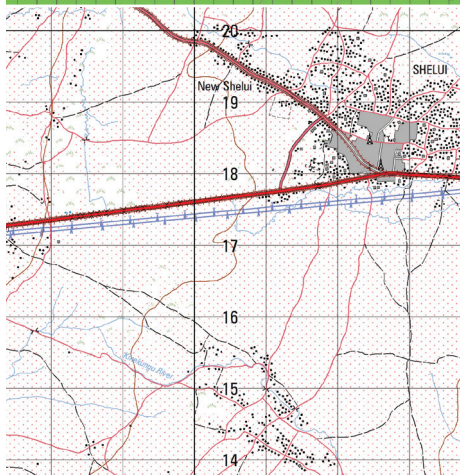
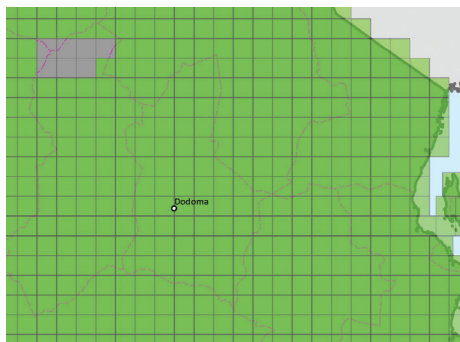
(clockwise from right) Participants of the ICA Commissions Joint Workshop *ATLASES, COGNITION, USABILITY* with historical panorama of Olomouc city in the background; one of the paper sessions; at the historic Olomouc city walk; catching up with friends during a break | *Photography Viktor Cap*



Topographic Mapping of Tanzania

East View Geospatial (EVG), an affiliate member of the International Cartographic Association and a leading provider of authoritative geospatial data and GIS production services and solutions, demonstrates its commitment to support the Tanzania Surveys and Mapping Division (SMD) to complete the country's 1:50,000 scale topographic map series. As the national mapping agency in Tanzania, the SMD is tasked with maintaining the country's various topographic map series. In the case of 1:50,000 scale mapping, Tanzania has long been nearly completely covered at this scale (1,251 sheets total, with some published as early as 1954) except for a small gap of seven sheets. The missing coverage is located in the north central area of the country, centered around Lake Kitangiri and the surrounding areas, along the northern border of the Singida Region.

EVG has been partners with the Tanzania SMD for over a decade, acting as a key distributor of their maps worldwide. With its expertise in international mapping and cartography and custom production capabilities, EVG is a natural fit to assist the Tanzania SMD in completing the 1:50,000 scale series. In producing the missing sheets, EVG will leverage its Commercial Data Services to cost-effectively build authoritative maps using the most current high-resolution satellite imagery. It will also leverage and conflate other data sources for boundaries, geonames, and topographic features. Upon completion of production, the missing map sheets will be available for purchase in various print and digital formats. Beyond the completion of the 1:50,000 scale topographic series, EVG intends to continue working with the SMD with training and build capacity among their staff by way of skills transfer and future joint map series updating initiatives.



Missing coverage (grey tiles) in the Tanzania 1:50,000 scale topographic series (top); detail of EVG 1:50,000 topographic mapping over Tanzania | Images East View Geospatial

EVG's work with the Tanzania SMD highlights its network of international partners, sourcing skills and production capabilities, as well as its commitment to help national mapping agencies the world over bring geospatial analytics in-house through consulting and capacity building services. As an ICA Affiliate Member, EVG looks forward to supporting the international mapping community through its work with the Tanzania SMD and other national mapping authorities.

Grant Bistram | Director of Marketing | East View Companies | USA

calendar

july 2019

02-05: GI_Forum 2019 / AGIT 2019

(organised by the ICA affiliate member UNIGIS International Association) | Salzburg | Austria | www.gi-forum.org/



12: ICA Commission on the History of Cartography Workshop | Controlling the Waters: Seas, Lakes and Rivers on Historic Maps and Charts | Utrecht | Netherlands | history.icaci.org/utrecht-2019/

For the full schedule of ICC 2019 pre-conference workshops run by the ICA Commissions between 10 and 15 July 2019, please refer to page 5.

15-20: 29th International Cartographic Conference and 18th General Assembly | Tokyo | Japan | www.icc2019.org/

september

11-14: AGSE 2019 | Digital Landscapes – Chances for Development (coorganised by the ICA Commission on SDI and Standards) | Stuttgart | Germany | applied-geoinformatics.org/

october

01-03: 18th FIG Land Administration Domain Model Workshop (LADM 2019) | Kuala Lumpur | Malaysia | isoladm.org/LADM-2019Workshop/

25: 50th Anniversary of the + Swiss Society of Cartography + | Bern | Switzerland | www.cartography.ch/

november 2019

02-04: 15th International Conference on Location-Based Services (organised by the ICA Commission on Location Based Services) | Vienna | Austria | lbsconference.org/

april 2020

21-23: 8th International Symposium on the History of Cartography | Mapping the Ottoman Realm: Travellers, Cartographers and Archaeologists (coorganised by the ICA Commission on the History of Cartography) | Istanbul | Turkey | history.icaci.org/istanbul-2020/

june 2020

21-23: FIG2020 Working Week | Smart Surveyors for Land and Water Management | Amsterdam | Netherlands | www.fig.net/fig2020/

50K

SAVE THE DATE

25.10.19
BERN
Anniversary celebration

1969
2019

The Swiss Society of Cartography turns 50 and cordially invites you!

