# Minutes of the 12<sup>th</sup> General Assembly, August 10-16, 2003, Durban

## 1.Opening

President Rystedt opened the General Assembly and welcomed the delegates at 9.00.

## 2.Roll call

40 national delegates, who were members of ICA in 1999, were present, as well as two observers, from Lithuania and Kenya.

## 3. Adoption of the Agenda

The agenda of the 12<sup>th</sup> General Assembly was adopted as circulated after a motion presented by Australia and seconded by Canada.

## 4.Nomination of two scrutineers

Nico Bakker, Netherlands and Patrik Ottoson, Sweden, were nominated as Scrutineers of the 12<sup>th</sup> General Assembly and elected by acclamation

## **5.**Members inelegible to vote

Under item 5 the Executive Committee listed the following members whose voting rights have been suspended since the 11<sup>th</sup> General Assembly (Azerbaijan, Belarus, Cyprus, Indonesia, Kenya, Latvia, New Zealand, Nicaragua, Nigeria, Panama, Sudan, Tunisia). The EC proposed that voting rights be restored to Indonesia, Latvia and New Zealand, as these countries had made up their financial arrears. It also proposed to add the following to the list of countries whose voting rights have been suspended: Albania, Brazil, Estonia, Guinea, Madagascar, Nicaragua, Philippines, Qatar, Salvador, Uganda, Ukraine and Vietnam, as these countries had not paid their subscription fees for several years. Voting on item 5 was by ballot. The proposal was approved by 30 votes in favour, one abstention and none against.

## 6. Membership withdrawals

Under item 6, the Executive Committee proposed the readmission of Kenya (which was withdrawn at the previous General Assembly) and the withdrawal of member nations whose voting rights had already been suspended by the 11<sup>th</sup> General assembly in 1999 and which have never answered any letter sent since that time. Those concerned were Azerbaijan, Belarus, Cyprus, Philippines and Uganda.

Voting on item 6 was by ballot. The proposal was approved by 27 votes in favour, 1 against and 3 abstentions.

## 7. Adoption of the minutes of the 11<sup>th</sup> General Assembly, 1999

The minutes of the 11th General Assembly held in Ottawa in 1999 were circulated during the Beijing conference and again on April 20, 2003.

The minutes were adopted as circulated on a motion from Canada seconded by the United Kingdom.

## 8. New member nations

One member nation had been admitted since the 11<sup>th</sup> General Assembly and was proposed for ratification by this General Assembly: Lithuania, represented by the Lithuanian Cartographic Society.

Lithuania was adopted as a new member on a motion from the Netherlands seconded by the United States of America.

## 9. New affiliate members

Under item 9, the Executive Committee proposed the ratification of the following affiliate members, according to article 3 of the statutes: Union of Chambers of Turkish Engineers and Architects - Chamber of Survey and Cadastre Engineers (Turkey), Indian National Cartographic Association, (India), ESRI (United States), Navigation Technologies (the Netherlands).

EC stated that the Hellenic Cartographic Society had become the national representative of Greece, and had therefore withdrawn as affiliate member.

Elsevier Science Limited (Great Britain), Heritage Documents and Manuscripts Centre (Kuwait), Tokyo Inshokan Printing Company (Japan) and Aero Sensing (Germany) had also withdrawn as affiliate members.

On a motion by Australia seconded by the United States, the ratification of UCTEA-CSCE, INCA, ESRI and NavTech as new affiliate members was accepted.

## 10. President's report 1999-2003

When I took up the position as President in 1999, my three main goals were to:

- Improve the image of ICA and the value of being an ICA member.
- Involve the Vice Presidents in the operations.
- Improve the publications.

# The Image of ICA and Membership Value

The first of these goals is problematic. We really have to work on our image. Cartography has an image of being old fashioned and connected only to paper maps. Our dilemma is that so many people are interested in maps - the older the better. Many of us have experienced that and have had problems in communicating the contemporary status of cartography and mapping as being a science and profession at the forefront of research and technology.

The Secretary General and I started the work on a Strategic Plan. The road to achieve a strategic plan is rather straightforward. We need to formulate a vision and set our goals and objectives with the mind to serve our members. After that we list the actions needed to reach the goals. For ICA, it is a journey together with the members of the Executive Committee, the commissions and the members. All must join and participate. The strategic plan has been on the agenda of all EC meetings during this term. In May this year all commission chairs were invited to a meeting in Budapest, where the SP was the main issue. Now it is time for the delegates of the General Assembly to contribute with

their views. What do you want from ICA? Obviously, you. want more than ICA delivers today. Never before have so many members been behind in paying the membership fee.

#### **The Executive Committee**

In my inauguration speech in Ottawa, I promised to increase the involvement of the Vice Presidents. I want to take this opportunity to thank the members of the Executive Committee. First of all I say a thanks to all of them for the liaison work. All of us on the Executive Committee have the duty to keep in contact with two or three commissions and, if possible, attend the commission meetings. By doing that and reporting at the EC meetings we have a rather good knowledge of the commission work. My first specific words of thanks go to Ferjan Ormeling. His service as Secretary General and Treasurer has been excellent. Since ICA has no employees, it is a heavy amount of work to take care of everything that has to be done. Since we have no one with French as a native language in the EC, he has also done all translations to French. I now go to the Vice Presidents in alphabetical order. Milan Konecny has been a kind of foreign minister. He has represented ICA at a number of meetings of Global Map and Global Spatial Data Infrastructure, which also included the World Summit for Sustainable Development in Johannesburg. He has been able to cover most of the travel costs from other sources than ICA, which is especially appreciated. Li Li made a tremendous effort in the organisation of our conference in Beijing 2001. She has also promoted ICA and cartography in China and elaborated the cooperation with the International Geographical Union in an attempt to create a World Water Atlas. Elri Liebenberg has been our contact with the Local Organising Committee for ICC 2003. She has always done her best to answer our questions on the progress in the planning of the conference. Robert MacMaster has been assigned to publications. He has together with me and Ferjan tried to convince Elsevier that there should be an International Cartographic Journal. The first signs from Elsevier were positive, but then they decided to reject our proposals. He has written numerous letters and held many conversations to pave the way for ICA publication ventures. Takashi Morita is now the ICA representative in the Steering Committee for Global Map. He has had the difficult task in the EC to watch the terminology. Kirsi Virrantaus has been very instrumental in the development of the Strategic Plan. Since she until last year chaired the FIG commission for Education, she has represented ICA at several FIG meetings. Alberta Auringer Wood got a special task to organise procedures for an ICA archive and to find a home for it. She has been able to get IGN of France to host the ICA archive in Paris. She has also been watching us to follow the statutes and by-laws of ICA. Thanks to her ICA scarves and ties may soon be available. Finally, we have the past president Michael Wood. He has done most of the work with the Strategic Plan. He has also been very helpful in our struggle with the English language. He has been the representative to IMTA, the International Map Trade Association, and a member in their jury when exhibited maps have been judged for prizes. Many, many thanks to all of you for your work and loyalty in helping me carry out this goal.

#### **Publications**

The third goal was about publications. Our science has been suffering from not having a clear channel for scientific papers. There should be an international journal for cartography and geographical information science, where both PhD students and established researchers could publish refereed papers. As you already know, Elsevier turned our proposal down. In our opinion they made a too narrow market research. Now

we are going to establish a closer cooperation with some of the existing journals. The commission chairs have been encouraged to explore conference contributions and to elaborate such ones to a standard in line with academic requirements. In order to do so ICA now claims the copyright to conference papers. That means that the author is not allowed to re-publish a conference paper without consent from ICA. As you know conference proceedings are considered as grey literature and not acknowledged as refereed publications. Robert MacMaster will give you more details in the Publications Report.

#### **The Commissions**

The commissions form the backbone of the association. Most of the work is carried out in the commissions and the results and findings are disseminated via reports from commission meetings and seminars. Since there are 18 commissions it will be too lengthy to even make a summary of what they have achieved. There will be a session when you will get a chance to contact the commission chairs. There are also reports available at the homepage of ICA <u>www.icaci.org</u> To all commission chairs and commission members I convey my sincere thanks.

#### **UN Activities**

UN organises regional cartographic conferences. Every 3rd year there is one for Asia and Pacific and every 4th year one for the Americas. The regional cartographic conference for Africa has changed to a meeting of CODI (Committee of Development Information) under the auspices of ECA, the Economic Commission of Africa. CODI has three sub-committees, Statistics, Information Communication Technology and Geo-Information. As president of ICA, I have been invited and presented papers at the following UN meetings: New York 2000, Kuala Lumpur 2001, Addis Ababa 2001 and 2003 and Okinawa 2003. I have also been active to give ICA a higher profile at these meetings and have asked UN to invite more ICA representatives.

ICA is also a supporter of the UN Geographic Information Working Group. I really think that the UN deserves better information for their operations. Today, the Security Council has to rely on paper maps. Versatile mapping is badly needed in many fields. However, several UN organisations like FAO and UNEP are rather advanced. An important UN activity is standardisation of geographical names. The most common complaint on maps concerns place names and many of you are active in this field in your daily work.

#### National Conferences and Symposia

ICA sponsors several events by allowing the organisers to use the ICA logo. The precondition for that is that one ICA representative is involved in the program committee and invited to participate. Due to limited time and travel funds we are not able to support all countries. I have myself been able to visit several countries, but regretfully I have not been able to accept all invitations. In some cases someone else on the Executive Committee or a commission chair has been able to attend. Please, invite us in good time. Our regular work must also be done and the ICA work has to fit in between projects, teaching and research.

#### Acknowledgement

In addition to my gratitude to the ICA community, I would like to thank my employers, National Land Survey and Gävle University, for office space and communication facilities. And last but not least, my wife. She is very patient with my long working days and travel.

## 11. Secretary-General's report 1999-2003

According to the statutes, the Secretary General and Treasurer is responsible for the administration and the general running of the Association ; before presenting the accounts to the General Assembly of Delegates, the Secretary General and Treasurer must submit them to the two auditors for audit : the Treasurer's report is the next item in the agenda of the General Assembly.

Thus the Secretary General is the permanent liaison between the Executive Committee and the ICA members : representatives of national and affiliate members and of committees, commissions and working groups. The Executive Committee produced several reference documents during the 1995-1999 period, as guidelines facilitating the activities of the association. Some of these guidelines have been modified during the 1999-2003 period. Coordinated by the Past president, the Executive Committee has added guidelines for ICA officers, including members of the Executive Committee. The Secretary-General prepared their publication, which was effected, thanks to the Netherlands Cartographic Society, in a special issue of its journal, called ICA Organizations and activities, following the practice established earlier by the previous Secretary-general Jean-Philippe Grelot

In such organisations as the International Cartographic Association, a key point is to provide continuous efficient communication. I urge you to inform the Secretary General as soon as changes occur with the contact person or the contact address in your national committees. Electronic tools will help us in this respect.

Much time was spent on the preparation and organization of an ICA website. This site contains, apart from the homepage,

-a list of forthcoming events
-a news section
-the ICA News
-guidelines for competing in the Barbara Petchenik contest,
-the text of the Mission of the ICA
-an ICA publications list
-a reference section, with -the statutes and bylaws
-guidelines for ICA officers
-guidelines for national committees
-publication procedures
-guidelines for Conferences & General Assemblies
-standard call for papers (guidelines for journal/news publishers, national committees, organizing committees, etc.)
-guidelines for ICA Endorsement of Conferences
-guidelines for travel awards

-a section showing ICA achievements
-a section showing ICA awards
-a section on the ICA commissions with their terms of reference and activities
-the addresses of the member countries and affiliate members
-the addresses of the Executive Committee
-links to sister societies
-other links

Especially for this General Assembly a section on nominations for ICA officers and on the General Assembly itself, with the agenda and relevant items was added. The ICA website was created by the Utrecht University cartographer **Ton Markus**, and is maintained on a day to day basis by **Martijn Storms**.

The work of our ICA News editor **Graciela Metternicht** deserves special mention, especially so as she has been able to engage the interest and cooperation of the commission chairs for this medium in a stimulating way.

All along the last eight years in the position of Secretary General of ICA, you gave me an opportunity to contribute to the development of cartography worldwide. More important, you invited me to numerous meetings and discussions: I should like to mention especially the meetings with the Greek, Indonesian, Austrian, Hungarian, Korean, Spanish, Russian, Finnish, Cuban and Dutch cartographic societies, and I would like to thank you for these opportunities.

#### 12. Treasurer's report 1999-2003

Since the 11th General Assembly in 1999 the financial situation of the International Cartographic Association was reported annually to meetings of the Executive Committee. At these meetings the arrears in payment of membership dues were reported as well, and the support of vice-presidents to stimulate defaulters to pay up was sought.

Meanwhile the Secretary-general and treasurer maintained three sets of documents:

-detailed tables of operations during the period; each financial operation was entered here with an identifier written on the accounting documents (invoices, credit notes, bank notices, etc.), for use by the treasurer of the Association and a professional auditor ; income categories discerned ar:e fees, publications, interest and others ; expenditure categories are: office costs, travel, commissions, publications, promotion and miscellaneous. Three types of accounts are used : bank accounts (in both euro's and dollars), a savings account, and deposit accounts in both euros and dollars. It took some time negotiating whether ICA would be enabled under Dutch law to benefit from savings and deposit accounts. Because we had no yearly general assembly we did not qualify, however. Only when the president enabled us to be registered in Sweden as a non-profit organization did we qualify for the benefits of non-profit organizations.

-generalised statement of receipts and expenditure that reviewed the financial situation of the Association as compared to the budget voted by the General Assembly in 1999;

-a table with national and affiliate member fees.

There has not been a single currency unit, as accounts were kept both in dollars and euros. In order to take account of the fluctuating relationship between the two currencies during this term the professional auditing firm (which has presented the final statement of revenue and expenditure in dollars) has introduced the item 'exchange difference'.

The accounts were reviewed by a professional auditor for the period 1st September 1995 to 30 June 1999. All relevant documents were copied to the Elected Auditors.

The Executive Committee received and approved the Treasurer's Report for the full period 1st July 1999 to 30 June 2003. This was submitted to the Elected Auditors and to the Delegates of the 12th General Assembly of the International Cartographic Association in Durban, South Africa, 16 August 2003 as follows.

At the end of June 2003, the statement of receipts and expenditures indicates :

<u>income</u> (actual : US \$ 202,770 ; budget : US \$ 202,000)

- national members subscriptions were 6 % lower than budgeted : \$117,000 against \$123,000;
- affiliate members subscriptions were 70 % higher than budgeted : \$70,000 against \$41,000 ; this is because one major affiliate member paid up its dues after 8 years
- sales of publications are only a third of the amount budgeted : \$4,600 against \$15,000;
- interests on investments has been only half the amount budgeted : \$10,800 against \$20,000 ; interest rates decreased dramatically, and we had problems in gaining recognition as a non-profit organisation
- miscellaneous: no income was generated that could not be entered under one of the previous items.

<u>expenditures</u> (actual : US \$200,221 ; budget : US \$212,000) ;

- Secretary's office expenditure was higher than in the previous term : \$4,162 against \$2,425 (postage could not be paid by Utrecht University)
- Total office costs and travel are almost in line with the budget : \$115,500 against \$112,000 ; there has been a sizeable increase in travel costs. Vice presidents received \$2500 each as travel budget and the ICA attendance at UN meetings and participation in other new initiatives such as GSDI and Global Map strained the travel budget.
- Part of the Offices and travel expenses has in fact been spent on the travel awards. This Executive committee allocated altogether \$30,488 to travel awards for the Beijing and Durban conferences during the term from July 1999 to June 2003. Since then some US\$5000 has been added.
- Commissions and working groups have used 75 % of their revised budget : \$45,000 against \$60,000 ; a number of commissions have announced that they will present outstanding claims within the budgets allotted to them in Durban ;
- Publications, here almost \$19,000 was used of a budgeted \$25,000. Of this amount \$12,500 was used for the ICA News. Seminars and conferences, promotion and miscellaneous are on line with budget : \$55,550 against \$67,000.

• ICA funds available at the end of period (30/6/2003) amount to \$149,000 (\$147,00 at 01/07/1999).

Statement of revenue and expenditure over the period 1 July 1999 up to 30 June 2003 (in US dollars)

|  | Actual             | Budget      | Actual                    |  |
|--|--------------------|-------------|---------------------------|--|
|  | 1999-2003          | 1999-2003   | 1995-1999                 |  |
|  |                    |             |                           |  |
| Revenue                                    |                    |             |                           |  |
|  |                    |             |                           |  |
| National member fees                       | 117.000            | 123.000     | 100.000                   |  |
| Affiliate member fees                      | 70,000             | 41,000      | 35.600                    |  |
| Sales of publications                      | 4,592              | 15,000      | 21,800                    |  |
| Interest                                   | 10,888             | 20,000      | 19,350                    |  |
| Miscellaneous                              | 0                  | 2,000       | 10,000                    |  |
| Misecianeous                               | 202,770            | 202,000     | 186,863                   |  |
|  | 202,110            | 202,000     | 100,000                   |  |
| Expenditure                                |                    |             |                           |  |
| Traval averages primarias                  | E4 0E2             |             | 24 422                    |  |
| Travel expenses primaries                  | 54,052             |             | 21,432                    |  |
| Other travel expenses                      | 57,292             |             | 38,798                    |  |
| Office costs                               | 4,162              |             | 2,425                     |  |
| Total offices and travel                   | 115,506            | 112,000     | 62,655                    |  |
|  | 44 740             | <u> </u>    | 40.000                    |  |
| Commissions and working groups             | 44,742             | 60,000      | 46,396                    |  |
| Publications                               | 18,942             | 25,000      | 22,460                    |  |
| Promotion                                  | 9,033              | 10,000      | 23,406                    |  |
| Miscellaneous                              | 0                  | 5,000       | 4,497                     |  |
| Exchange difference                        | <u>11,998</u>      | 0           | <u>24,123</u>             |  |
|  | 200,221            | 212,000     | 185,537                   |  |
| Net result                                 | 2,549              | -10,000     | 1,326                     |  |
| Notes to the balance sheet as at           | 30 June 2003 (in U | IS dollars) |                           |  |
| Accesto                                    |                    |             | 30.06.3003                |  |
| Assets                                     |                    |             | 30-06-2003                |  |
| Cash and banks                             |                    |             |                           |  |
| Dollar account                             |                    |             | 35,605                    |  |
| Dollar deposit account                     |                    |             | 15.024                    |  |
| Euro account                               |                    |             | 3,662                     |  |
|  |                    |             | <u> </u>                  |  |
| Euro savings account                       |                    |             | <u>100,314</u><br>154,605 |  |
| Equity and liabilities                     |                    |             | 134,000                   |  |
| Decense fund                               |                    |             |                           |  |
| Reserve fund<br>Reserve fund at 01-07-1999 |                    |             | 147.056                   |  |
|  |                    |             | 147,056                   |  |
| Net result                                 |                    |             | 2,549                     |  |
| Reserve fund at 30-06-2003                 |                    |             | 149,605                   |  |
|  |                    |             |                           |  |
| 1  |                    |             |                           |  |

Membership dues arrears

Members who have not paid their annual subscription fees over the period 1992 to 2002 account for a 'deficit' of US \$ 42,250 : \$ 40,000 from national members and \$ 2,500 from one affiliate members :

•

- 1994 : 7 national members for US \$ 1750 ;
- 1995 : 9 national members for US \$ 2250 ;
- 1996 : 11 national members for US \$ 2750 ;
- 1997 : 12 national members for US \$ 3000 ;
- 1998 : 16 national members for US \$ 4000.
- 1999: 17 national members for US \$ 4250.
- 2000: 20 national members for US \$ 5000.
- 2001: 28 national members for US \$ 7000.
- 2002: 39 national members for US \$ 9750
- 2002: 1 affiliate member for US \$ 2500

This has been an ongoing concern for the Executive Committee when preparing the budget for the 2003-2007 period. But despite this, funds available at the end of the 1999-2003 period would be \$80,000+\$30,000 = \$110,000. This means more than twice the yearly costs of operation of the Association, and two times the amount recommended by the International Council of Scientific Unions.