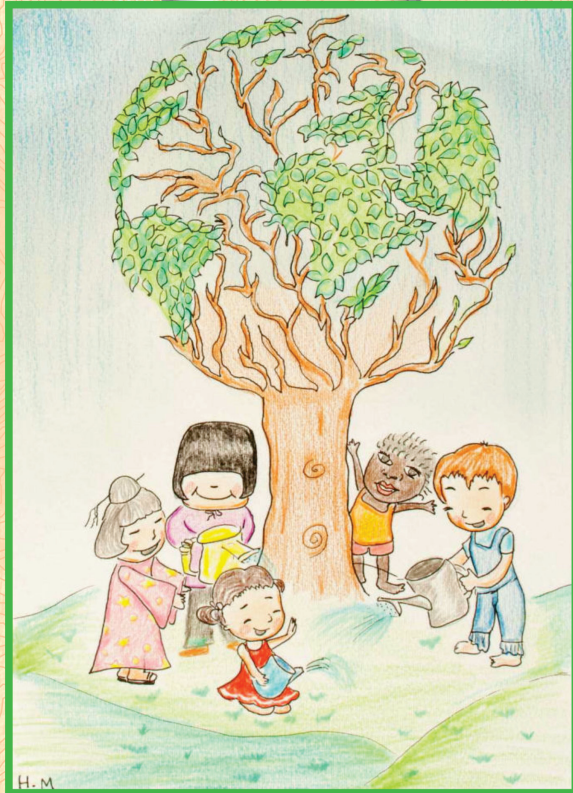
Inscription and further information on: www.cartography.ch