It is our hope to involve vice-presidents more in the day to day affairs of the ICA by making them responsible for specific fields identified in the strategic plan (education, science, professional practice, society). This would require a larger budget for them to cover travel expenses. At present, in view of the reserves, there seems to be no immediate need to increase the basic membership unit (now at US \$250). In 2007 an increase will probably be necessary.

## **13. Auditors' report Statement of the honorary auditors**

Hilton hotel, ICC Durban August 9, 2003

We examined the detailed lists and randomly examined original documents. In our opinion, the financial statements give a true and fair view of the financial position of the International Cartographic Association as of 30 June 2003 and for the period of 1 July 1999 through 30 June 2003. We concur with the conclusion of the professional auditors, BDO Accountants, that the accounts are in accordance with generally accepted accounting principles.

Respectfully Signed by the honorary auditors

Jaume Miranda, Judy Olson

## 14. Adoption of the accounts

The accounts were adopted on a motion by South Africa, seconded by Israel, which was passed unanimously.

#### 15. Preliminary budget 2003-2007

The preliminary budget has been prepared under the following assumptions:

- Allocation of affiliate member fees to the Promotion and solidarity fund
- No change in the basic membership unit which is still set at US \$ 250 a year
- No change in the total subscriptions received from member nations
- No change in the profits on investments
- No change in the total amount allocated to commissions and working groups
- No change in the funds allocated to travel and to the secretariat

| Preliminary budget 2003-2007 - In US \$ |         |                                |  |  |  |
|---|---------|--------------------------------|--|--|--|
| cotisations des nations                 | 120 000 | national members fees          |  |  |  |
| cotisations des affiliés                | 60 000  | affiliate members fees         |  |  |  |
| ventes d'ouvrages                       | 8 000   | sales of publications          |  |  |  |
| produits financiers                     | 10 000  | interest on invests            |  |  |  |
| vente des cravates                      | 40 000  | sales of ties and scarves      |  |  |  |
| divers                                  | 2 000   | miscellaneous                  |  |  |  |
| total des recettes                      | 240 000 | total receipts                 |  |  |  |
| secrétariat & voyages                   | 115 000 | offices and travel             |  |  |  |
| commissons, gr. travail                 | 60 000  | commissions & w.groups         |  |  |  |
| publications                            | 20 000  | publications                   |  |  |  |
| promotion                               | 10 000  | promotion                      |  |  |  |
| bourses de voyage                       | 30 000  | travel Awardees                |  |  |  |
| production des cravates                 | 35 000  | production of ties and scarves |  |  |  |
| divers                                  | 5 000   | miscellaneous                  |  |  |  |
| total des dépenses                      | 275 000 | total expenditures             |  |  |  |
|   |         |                                |  |  |  |
| comptes, fin de période                 |         | funds at end of period         |  |  |  |
| compte courant                          | 80 000  | bank account                   |  |  |  |
| fonds de promotion                      |         |                                |  |  |  |
| et de solidarité                        | 30 000  | promotion & solidarity fund    |  |  |  |

Preliminary budget 2003-2007 - in US \$

In this proposal there is a \$35 000 deficit, to be paid from the reserves. Technically and financially, this will not create a problem as the reserves of the Association are significantly higher than the recommendation made by the International Council for Science, ICSU, for non-governmental, scientific organisations. The decision by the Executive Committee not to recommend an increase in the subscription unit, is meant to deliver a strong message to the member nations. It is the reponsibility of national delegates to the General Assembly to commit themselves and all member nations to pay the annual fees if they want to have an active and sound ICA.

The provision in the budget for a stock of ICA ties and scarves was questioned by the UK, because it tied up capital. Israel was in favour of assessing the demand for ICA scarves and ties, while Australia considered that there would be many commercial firms outside North America who could offer lower prices and carry the risk. Prior to the discussion on the final budget proposal Australia moved that in any case the deficit should not surpass US\$40 000. This was seconded by the United States, and all were in favour, except for Israel which abstained. President then adjourned the Assembly for lunch. He asked delegates to look at the posters put up by the commission chairs in the room where lunch was served, showing their activities for the past four years. The Assembly resumed after lunch.

#### 16. Statutes

At this point the number of delegates present and eligible to vote had increased to 42, while postal votes had been received from Belgium, Latvia, Romania, Slovakia, Venezuela and Yugoslavia. As Belgium was present in the General Assembly, this brought the number of eligible members voting on this issue to 47. Under agenda items 5 and 6 the number of members eligible to vote had been reduced to 62, and as changes in the statutes require an absolute majority of the voting members of the Association (article 28), the necessary number of votes to accept the proposed changes was 32.

Proposals for changes in the statutes (item 16) have been circulated on April 20, 2003. A form for voting by correspondence on these proposals was circulated in June 2003, according to article 28 of the statutes.

These proposed changes are based on the following considerations:

-the wish to allow for personal members

-the wish that the statutes reflect the increased emphasis on GIScience

-the wish to have new categories of affiliate members

-the wish to give non-paying members observer status instead of being struck from the membership list, and their voting rights to be reinstated when they pay up, to be determined by EC.

The proposed changes were highlighted as follows:

#### Statutes of the International Cartographic Association, the International Society for Cartography and Geographical Information Science (ICA)

#### Article 1a and 1b Aims of the Association

The <u>ICA</u> has the following aims :

a) The advancement of the study of cartographic <u>or geographic information science (GIS)</u> problems. In particular it is concerned with the processing, storage and analysis of source material and the design, construction, reproduction and display techniques of maps and associated forms of graphic communications. To this end, co-operation with different branches of geodetic, geographic and other scientific research is desirable.

b) The initiation and co-ordination of cartographic <u>and GIS</u> research involving co-operation between different nations, the exchange of ideas and documents, the furtherance of training in cartography <u>and GIS</u>; and the encouragement of the spreading of cartographic <u>and GIS</u> knowledge.

#### Article 3 National representation and membership of associations

Any nation which pursues a cartographic <u>or GIS</u> activity can be accepted as a member of the ICA provided that it agrees to participate financially in supporting the Association and in collaborating actively in its scientific and technical activities. Each nation can only be represented as a member by one single organisation which should preferably be the national society or committee for cartography <u>or GIS</u>. The ICA can accept requests for affiliation from international, national scientific, technical or other organisations made for the purpose of collaborating in its activities, and without compromising the principle of single representation of each nation in the official functioning of the Association or affecting the methods of voting as described in Articles 4, 26 and By-Law 5.

Application for national <u>or affiliate</u> membership shall be made by letter to the Secretary General and Treasurer and may be approved by the Executive Committee subject to ratification at the next General Assembly of Delegates.

#### Article 5. Activities and reports

The task of each national <u>or affiliate</u> member organisation is to facilitate and co-ordinate in its nation the study and development of the different aspects of cartography and/or geographic information science.

Every national <u>or affiliate</u> member organisation either individually or in conjunction with one or more of the member nations can submit to the Association questions which are appropriate to the Association for discussion.

Each member nation agrees to send a written or printed report on its cartographic activities to each General Assembly of Delegates.

#### Article 9. Meetings of the General Assembly

The General Assembly of Delegates will normally meet every4 years. The time and place of the next meeting will be decided upon at the previous General Assembly, or, if this is impractical by the Executive Committee.

In special circumstances, with the agreement of the Executive Committee, the President has the right to call an extraordinary General Assembly. <u>The President</u> is also obliged to do so, if one third of the member nations demand it.

As a rule, the General Assemblies will be held in conjunction with a Conference

#### Article 20 . Payment of subscriptions

In each member nation, the national representative organisation which adheres to the Association is responsible for the contribution. If a nation has not paid its dues for three consecutive years the Executive Committee may decide that it shall cease to form part of the Association.

The Executive Committee can institute individual ICA membership at a later date, to be regulated by the by-laws

#### Article 23 Joint meetings

Special meetings, called 'joint meetings', may be organised. These shall consist of a small number of qualified research-specialists, who are to be recommended or invited by the members of the Executive Committee. The Executive Committee decides in each case on the time, place and working programme of such joint meetings.

#### Article 27. Publications

All publications of the Association require the approval of the Executive Committee.

The Executive Committee will arrange for the publication of a bulletin or newsletter concerning the activities of the Association and its members, <u>and facilitate the publication of papers on cartography and GIS.</u>

For consideration of other publications, the Executive Committee shall appoint a Publications Committee consisting of a Chairperson and three members, <u>only one of these four may</u> be a member of the Executive Committee. The President and the Secretary General and Treasurer shall be additional members ex officio. The tenure of office of the Committee shall be the same as the Executive Committee, but may be re-appointed. The Publications Committee will examine proposals for publications (including commission Reports), approve plans in terms of production, format and style, budgets and expenditure and arrangement for distribution.

#### Article 30. Dissolution of Association

A decision to dissolve the Association is valid only if at least two-thirds of the member countries consent. In all respects, the regulations of Article 28 are valid.

In case of dissolution, the funds of the Association will be placed by the General Assembly of Delegates or the Executive Committee at the disposal of one or several international scientific organisations whose aims are closely related to cartography <u>or GIScience</u>.

#### **BY-LAWS**

#### By-Law 1

- a) Each member subscription to the ICA shall be expressed in 'subscription units'. All adhering members are divided into categories, numbered I to VI, and will pay annually the number of subscription units specified in that category.
- b) The categories and subscription units shall be as follows :

| Category No              | Ι | II | III | IV | V | VI |
|--------------------------|---|----|-----|----|---|----|
| No of subscription units | 1 | 2  | 3   | 4  | 6 | 8  |

- c) Each member shall select into which category it wishes to be classed. The Executive Committee may refuse a specification if the category chosen is believed to be manifestly inappropriate.
- d) The amount of the subscription unit and the currency or currencies in which the subscription will be made will be determined by the General Assembly on recommendation of the Executive Committee.
- e) The subscription for Affiliates as defined in By-Law 5(a) is set as a minimum of <u>one</u> subscription unit for categories (1) and (2), <u>a minimum for two subscription units for category</u> (3) and (4) and a minimum of ten subscription units for category (5).

#### By-Law 5

- (a) For the purpose of affiliation as described in Article 3 the following categories shall apply :
- (1) (International) Educational establishments
- (2)National cartographic or GIS societies other than the

national ICA representative body

- (3) National Scientific Organisations and Technical Organisations. These include academic, research or technical institutes or other scientific or technical bodies, governmental or autonomous, that are users of cartographic data and are demonstrably devoted to the discipline of cartography to the satisfaction of the Executive Committee.
- (4) <u>Nationally operating private firms/companies</u>

engaged in the development, production or manufacture of cartographic or allied equipment or products and are committed to supporting the interests of the discipline of cartography <u>and/or GIScience</u> to the satisfaction of the Executive Committee.

(5) Internationally operating private firms/companies

These include such organisations that are engaged in the development, production or manufacture of cartographic or allied equipment or products and are committed to supporting the interests of the discipline of cartography <u>and GIScience</u> to the satisfaction of the Executive Committee.

- (b) Application for affiliation in category (a)(2) is to be submitted to the Executive Committee supported by a letter from the member nation.
- (c) Application for affiliation in categories (a)(1) or (a)(3) to (a)(5) is to be submitted to the Executive Committee in writing.

By-Law 6

ICA member nations and affiliates shall be entitled to the following services :

- Invitation to all ICA conferences.
- One free copy of all ICA publications including the ICA Newsletter.
- Free copies of National Reports presented to ICA General Assemblies. Free copies of the published collection of presented conference papers when made available, posted to members and affiliates unable to be present at the conference.
- Free subscription to one cartographic journal of international repute offered by the ICA.
- Training courses from time to time as the need is demonstrated and finance is available.
- Preferential treatment in exhibitions of ICA.

Upon request the ICA may assist in sponsoring conferences, seminars and symposia in member countries or in conjunction with affiliates. Assistance may consist of :

- a financial contribution conditional on due recognition being given to the ICA and/or
- the support of a member of the Executive Committee of ICA to attend and participate in the meeting.

#### Bylaw 7

All national and affiliate members may propose one representative for each commission.

The foregoing Statutes and By-laws are as amended by the 12<sup>th</sup> ICA General Assembly held <u>in</u> <u>Durban on 10 and 16 August 2003</u>

> The Secretary General and Treasurer

The President

Ferjan Ormeling

Bengt Rystedt

The Executive committee had proposed a clarification of the name of the ICA by adding 'The international society for cartography and geographical information science ' as a subtitle. Against this there was a counterproposal from Finland to change the name altogether to "International Society for Cartography and Geographical Information Science", leaving the unchanged abbreviation of 'ICA'. As this Finnish proposal had been rendered incorrectly on the postal voting form on the statutes by the Secretary-General, the President ruled that the vote on the subtitle and on the change of the name of ICA had to be postponed to the next General Assembly. In the meantime a commission would be appointed to investigate the issue.

There had been a proposal from Poland to change the number of ICA vice-presidents from 5-7 (to be determined by the General Assembly) to 3.

The Polish proposal to reduce the number of vice-presidents to three was not carried, as there were 14 votes in favour, 1 abstention and 32 votes against.

The proposal by the executive committee to change the statutes was carried by 34 votes in favour, no abstentions and 13 votes against, and was therefore adopted.

## 17. Strategic plan

A proposal for a strategic plan had been circulated in June 2003. It was addressed by Past President Wood, who elucidated it and highlighted its main objectives. It would be discussed also during the meeting of the national delegates with the Executive Committee on August 13, 2003, prior to the second part of the 12<sup>th</sup> General Assembly on August 16, 2003.

## **17a.Publications report**

Robert McMaster, chair of the Publications Working group, presented the following report:

# International Cartographic Association (ICA) Publications Report for 1999-2003

# Published

## Books

Maps and the Internet (2003). Edited by Michael Peterson

## Proceedings

*Cartography and Children* (2002). *Proceedings* of the conference held August 4-6, at the Instituto de Geociências, Universidade Federal de Minas Gerais, Diamantina, Brazil.

*Teaching Maps for Children: Theories, Experiences and Perspectives for the Beginning of the 3rd Millennium* (2001). *Proceedings* of the conference held September 6-8, at Eötvös Lorand University, Department to Cartography Budapest, Hungary.

Discovering Basic Mapping Concepts: Exploring How Elementary Children can Discover Concepts Basic to the Understanding of Maps and their Usage for Inventory, Analysis and Discussion (2000). ISBN: 0-9687014-0-X. Proceedings of the Seminar held, August 10-12, 1999, at Concordia University, Department of Geography, Montreal, Quebec, Canada.

*The Selected Problems of Theoretical Cartography 2000* Edited by Alexander Wolodtschenko. *Proceedings* of the Seminar held in Dresden, Germany 14-15 October 2000, published in 2001

*The Selected Problems of Theoretical Cartography* Edited by Alexander Wolodtschenko *Proceedings* of the Seminar held in Gdansk, Poland 20-21 July 2002, published in 2003.

Proceedings, 2002 ICA Mountain Cartography Workshop, Edited by Thomas Patterson

"Geomatics and Coastal Environment" *Proceedings* of the Coast GIS 99 Conference in *Brest*.

*Proceedings* of the Session on Teaching Cartography and GIS for Environmental Mapping, held during Intercarto IV, Barnaul, 1999.

*Proceedings* of the Seminars on Developing the ICA-CET Internet Cartography Course held at Budapest (Hungary), February 4-5, 2000 and Apatity (Russia), August 22-24, 2000 published in 2001.

*Proceedings* of the Seminars on Developing the ICA-CET Internet Cartography Course held at Beijing (China), August 9, 2001 and Helsinki (Finland), May 28, 2002 published in 2003.

## **Special Issues of Journals**

Sponsored by the ICA Commission on Mountain Cartography

Special Issue of *Cartographica* on "ICA Commission on Mountain Cartography", Edited by Lorenz Hurni, Karel Kriz, Tom Patterson, and Roger Wheate (2001)

Sponsored by the ICA Commission on Visualization "Geovisualization". Special Issue of *Cartography and Geographic Information Science*. Edited by Alan MacEachren and Menno-Jan Kraak. Vol. 28, No. 1.

#### Maps

Map of Mars: 1:25,000,000, Edited by B.V. Krasnopevtseva and K. Shingareva.

Map of Venus: 1:45,000,000.

## Report

ICA Strategic Plan for 2003-2011.

#### **Book Projects In Progress:**

*Incremental Updating and Versioning.* Edited by Antony Cooper, CSIR, Pretoria, South Africa and Ammatzia Peled, University of Haifa, Haifa, sponsored by the *Incremental Updating and Versioning Commission* 

*Exploring GeoVisualization*. Edited by Jason Dykes, Menno-Jan Kraak, and Alan MacEachren.

*Map Generalization*. Edited by Tiina Sarjakowski, William Mackaness, Diane Richardson, and Anne Ruas.

World Spatial Metadata Standards, Edited by Harold Moellering.

Mapping from Satellite Data, by Serge Le Blanc.

Compendium on Cartographic Techniques, by Sjef van der Steen.

#### 18. Presentation of the activities of commissions and working groups 1999-2003

All chairpersons of commissions and working groups presented their main activities during the 1999-2003 period, including seminars and publications during the lunch break, with posters, except for the commissions on Census Cartography, Mapping from Satellite Imagery and Maps and Graphics for Blind and Visually Impaired People. All commissions except for the latter three had also sent in reports beforehand, that had been added to the ICA website. All commission chairs were exhorted to incorporate their achievements during the 1999-2003 term to the ICA website as well.

# **19.** Commission proposals 2003-2007, presentation of nominations and terms of reference.

For the 2003-2007 term three new commissions were proposed: a Commission on Map Projections (by USA), a Commission on Incremental Updating and Versioning of Spatial Data Bases (by South Africa and Israel) and a Commission on Ubiquitous Mapping (by Japan).

The existing commissions whose chairs had been renominated without opposition were: Commission on Gender and Cartography: Eva K.Blum (Poland) Commission on Marine Cartography : Ron Furness (Australia) Commission on Mountain Cartography: Lorenz Hurni (Switzerland) Commission on Mapping from Satellite Imagery: Serge LeBlanc (France) Commission on Visualization and Virtual Environments: Alan MacEachren (USA) Copmmission on Spatial Data Standards: Harold Moellering (USA) Commission on Maps and the Internet: Michael Peterson (USA) Commission on Planetary Cartography: Kira Shingareva (Russian Federation) Commission on National and Regional Atlases:Timothy Trainor (USA) Commission on Theoretical Cartography: Alexander Wolodtschenko (Germany)

Apart from the commission chairs that were proposed to extend their term, the following new commission chairs had been proposed:

Commission on Generalization: Anne Ruas (France) and William Mackanness (United Kingdom) as co chairs;

Commission on Education and Training: Laszlo Zentai (Hungary), Vic Vozenilek (Czech Republic) and Liu Yaolin (China);

Commission on Map Production: Philippe De Maeyer (Belgium) and Zhang Qingpu (China);

Commission on the History of Cartography:Alexei Postnikov (Russian Federation); Commission on Incremental Updating: Ammatzia Peled (Israel) and Antony Cooper (South Africa) as co-chairs;

Commission on Cartography and Children: Patrick Wiegand (United Kingdom); Commission on Map Projections: Daan Strebe (USA);

Commission on Ubiquitous Cartography: Takashi Morita (Japan);

Commission on Census Cartography: Donald Wokoma (Nigeria)\*,

Commission on Maps and Graphics for Blind and Visually impaired People: Jonathan Rowell (United Kingdom)

\*) as this proposal was received after the deadline it was decided not to incorporate it in the final proposal to the General Assembly.

Those terms of reference, that had been proposed by the commissions or by member countries, had been incorporated on the ICA website in advance, as well as the CV's of the proposed candidates and their vice-chairs and the reports for the 1999-2003 term.

## 20. Presentation of nominations to the Executive Committee

As a result of the calls for nominations, the nominees for the Executive Committee for the term 2003-2007 were:

- For the presidency, Milan Konecny (Czech Republic) and Bengt Rystedt (Sweden)
- For secretary-general and treasurer, **Ferjan Ormeling** (the Netherlands)
- For vice-presidents, Olayinka Balogun\* (Nigeria), Temenoujka Bandrova (Bulgaria), William Cartwright (Australia), David Fairbairn (United Kingdom), Wolfgang Kainz (Austria), Li Li (China), Elri Liebenberg (South Africa), Ramon Lorenzo (Spain), Robert McMaster (United States of America), Takashi Morita (Japan), Pritvish Nag (India), Haggai Nyapola (Kenya), Vladimir Tikunov (Russian Federation), and Kirsi Virrantaus (Finland).

\*)As this nomination had been sent in too late it was not deemed acceptable by the Executive Committee.

## **21.Future conference proposal**

One bid has been made for the place of the 13th General Assembly of the ICA and 23<sup>rd</sup> International Cartographic Conference, **Moscow**, Russian Federation. This venue had been visited by members of the Executive Committee prior to the 12<sup>th</sup> General Assembly.

# 22. ICA Awards

The president presented two ICA honorary fellowships with the following citations:

**Dr. Harold Moellering** is professor of geography at the Ohio State University in Columbus, Ohio, where he is Director of the Numerical Cartography Laboratory. He has served on many national committees including the U.S. National Committee for ICA and the U.S. National Academy of Sciences/National Research Council Committee on Cartography . He has also served on editorial boards for cartography and GIS journals. His research specialties include numerical, analytical and dynamic cartography, and geographic information systems.

Prof. Moellering's central contribution to ICA has been as chair of what is now the Commission on Spatial Data Standards. He has chaired the Commission for several terms and has overseen numerous productive workshops and Commission meetings in a wide variety of venues. During his tenure, the Commission has produced three books, all published by Elsevier: *Spatial Database Transfer Standards: Current International Status* (1991), *Spatial Database Transfer Standards 2: Characteristics for Assessing Standards and Full Descriptions of the National and International Standards in the World* (1997), and *World Spatial Metadata Standards*, currently in press. He has also served on numerous other standards committees, both national and international, has presented many papers at ICA and other professional meetings, and has published in and edited special issues of cartography and GIS journals.

For his contribution to ICA as chair of the Standards commission and for his furtherance of standards in the international digital cartographic community, Prof. Moellering is awarded an ICA Honorary Fellowship.

Mr. **Sjef van der Steen** is a "Praktijkdocent" on the instructional staff at ITC in Enschede, the Netherlands, where he has enjoyed a reputation for excellent teaching and where he will soon become the institution's Alumni Co-ordinator.

In ICA, Mr. van der Steen has been the Chair of the ICA Commission on Map Production Technology since 1995. He is a staunch supporter of one of ICA's most important objectives: the exchange and dissemination of cartographic knowledge. As part of the international network of people interested in aspects of map production technology, he has made several presentations on his work with map production flow diagrams. As commission chair he has organized numerous seminars and workshops, some in cooperation with other ICA commissions, in venues such as Cuba, Indonesia, Chile, Thailand, and Turkey. Under his leadership, the knowledge generated by his Commission was not just disseminated in lectures and exercises at the seminars and workshops but also in proceedings and other outlets. He has led the Commission through rapid technological changes in our discipline, has provided good new direction toward geoinformation production management, and has demonstrated excellent networking and team playing skills.

For his special contributions to ICA through his leadership on the Commission on Map Production, and for his role in teaching and communicating in the field of cartography, Sjef van der Steen is awarded an ICA Honorary Fellowship. The General Assembly was adjourned at this point and resumed August 16, 2003-09-02

#### **Opening and addresses**

The President opened the meeting on August 16, 2003 at 9.00 Derek Clarke, Chair of the Organizing Committee, addressed the meeting on the security issue. He described all the measures taken to ensure a safe conference environment, the daily meetings with the police, and how these dealt with incidents. He urged all victims to immediately report their mishaps.

## 1.Roll call of members

40 members were present at the beginning; Sri Lanka, Mozambique (no voting right), Cameroun (no voting right) and Jordan came in later during the session. This brought the number of countries eligible to vote to 42.

## 4. Nomination of two scrutineers

As Patrik Ottoson, one of the scrutineers of the first half of the General Assembly, had joined an excursion, the President proposed Nico Bakker (Netherlands) and Peter Keller (Canada) as scrutineers for this second half of the General Assembly; on a motion by Israel, seconded by Australia, this was accepted by the floor by general acclamation.

## 5. Members ineligible to vote

SG announced that Brazil had paid its membership arrears since the first session of the General Assembly, and proposed that its voting rights be reinstated, agreed by general acclamation. This brought the number of countries present eligible to vote to 43.

#### 6.Withdrawal of membership

President announced that no communication had been received from the 5 countries excluded from membership since the first half of the General Assembly. He stated that from now on, however ICA will continue to send information to ex-member nations, which will, in a sense, be considered as dormant.

#### 8.New member nations

President proposed the acceptance of Mozambique as a new member nation. This, moved by Australia and seconded by Sweden, was agreed. The President welcomed Mozambique as a new member of ICA. He also proposed as new members Ecuador and Cameroun (conditional on the reception of a formal letter requesting membership from the Instituto Oceanografico de la Armada and the University of Yaoundé respectively). The acceptance of Cameroun was moved from the floor by the United States and seconded by South Africa, and accepted by acclamation, with one country abstaining. The acceptance of Ecuador was moved by Australia and seconded by Chile and approved with one abstention and one against. The addition of Mozambique brought the total number of countries eligible to vote to 44.

#### 9. New affiliate members

President proposed ratification of the following new affiliate members: The RCMRD (Regional Centre for Mapping of Resources for Development) in Nairobi, Kenya, and RECTAS (Regional Center for Training in Aerospace Surveys), Ile Ife, Nigeria; this

proposal was moved by India and seconded by the Netherlands, and adopted by acclamation.

## 22. ICA Awards

President announced the following recipients of the ICA Honorary Fellowship: Ciołkosc (Poland), Freitag (Germany), Klinghammer (Hungary) and Liao Ke (China). The following citations were read:

**Prof. Dr. Andrzej Ciołkosz** is an outstanding cartographer whose activities centered on the application of air photography and satellite images in cartography. He was an organizer and head of the Polish National Remote Sensing Centre in the Institute of Geodesy and Cartography, whose mission is the use of remotely sensed data in thematic cartography. He is the author of some two hundred papers, reports, and maps. He is a member of the Polish Association of Cartographers.

Prof. Ciołkosz was a Vice-President of the International Cartographic Association from 1978 to 1984 and was Chair and Deputy Chair of the ICA Commission on Thematic Mapping with the Aid of Satellite Imagery. He contributed to *Annotated Bibliography on Application of Satellite Images to Thematic Mapping* and to the guidebook *Thematic Mapping from Satellite Imagery* published on behalf of ICA by the University of Waterloo (Canada) and Elsevier Science. He was Chair of the Local Organizing Committee for the ICA conference that was held in Warsaw in 1982.

Prof. Ciołkosz is still very active in research and teaching in remote sensing and cartography at Warsaw University and Nicholas Copernicus University in Torun.

For his many contributions to ICA and to the application of remotely sensed imagery in cartography, Prof Ciołkosz is awarded an ICA Honorary Fellowship.

**Dr. Ulrich Freitag** is professor emeritus in the Institute of Geographical Science, Berlin Free University. His research interests include the theory of cartography, cartographic information processing, and the application of cartographic models. He has published more than 30 articles and books just in the last decade. An active member of the German Geographic Society, he served as its chair from 1987-1995. He enjoys great prestige in the field of cartography in Germany and worldwide, as evidenced in such appointments as Advisory Board for Exploratory Essays on the History of Cartography in the Twentieth Century, part of the multivolume History of Cartography project.

Prof. Freitag has been involved in many ICA activities over the years including active participation in the Working Group to Define the Main Theoretical Issues in Cartography, for which he wrote materials on map function. He was closely involved in bringing ICA to Germany (Cologne) in 1993, and his involvement was key to the success of that conference. At least as important as his direct involvement in ICA, he has been a promoter of ICA in the very large German cartographic community, and he has been an active "ambassador" for ICA in South Asia, especially in Thailand.

For his many services to ICA and for his rich contributions to the field of cartography, Professor Ulrich Freitag is awarded an ICA Honorary Fellowship.

**Prof Dr Istvan Klinghammer** is director of the Eötvös Lorand University Institute of Cartography. In that position he has had a decisive influence on the modernization of cartographic education in Hungary and in the establishment of a cartographic educational network over Europe. He has published in German, Russian and Hungarian. He has collaborated with ICA's Commission on Education and Training and was one of the prime contributors to the ICA manual series *Basic Cartography*. He contributed to the series of successful joint commission meetings that were held in Hungary 10 years apart – 1983 and 1993 (the famous electronic atlases meeting, for which he also edited the proceedings), and which culminated in the joint ICA Executive Committee and commission chairs meeting held in Budapest in Spring 2003, where through the acceptance of the strategic plan a new course was set.

Prof. Klinghammer has been an influential in the decision to have Budapest as venue for the International Conference on the History of Cartography in 2005. Over the years he has encouraged his younger colleagues to participate as much as possible in ICA. In addition to director of its Institute of Cartography, Prof. Klinghammer is currently Rector of Eötvös Lorand University. He is probably the only cartographer worldwide to serve in this function.

For his many contributions to ICA and for his excellent ambassadorship for cartography in his own country and beyond, Prof Klinghammer is awarded an ICA Honorary Fellowship.

**Prof. Liao Ke** is a researcher in the Institute of Geographic Sciences and Natural Resources Research, CAS, and Director of the Cartography and GIS Committee in the Chinese Geographic Society. His interests include thematic and complex mapping, mapping with remote sensing, computer cartography, map use and cartographic theory, and the role of cartography in modern Society and in sustainable development. He is editor in chief of "National Physical Atlas of China" and "Atlas of Qinghai-Xizang Plateau". He is also co-editor of "National Economic Atlas of China," "The Population Atlas of China," and "Atlas of Ecological Environment in the Beijing-Tianjin Area." He has published more than 100 articles and 4 monographs, has edited 8 books, and has received many national and local honors. The "National Physical Atlas of China" won a prize for excellence in the international maps exhibition of the ICA.

Professor Liao Ke has attended all ICA conferences since 1980. He has been a member of the Commission on National and Regional Atlases, for which he successfully organized a seminar in China and two Chinese atlas exhibitions in Beijing. He took an active part in the work of preparing for 20th ICC in Beijing and has served on the ICA Awards Committee. For his contributions to ICA and for his many contributions to cartography, Prof. Liao Ke is awarded an ICA Honorary Fellowship.

Professor Liao Ke received his award at the Conference Dinner in the evening of August 14. A suitable occasion for awarding Ciołkosz, Freitag and Klinghammer will be found after the conference..

## 23. Final budget proposal 2003-2007

SG proposes the following budget for the 2003-2007 term:

| en dollars américains - <i>in US</i> \$ |         |                        |  |  |
|---|---------|------------------------|--|--|
| cotisations des nations                 | 120 000 | national members fees  |  |  |
| cotisations des affiliés                | 60 000  | affiliate members fees |  |  |
| ventes d'ouvrages                       | 8 000   | sales of publications  |  |  |
| produits financiers                     | 10 000  | interests on invests   |  |  |
| Utilisation des reserves                | 40 000  | Use of reserves        |  |  |
| divers                                  | 2 000   | miscellaneous          |  |  |
| total des recettes                      | 240 000 | total receipts         |  |  |
| secrétariat & voyages                   | 115 000 | offices and travel     |  |  |
| commissons, gr. travail                 | 60 000  | commissions & w.groups |  |  |
| publications                            | 20 000  | publications           |  |  |
| promotion                               | 10 000  | promotion              |  |  |
| bourses de voyage                       | 30 000  | Travel Awardees        |  |  |
| divers                                  | 5 000   | miscellaneous          |  |  |
| total des dépenses                      | 240 000 | total expenditures     |  |  |
|   |         |                        |  |  |
| comptes, fin de période                 |         | funds at end of period |  |  |
| compte courant                          | 80 000  | bank account           |  |  |

Proposed final budget ICA 2003-2007

In this proposal no provision had been made for the purchase of ties and scarves, as had originally been suggested. In the budget the use of reserves had been made more explicit. The budget was based on the assumption that the subscription unit remained at US\$250 a year.

#### 24. Vote on the 2003-2007 budget including the subscription unit (by-law no 2)

The proposal to keep the basic membership unit for the term 2003-2007 at US\$250 was moved by Australia, and seconded by Slovenia. There were no votes against, and one abstention, so the motion was carried, and the basic membership unit set at US\$250 for the term 2003-2007.

•••

The budget was subsequently put to the vote, by ballot. There were 41 votes in favour of the budget, 1 opposed with no abstention. The budget was consequently accepted.

## **25. Election of President**

Past president Michael Wood directed the procedures for the election of the president and explained the voting form. He asked the delegates to prepare their forms.

#### 26. Election of Secretary-General and Treasurer

While the scrutineers were collecting the voting forms, the president directed the election of the Secretary-General. In the absence of an opponent, he proposed the election of the present SG Ferjan Ormeling for another term. This was moved by Greece and seconded by Croatia, and accepted by general acclamation.

## 27. Vote on the number of Vice-Presidents

According to the statutes, the General Assembly had to set the number of vice-presidents between 5 and 7. President proposed to have 7 vice presidents. This was moved by South Africa, seconded by USA and India, and accepted while 5 countries voted against and four abstaining.

## 28. Election of vice-presidents

The President explained the voting form, on which the nominated candidates for the seven posts had been listed in alphabetical order. Everyone had been able to see the CVs of the candidates (in the Nominations book handed out at the first half of the General Assembly), and their views on implementing the strategic plan, distributed August 14, 2003. He indicated that according to the statutes the candidate from Nigeria had not been included by the EC on the form because his nomination came in too late. He asks the delegates to prepare their voting form

## 29. Election of auditors 2003-2007

The President proposes that the same auditors Judy Olson (USA) and Jaume Miranda (Spain) continue their work for the next term. This was moved by Germany, seconded by Australia and carried by acclamation.

#### 30. Commission proposals 2003-2007/Election of commission chairpersons

The President explained why the terms of reference for the Commission on the History of Cartography circulated earlier to national delegates had not been incorporated after all in the final document. The reason for the withdrawal are that the terms of reference worked out during the week could not be confirmed by the proposed chair and that ICA cannot hold a duly proposed chair to terms of reference drawn up without his knowledge. To ensure the continuity of the commissions whose chairs were not present and had no vice-chair proposed as yet, (Commission on the History of Cartography and Commission on Mapping from Satellite Imagery), vice-chairs were listed on the voting forms. Germany protested against the voting form. It wanted to have the terms of reference for the Commission on the History of Cartography, as circulated earlier, included in the conference agenda.

The President apologized for the earlier lapse but indicated why this could not be changed back.

The United Kingdom asserted that, although there was a legitimate and proper proposal for the commission chair from Russia, there were no terms of reference provided. It was pointed out that the statutes did not require terms of reference to be given to the General Assembly.

Israel indicated that ICA was a bottom-up society, and that this should be respected by the delegates.

President acknowledged this, but was unable to go against the statutes. The work of the members of the Commission on the History of Cartography present in Durban was acknowledged, and safeguarded by the proposal for a vice-chair on the ballot paper. President then put the terms of reference to the vote, as a block.

This proposal was moved from the floor and carried, with 4 abstentions and 5 votes against. President then asked the delegates to fill in their voting forms for the chairpersons of the commissions, and adjourned the meeting for the tea break.

## Break

After the break the President communicated the results of the various ballots. He announced that **Milan Konecny** had been voted President, and congratulated him. The following vice-presidents had been voted by the General Assembly:

William Cartwright (Australia)
David Fairbairn (United Kingdom)
Ramon Lorenzo (Spain)
Robert McMaster (United States of America)
Haggai Nyapola (Kenya)
Vladimir Tikunov (Russian Federation)
Kirsi Virrantaus (Finland).

Bengt Rystedt would serve as past-president.

| Commission   | Commission chair(s)                | Vice-chair(s)           |
|--|------------------------------------|-------------------------|
| Maps and the Internet                                    | Michael Peterson                   | Georg Gartner           |
| Visualization and virtual environments                   | Alan MacEachren                    | Menno-Jan Kraak         |
| Maps and Graphics for Blind and partially sighted people | Jonathan Rowell                    | to be announced         |
| Generalization and multiple representations              | Anne Ruas and<br>William Mackaness |                         |
| Cartography and Children                                 | Patrick Wiegand                    | to be announced         |
| Ubiquitous mapping                                       | Takashi Morita                     | to be announced         |
| Theoretical cartography                                  | Alexander<br>Wolodtschenko         | to be announced         |
| Spatial data standards                                   | Harold Moellering                  | to be announced         |
| Mapping from satellite imagery                           | Serge LeBlanc                      | Graciela<br>Metternicht |
| Map projections  | Daan Strebe                        | Frank Canters           |
| Management and economics of map production               | Philippe Demaeyer                  | to be announced         |
| Planetary cartography                                    | Kira Shingareva                    | James<br>Zimbelman      |

For the commissions the following chairs had been elected:

| National and regional atlases                       | Timothy Trainor   | Peter Jordan    |
|---|-------------------|-----------------|
| Mountain Cartography                                | Lorenz Hurni      | Karel Kriz      |
| Marine cartography                                  | Ron Furness       | David Green     |
| Incremental Updating and Versioning of Spatial data | Antony Cooper and |                 |
| bases   | Ammatzia Peled    |                 |
| Education and Training                              | Laszlo Zentai     | Wolfgang        |
|   |                   | Meissner and    |
|   |                   | David Fraser    |
| Gender and Cartography                              | Ewa K.Blum        | to be announced |
| History of Cartography                              | Alexei Postnikov  |                 |

Australia moved to have all voting forms be destroyed after the voting, and the scrutineers thanked for their labours. This was seconded and carried by the majority, 10 countries abstaining and one country against.

Germany and Austria then asked for the exact number of ballots that voted for and against the proposals. This was seconded by the United Kingdom.

Australia claimed as a point of order that as the meeting had just agreed to have the voting ballots destroyed, these exact numbers could not be given. This was so ruled by the President.

## 31. Presentation of the 22th International Cartographic Conference

President gave the floor to Ramon Lorenzo, chairman of the Spanish Organizing Committee for the presentation of the ICC 2005 in A Coruña, which was carried out with the help of a power point presentation. The dates selected are July 9-16, 2005. The conference venue's website is: <u>www.icc2005.org</u>

# **32** Selection of the place of the 13th General Assembly and the 23rd International Cartographic Conference

SG mentioned that the President and he himself visited Moscow in June 2003, and stayed in the proposed conference hotel (Hotel Cosmos) and conference venue; they visited the proposed technical and social excursion destinations (and made an exciting visit to Star City, training ground of the Russian cosmonauts). He stated that the President and he were most confident that the Russian Federation would organize a conference and general assembly that would at least equal the 1976 success. Russia is a cartographic world power offering many possibilities for interesting technical visits in its capital. He therefore proposed Moscow as the venue for the 2007 13<sup>th</sup> ICA General Assembly and 23<sup>rd</sup> International Cartographic Conference. This proposal was moved by Australia, and seconded by Germany and Slovenia. There were no votes against, and one abstention.

#### **33.** Any other business

<u>Strategic Plan</u> – Past president Michael Wood opened the discussion again on the strategic plan. He described it as a document that rather than exactly describing the blueprints for the future, showed the right directions ICA should move into, on the

basis of the right priorities. He proposed a motion to accept the plan in this spirit. This was moved by New Zealand and Mozambique, and seconded by India, Australia and Chile. The motion was carried with no votes against and no abstentions.

<u>Name</u> – Poland asked what was to happen with the society's name during the next term. Would the old name or the proposed name be used?

President answered the old name would be used. A working group would prepare a proposal on the name issue for the next General Assembly.

<u>National reports</u>: The United Kingdom announced that its national reports had arrived and had been distributed. President referred to the list of national reports received, contained in the Agenda for the second half of the General Assembly.

<u>Durban Statement</u>. South Africa referred to the Durban statement, which aimed at mapping Africa for Africa, drawn up after a full day meeting with African NMA leaders and submitted it to the ICA. He requested ICA to set up a commission or Working Group for this purpose. President acknowledged the importance of this statement and indicated ICA would comply with the request.

<u>Vote of thanks</u>: The representative of the United Kingdom thanked the organizing committee on behalf of the delegates for so capably organizing the conference, and moved a vote of thanks, which was seconded and accepted with general acclamation.

## Ferjan Ormeling

# ICA Secretary-General

## Utrecht, September 3, 2003

(gratefully acknowledging the grammatical corrections made by Chris Board and Michael Wood)

## **Appendix 1: National reports handed in by member nations** In paper form: Australia Belgium Canada Chile China Croatia Cuba Finland France Germany Hungary Iran Japan Korea, republic of Netherlands New Zealand Poland Portugal **Russian** federation Slovakia South Africa Spain Sweden Turkey United Kingdom USA Plus in CD form Belgium Hungary Portugal On webstites only Austria

Iran Switzerland **Only on CD** 

Indonesia

The printed National report of the Czech Republic was sent in time but could not be distributed, as it was not delivered.

## **Appendix 2: Terms of reference of the Commissions Commission on the History of cartography**

No terms of reference received

## **Commission on Education and Training**

1.To produce an ICA-sponsored Internet cartography teaching programme (modules), with regional workshops for training the teachers.

2.To produce an ICA-sponsored Internet programme for continuing education, with regional workshops for teacher training.

3. To promote integration by establishing linkage with the committees on education of sister surveying and mapping disciplines, by producing a list of institutions providing cartography course programmes, and interact as much as possible with other ICA commissions and working groups (organize joint meetings).

4. To encourage and support the involvement of student cartographers in the commission's activities to make the cartographic education and training more effective.5. To run a "refereed" seminar on the latest developments in cartographic education and training at each international cartographic conference.

# **Commission on Gender and Cartography**

- 1) To serve as a resource on issues related to Gender and cartography
  - a) by encouraging and supporting women and other under-represented groups to take an active role in professional activities and/or associations at national and international level;
  - b) by preparing papers for presentation at conferences and publications in cartographic journals;
  - c) by maintaining the Gender and Cartography website
- 2) To facilitate professional contacts with women and younger cartographers:
  - a) by updating the Gender and Cartography Commission web-based directory on women cartographers
  - b) b) by conducting cooperation with the commissions of sister organizations (i.e. IGU, FIG, ISPRS, WBU, WHO and others) having similar goals
- 3) To continue cooperation with other commissions within the ICA;
  - a) by organizing workshops with Education and training to improve education and skills of women cartographers
  - b) b) by actively participating in technical commissions
- 4) To promote the production of gender issues oriented atlases of various regions of the world;
  - a) by encouraging scientific institutions and cartographic organizations to produce similar atlases similar to the demographic atlas produced by the commission for Poland;
  - b) b) by presenting the cartographic methods used in the gender |commission's demographic atlas to the international community;

c) By preparing guidelines and specifications for mapping of the issues related to gender and under-represented groups at regional and global levels.

## **Commission on Incremental Updating and Versioning of Spatial Data Bases**

1. To serve as a focal point for research into the incremental updating and versioning of digital spatial data bases and the implementation of solutions. Research issues include: bi-directional, multi-level, historical and temporal updating, planning for future changes, data base maintenance, feature identifiers, modularity (dimension, context, layer, theme and size), inconsistent updating and simultaneous updating by field teams;

2. To identify those individuals and organizations interested in the problems of incremental updating and versioning who are willing to contribute, and to support networking between them;

3. To foster and further inter-society cooperation with ISPRS, EuroGeographics and Other Geo-Societies on incremental updating and versioning;

4. To finish the literature study and publish the overview of the current state of the art of the incremental updating and versioning of digital spatial data bases, especially for protecting the integrity and spatial referencing of value-added data and topology, as was specified in the proposal submitted to ICA Executive Committee during the 20th Congress, Beijing, 2001;

5. To organize seminars and/or workshops in conjunction with International Cartographic Conferences and other events, leading to:

(a) A conceptual model of incremental updating and versioning of digital spatial data bases; and

(b) The publication of a reference manual (cookbook) focusing on the definition of the problem, the setting of further research goals and efforts, and identifying best practices;

6. To define algorithms for modular and/or application-oriented incremental updating and versioning;

## **Commission on Marine Cartography**

1.Promotion of marine cartography - Facilitate the networking of those member nations representatives on the commission as a resource through which marine cartography can be promoted

- Establish and maintain routine and higher profile liaison with kindred scientific bodies such as the International Hydrographic Organisation (IHO), the Hydrographic Society, Federation Internationale des Geomètres (FIG), the International Association of Geodesy (IAG), the International Geographical Union (IGU), and the International Society for Photogrammetry and Remote Sensing (ISPRS).

- Encourage authors writing in the general area of marine cartography and provide contacts and assistance in the accessing of resources and material represent and promote the work of ICA at appropriate fora

- Respond to issues referred by the ICA Executive Committee for advice and information.

2.Promotion of ICA and cartography as major contributors in the field of coastal zone management - Continue to conduct, in conjunction with the IGU Commission on Coastal Systems, the CoastGIS series of symposia - Explore opportunities for training and workshops in GIS applications to the Coastal Zone within developing nations.

3.Encouragement of publications in the areas of marine cartography and, in particular, publications dealing with the coastal zone - Publish proceedings for all symposia/conferences/workshops organized by the commission
- Encourage and where needed, seek out the preparation of articles in the area of coastal zone cartography, and target leading experts to publish an authoritative volume dealing with cartography and GIS within the coastal zone (planned in conjunction with IGU).

4.Ongoing Cooperative Activities - Support initiatives aiming to promote training of nautical cartographers. Provide two active members representing ICA on the FIG/IHO/ICA advisory panel on standards of competence for Hydrographic Surveyors and Nautical cartographers suitably qualified to participate fully in the work of that panel - Provide any proposed change to IHO Publication S-23 (Limits of Oceans and Seas) and to the Undersea feature names gazetteers (following the guidelines stated in IHO Publication B

## **Commission on Mountain Cartography**

To further define the topics of Mountain Cartography and to promote the methods and knowledge of mountain cartography among scientists and professionals in cartography and related fields

by providing

- an updated, attractive web-site with information about Commission activities, links to other events and theme-specific knowledge

- an updated web-based compendium with links to related web-sites and bibliographic information

by continuing the well-established workshop series

and by promoting publication activities (proceedings, web-proceedings, journal articles and special issues) and common research activities

## **Commission on National and Regional Atlases**

1. Promote and support the design, production and use of atlases and atlas information systems by:

demonstrating design and production applications of national and regional atlases;
 conducting workshops and/or seminars that present recent and potential atlas developments and innovations;

- documenting guidelines and procedures for the design and production of global, national, and regional atlases via the Internet and, where applicable, CD-ROM, DVD, and printed proceedings.

2. Explore and develop new tools for atlas design, creation and dissemination by:

- encouraging exploration and implementation of new atlas design concepts;

- recognizing static, interactive, multimedia and animated approaches for accessing and disseminating geographic information;

- evaluating the use of the Internet, CD-ROMs, DVDs, and other formats for dissemination of integrated geographic data.

3. Encourage efforts for integrating data for the development of electronic atlases and national and regional atlas information systems by:

- acknowledging requirements for diverse geographic and temporal data themes; - identifying and exploring various options and issues for data integration.

## **Commission on Planetary Cartography**

1). Continuation on the documentation and analysis of the status of planetary cartography within the international community, to aid in determining both global resources and needs. The next analyses will be done during the following two years.

2). Preparation on the next version of a multilingual glossary of planetary cartographic terms.

3). Continuation on the series of multilingual maps in two parallel directions; namely, to organize and print existing maps for new groups of languages, and to compile and print maps of other Solar System Bodies (for example, Mercury final version, Phobos and Deimas, some of giant-planets' moons).

4). A new project (discussed in Beijing in 2001) includes the construction of a Specialized Planetary Cartography Date base. It will be an international project through the participation of Russia, Germany, and Hungary at first, with other countries added in the future. The structure of this database is in development.

5). The electronic version on the Atlas of terrestrial planets and their moons is in development as the first stage for this information. The DB will be involved in the GIS System named ESS (Electronic Solar System).

6) Discussion on the role of planetary cartography in the development on the geography of extraterrestrial territories, especially in connection with the global education process. Compiling and printing of textbook "Geography of Extraterrestrial Territories" is considered as an output of this activity.

## **Commission on Management and Economics of Map Production**

Scope:

the commission will deal with aspects of economics, planning and organisation, production guide lines, quality assurance/ management for mapping organisations, with emphasis on cartography and visualisation.

Objectives:

- to produce publications on management of map production
- to handle topics dealing with the practical execution of the management on the level of production execution
- to give employers a guide for production overview
- to produce and explain tools for appropriate production management
- to introduce economic aspects for map production management
- to apply aspects of quality control, quality assurance, quality management

# Terms of reference

New proposed terms to be established:

- The establishment of Workflow Management in mapping organisations
- Guidance on market orientation: Economics in map production
- The introduction and development of Quality Management

- An on-demand publication on cartographic map production techniques Minimum deliverables:

- Organisation of regional seminars in: Africa (Tanzania), Latin America

(Colombia/Mexico), Asia (Malaysia)

- Presentations in seminars and congresses.
- Publications for website and paper publications.
- Guidelines for both managers and operators

# **Commission on Map Projections**

establishment of a repository of knowledge on map projections
 promotion of map projections within all disciplines

3)providing a platform to promote research and a common language in the field of map projections

4)encourage collaboration between researchers within the field of mapping sciences as well as across disciplines

The first two-year plan accounts for establishment of a membership database, a website, a survey of map projection terminology, a survey of projection names, a survey of map projection use and a survey of map projection research

## **Commission on Mapping from Satellite Imagery**

1)To analyse the various types of existing and forthcoming satellite imagery in view of their potential inputs for producing and updating topographic and thematic maps and databases ;

2) To continue with the inventory and analysis of the cartographic capabilities of different remote sensing systems;

3)To research the state of the art of cartographic standards (e.g., legend, symbology, etc) for remote sensing based mapping of different domains : a) urban areas ; b) land cover, c) forestry ; d) environment

4) To study and report on methods and techniques for satellite-based change detection and its cartographic representation (e.g. temporal cartography);

5) to organize, wherever possible, seminars/workshops jointly with other ICA commissions, to disseminate the findings related to the cartographic potential and limitations of satellite imagery for thematic and topographic mapping

## **Commission on Spatial Data Standards**

1) To develop a conceptual model of the Spatial Data Infrastructure (SDI) using the UML modeling language and associated modeling concepts, working in the areas of science, technology and standards, at the Global, Regional and National levels.

2) To define the technical characteristics of the SDI, and concepts for appropriate data sets for the SDI.

3) To participate at the scientific level of the SDI in several organizations active in that area. This work will be closely coordinated with the ICA Executive Committee.

4) To develop a report on this developing area, or to hold a specialist meeting on this topic.

5) To organize reporting sessions on the Commission's activities at the 2005 and 2007 ICA meetings.

6) To organize and hold full Commission meetings in the summers of 2004 and 2006.

7) To continue to serve as a Category A Scientific Liaison with ISO/TC211 Committee

on Geographic Information/Geomatics, and begin liaison with various GSDI organizations.

8) To exchange information and reports by the ICA member countries and relevant bodies concerning the development standards for the transfer of digital spatial data, metadata and the SDI.

9) To collect and distribute in the Commission copies of all spatial data standards published in ICA countries and by relevant international bodies.

10) To serve as a focal point of information concerning digital spatial data transfer, metadata, and SDI developments throughout the world.

11) To identify research and education needs that arise from the standards and SDI process.

## **Commission on Theoretical Cartography**

1)To study selected topics of theoretical interest such as general and applied cartosemiotics, map language, mapping and map use as cognitive processes and terminology.

2)To study aspects of theoretical cartography which relate to problem-solving and decision-making

3)To conduct workshops or symposia about selected aspects of theoretical cartography.4)To compile and publish a report and collected papers on topics of interest to the Commission and to maintain the Commission's website, providing bibliographic reference

# **Commission on Ubiquitous Mapping**

This proposed commission is about the 'well-mapped society': many societies are moving towards the time when maps will be available anywhere, anytime. Today the number of ways maps and geo-spatial information are likely to be employed is very large and diverse. As the individual gains the ability to access relevant information, on demand, this will influence human behaviour . As opposed to the Maps and the Internet commission this commission will focus mainly on theoretical issues. The proposed terms of reference are:

1.to organize regional workshop including site observation to comprehend contemporary situation of mobile and car-navigation mapping

2. to clarify similarity and difference in comparing variant systems to establish an evaluation scheme

3. to place the notion of Ubiquitous Mapping in the domain of Theoretical Cartography4. to compile and publish the report and/or collected paper to disseminate the ideas

## **Commission on Visualization and Virtual Environments**

1. To study and report on the changing and expanding role of maps in science, decisionmaking, policy formulation, and society in general due to the continuing technological and conceptual advances that enable new map forms used as visual thinking/decisionsupport tools. During this term, particular attention will be directed to four cross-cutting themes identified in research agenda setting activities of the Commission during its previous term. These cross-cutting themes will serve as a starting point for work – with Commission activities over the four years expected to progress beyond initial goals. The themes and the initial target problem within each are: (1) leveraging advances in display and interface technology for cartographic representation – to develop the understanding and integrated technologies that make it possible to take advantage of the potential offered by increasingly experiential representation technologies; (2) developing and extending geovisualization methods and tools to support knowledge construction – to develop extensible methods and tools that enable understanding of, and insight to be derived from, the increasingly large and complex geospatial data sets becoming available. (3) supporting multi-user geovisualization – To develop a new generation of geovisualization methods and tools that support group work; (4) *understanding* geovisualization users and meeting their needs – to develop a human-centered approach to geovisualization.

2. To investigate and report on the links among *cartographic visualization* and related developments in *information visualization, scientific visualization, computer graphics, virtual reality, exploratory data analysis, human-computer interaction, and computer-supported cooperative work* and continue to facilitate exchange of ideas between cartographers and others working on problems in visualization and virtual environment design.

3. To organize workshops and/or seminars for exploring the issues cited above and facilitate development and transfer of cartographic visualization principles and technology at the international level.

4. To produce appropriate publications for dissemination of results of the above efforts.

## **Commission on Cartography and Children**

The commission aims, internationally, to:

- promote the use and enjoyment of maps by children and young people;
- increase understanding of children and young people's engagement with maps.
- raise the standard of maps and atlases produced for children and young people;

In 2003-2007 it will further these aims by:

- 1. disseminating the outcomes of research into map use by children and young people (deliverable: an enhanced set of online bibliographic research tools)
- 2. developing stronger links between the ICA and relevant international educational organisations (deliverable: a joint international conference with the Commission for Geography Education of the International Geographical Union)

- 3. stimulating a debate on design and realisation of maps and atlases for children (deliverable: a collection of papers on case studies in educational cartography)
- 4. promoting the use of digital cartography and GIS in schools (deliverable: an international conference and associated publication)
- 5. providing consultative support to the ICA executive in relation to the rules and judging of the Barbara Petchenik Children's World Map Competition (deliverable: appropriate support as required)

## **Commission on Maps and the Internet**

1. To focus attention on the dissemination of maps and spatial data through distributed electronic networks. Product: Oral or published report.

2. To organize workshops and/or seminars to promote the exchange of information about Internet cartography for an international audience. Product: Annual meetings and workshops.

3. To address Internet map user issues to better serve user needs. Examine Internet map usage and project future areas of growth. Product: Oral or published report

4. To address developments in mobile related applications. Examine mobile related applications usage and project future areas of growth. Product: Oral or published report.

5. Promote instruction on Internet mapping through workshops and collaboration/coordination with other ICA commissions. Product: Materials to be used in workshops.

## **Commission on Generalization and Multiple Representations**

1.To foster research and practical experience in multi-scale issues and automated map generalization and to form a network and focal point for researchers and practitioners in this domain.

2.To develop and evolve a critical mass of expertise able to provide support, guidance and constructive criticism to new researchers in the field.

3.To foster and maintain a liaison with related commissions within the ICA as well as in related national and international organizations (e.g. ISPRS, IGU, EuroSDR), including:

- identification of contact persons,
- timely mutual updating on planned activities,
- organization of joint conference sessions and/or workshops.

4.To maintain a World Wide Web site for electronic dissemination of research on multiscale issues and map generalization, including:

• a membership database,

- a bibliographic database,
- examples of research projects and test data,
- a 'last news' section advertising for workshops, recent books and articles related to generalization and multi-scale

5.To organize sessions and meetings for exploring the issues named above, including:

- workshops held every two years in conjunction with international cartographic conferences
- workshops in alternate years between ICA meetings, where possible, associated with conferences in the GeoSciences (such as ISPRS or Spatial Data Handling).
- special sessions and/or panel sessions at international cartographic conferences, in collaboration with local organizers
- one day *outreach workshop* every two years in conjunction with generalization workshop and the ICC, seeking to broaden the community by highlighting main generalization and multi-scale principles and results.

6.To produce publications for dissemination of the above efforts, including one special issue of a peer-reviewed scientific journal or a book every two years.

## **Commission on Maps and Graphics for Blind and Partially Sighted People**

The commission aims to further enhance communication and education in the design, production and use of maps and graphics for blind and partially sighted people by:

- 1. sharing, exchanging and disseminating information on design and developing new production technologies appropriate to user's needs;
- 2. providing guidance on and encouraging good practice in the design, production and use of tactile images;
- 3. developing cooperation with organizations representing blind and partially sighted people involved in cartography, communication, and welfare particularly the International Council on English Braille;
- 4. creating accessible databases as sources of information about tactile symbols and tactile production;
- 5. investigating user perspectives and the implications these will have for tactile mp design;
- 6. formulating appropriate responses to moves towards standardization