ica affiliate members

- 2011** **Association of Polish Cartographers** | *Poland* | www.polishcartography.pl
Attn: Assoc Prof Joanna Bac-Bronowicz | joanna.bac-bronowicz@pwr.wroc.pl
- 2019** **Australian and New Zealand Map Society** | *Australia / New Zealand* | www.anzmaps.org
Attn: Dr Martin Woods | anzmaps1@gmail.com
- 1999** **Centro Argentino de Cartografía** | *Argentina* | www.centroargentinodecartografia.org
Attn: Jorge Horacio Machuca | cac@centroargentinodecartografia.org
- 2011** **Chinese Cartographic Association (Chinese Taipei)** | *Taiwan-China* | www.ccartoa.org.tw
Attn: Dr Ching Jen Kao | ccartoa@gmail.com
- 2007** **Dubai Municipality** | *United Arab Emirates* | www.dm.gov.ae
Attn: Hussein Mohammed Abdulmuttalib | huseinma@dm.gov.ae
- 2007** **East View Geospatial** | *United States of America* | www.geospatial.com
Attn: Kent Lee | geospatial@eastview.com
- 2005** **Eko-Graf Publishing House** | *Poland* | www.ekograf.pl
Attn: Roman Janusiewicz | ekograf@ekograf.pl
- 2017** **El Servicio Aerofotogrametrico del General Juan Soler Manfredini de la Fuerza Aerea de Chile (SAF)** | *Chile* | www.saf.cl
Attn: Viviana Barrientos Lardonis | viviana.barrientos@saf.cl
- 2003** **Esri** | *United States of America* | www.esri.com
Attn: Mark Cygan | mcygan@esri.com
- 1995** **Geospatial Information Authority of Japan** | *Japan* | www.gsi.go.jp
Attn: GIA Secretariat | gsi-intex@ml.mlit.go.jp
- 2015** **GeoTechVision Enterprise Limited** | *Jamaica* | www.techvisionenterprise.com
Attn: Valrie Grant | valrie@techvisionenterprise.com
- 2007** **German Federal Agency for Cartography and Geodesy** | *Germany* | www.bkg.bund.de
Attn: Prof Dr Ing Hansjörg Kutterer | hansjoerg.kutterer@bkg.bund.de
- 2015** **HERE** | *Germany* | www.here.com
- 1995** **Hexagon Geospatial** | *United States of America* | www.hexagongeospatial.com
Attn: Jon Thies | jon.thies@hexagongeospatial.com
- 2003** **Indian National Cartographic Association (INCA)** | *India* | www.incaindia.org
Attn: Col Sunil S. Fatehpur | secretarygeneralinca935@gmail.com
- 1995** **Institut Cartogràfic i Geològic de Catalunya (ICGC)** | *Spain* | www.icgc.cat
Attn: Jaume Massó i Cartagena | direccio.icgc@icgc.cat
- 1995** **Institut National de l'Information Géographique et Forestière (IGN)** | *France* | www.ign.fr
Attn: Dr Sébastien Mustiere | sebastien.mustiere@ign.fr
- 2007** **Instituto Geográfico Nacional España** | *Spain* | www.ign.es
Attn: Francisco Javier González Matesanz | fjgmatesanz@fomento.es
- 2011** **Land Information New Zealand** | *New Zealand* | www.linz.govt.nz
Attn: National Topographic Office | media@linz.govt.nz
- 2017** **Library and Archives Canada** | *Canada* | www.bac-lac.gc.ca
Attn: Sebastien Daneau | sebastien.daneau@canada.ca
- 1995** **Moscow State University of Geodesy and Cartography** | *Russia* | www.miigaik.ru
Attn: Prof Vasilii A. Malinnikov | lgm@miigaik.ru
- 1995** **National Hydrographic Office** | *India* | www.hydrobharat.nic.in
Attn: Vice Admiral Vinay Badhwar, NM | ia-inho@navy.gov.in
- 2011** **National Land Survey of Finland** | *Finland* | www.nls.fi
Attn: Heli Ursin | heli.ursin@nls.fi
- 2007** **Ordnance Survey** | *United Kingdom* | www.ordnance-survey.co.uk
Attn: Paul Naylor | paul.naylor@ordnancesurvey.co.uk
- 2003** **Regional Centre for Mapping of Resources for Development (RCMRD)** | *Kenya* | www.rcmr.org
Attn: Dr Hussein O. Farah | rcmr@rcmr.org
- 2015** **Surveying and Spatial Sciences Institute (SSSI)** | *Australia* | www.sssi.org.au
Attn: Penny Baldock | chair.sicc@sssi.org.au
- 2015** **UNIGIS International Association** | *Austria* | www.unigis.net
Attn: Prof Dr Josef Strobl | josef.strobl@sbg.ac.at
- 2003** **Union of Chambers of Turkish Engineers and Architects, Chamber of Surveying and Cadastre Engineers (UCTEA-CSCE)** | *Turkey* | www.hkmo.org.tr
Attn: Prof Dr Necla Uluğtekin | hkmo@hkmo.org.tr
- 2015** **United Arab Emirates University** | *United Arab Emirates* | www.chss.uaeu.ac.ae/en/
Attn: Dr Naeema Alhosani | naeemam@uaeu.ac.ae
- 2011** **United Nations Geospatial Information Section** | *United Nations* | www.un.org/depts/cartographic/english/htmain.htm
Attn: Ayako Kagawa | kagawa@un.org
- 1995** **United States Geological Survey** | *United States of America* | cegis.usgs.gov
Attn: Dr E. Lynn Usery | usery@usgs.gov
- 2007** **University of Architecture, Civil Engineering and Geodesy** | *Bulgaria* | www.uacg.bg
Attn: Assoc Prof Peter Penev | ppenev@gmail.com
- 2019** **University of Belgrade, Department of Geography** | *Serbia* | www.gef.bg.ac.rs/en/
Attn: Dr Aleksandar Đorđević | adjordjevic@gef.bg.ac.rs
- 2017** **University of Lay Adventists of Kigali** | *Rwanda* | www.unilak.ac.rw
Attn: Dr Gabriel Habiyaemye | research@unilak.ac.rw
- 1995** **University of Twente, Faculty of Geo-Information Science and Earth Observation (ITC)** | *The Netherlands* | www.itc.nl
Attn: Dr Corné van Elzakker | c.vanelzakker@utwente.nl
- 2015** **Wuda Geoinformatics** | *China* | www.geostar.com.cn
Attn: Song Aihong | songaihong@geostar.com.cn

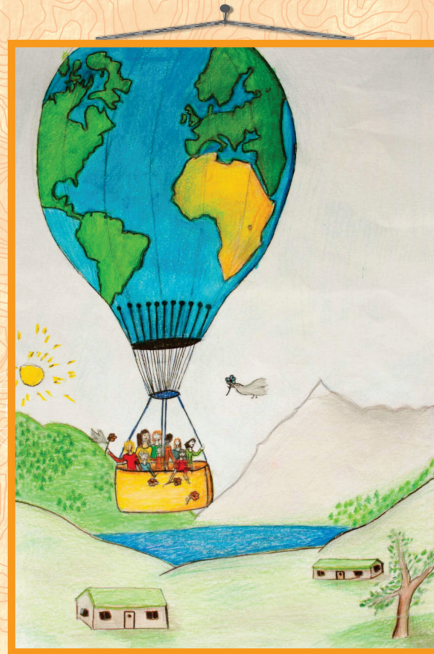
1995 – year of ratification by the ICA General Assembly
65 – affiliate member's profile published in *ICA News* (issue number)

children's map gallery 2011 participants



Hosein Mirzadeh Darzi | 9 |
World is Like a Tree | Sadoq
Primary School: Qom | Iran

Aimee Elliott | 12 | *Globe Trotting
is Getting Easier* | Aquinas College:
Tauranga | New Zealand



Victoria Dontsova | 11 | *The Sky is the
Limit* | Møhlenpris Skole: Bergen |
Norway

Helene-Marie Guillaume | 14
| *Boy with the Balloons* | Die
Hoerskool Menlopark: Gauteng |
South Africa

Belén Trinidad Almonacid Arjel |
15 | *The World in Just One Network*
| Colegio Domingo Santa María de
Puerto Montt: Puerto Montt | Chile

