

# GLOBAL MAPPING NEWSLETTER

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**Seminar on Global Mapping was held on November 13-16, 1996 in Santa Barbara, California, USA**

"Interregional Seminar on Global Mapping for the Implementation of Multinational Environmental Agreements" was held at Miramar Hotel in Santa Barbara, California, USA, on November 13-16, 1996 organized by the United Nations Department of Development Support and Management Services under the joint auspices of the University of California, Santa Barbara and the Geographical Survey Institute of Japan.

Eighty people from 23 countries including experts of national mapping organizations, experts and researchers of related international organizations, and 5 officers from the United Nations participated in this four-day Seminar.

The participants agreed on the importance of Global Mapping concept through presentations by global/regional data producers, discussions on technological issues, and reports on users' needs to Global Map from experts of developing countries and international organizations.

At the end of the Seminar, "the Santa Barbara Statement on Global Mapping for Implementation of Agenda 21" aimed at Global Map development was adopted as the consensus of participants.



*Chancellor Henry Yang at welcome address*

The Statement addresses the needs of worldwide availability of the data to attain the objectives of Agenda 21, and recognizes the important role of International Steering Committee for Global Mapping (ISCGM) to coordinate the development of a Global Spatial Data Infrastructure (GSDI).

Nine recommendations included in the Statement are to be reported at the Special Session of "the United Nations General Assembly on the Implementation of Agenda 21" scheduled in 1997 (See the Santa Barbara Statement).

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NOTICE: An extensive survey made by ISCGM secretariat, "A Survey of Global Mapping Related Activities" is available on our web page.



## the Santa Barbara Statement

Approaching the dawn of the 21st century, the international community is entering a challenging new era of development. Globalization, openness, and interdependence are now recognized as key features of the world economy. Objectives under Agenda 21, particularly those related to Chapter 40 on "Information for Decision Making," can only be effectively implemented with improved worldwide availability of and access to relevant spatial data, such as those displayed on maps. Recognizing that current global mapping efforts are primarily driven by global change concerns, future progress must also be responsive to more immediate national priorities that enhance economic growth and ensure sustainable development.

This seminar was jointly organized by the United Nations Department for Development Support and Management Services, the University of California, Santa Barbara, and the Geographical Survey Institute of Japan, to advance the cause of, and encourage international cooperation in global mapping.

This seminar builds upon recommendations made at the First International Workshop on Global Mapping in Izumo, Japan in 1994. Participants at Santa Barbara agreed that actions are needed to facilitate expanded, cooperative efforts on global mapping. Needed actions include:

- Finding ways to increase scientific and technological development of mapping organizations in both the developed and developing countries to produce better map and information products;
- Increasing technical assistance for country capacity-building so that governments can use spatial data products more effectively and efficiently;
- Strengthening of mechanisms that improve the provision of technical and economic assistance to developing countries to support collection, production, archiving, and dissemination of map data, which can then be integrated into global spatial data products, and
- Designating the International Steering

Committee for Global Mapping (ISCGM), which includes representatives of national mapping organizations and the international community, to coordinate the development of a Global Spatial Data Infrastructure (GSDI).

Mapping of core information required to make decisions consistent with sustainable development needs to be addressed on a global scale. A diverse group, which includes National Mapping Organizations (NMOs), space agencies, international scientific organizations, national research institutes, private sector agencies and data sources, academia, non-governmental organizations (NGOs), donors, development banks, and the United Nations, all have a stake in global mapping. Global mapping is critical to the concept of GSDI. "Global mapping" is understood here as a process for the creation, maintenance, access, future development, and application of spatial data at appropriate scales and resolutions. A GSDI would include base cartographic and thematic data (e.g. physical, environmental, socio-economic, infrastructure and other relevant spatial data). The GSDI over time would foster the harmonization of data so that information from one region can be integrated with that of others and effectively employed as a tool to improve sustainable development decision making. Making the GSDI a reality will also involve addressing issues of varied data policies and forging appropriate partnerships.

Participants at Santa Barbara strongly believe that this Seminar provided an important opportunity to move the GSDI concept forward. They recognize that:

- the need for map and information products relevant to sustainable development is global;
- the primary concern of developing countries and economies in transition relate to pressing national development issues that could be better achieved with the availability of GSDI;
- incentives must be provided to foster cooperation within and among countries in efforts to produce, maintain, and disseminate accurate maps and information products;



- a variety of technical and institutional challenges must be overcome if progress is to be realized.

Participants recognize the reasons why adequate global scale maps do not presently exist. Issues of national security, sovereignty, technology, capacity, and infrastructure limit opportunities for international cooperation. These restrictions currently combine to limit global map development activities to scales of 1:1,000,000. To maximize the benefit of global map products, spatial data sharing needs to be encouraged at this scale and better wherever possible. Such efforts must support spatial data requirements at varying scales and resolutions to meet specific local and national priorities. Current access policies (e.g., distribution and sharing restrictions) must be addressed so that they do not become constraints to the creation of globally consistent data sets.

This seminar confirmed that there are a number of ongoing efforts contributing to the production of a global map framework. Participants encourage NMOs—including those from countries facing technical and financial constraints—to continue efforts that contribute to the objective of creating better, more accessible maps at scales from local to global. Participants recognize the special role of the ISCGM as a catalyst in this endeavor and expect the ISCGM to play a leading role in implementing, where appropriate, recommendations made by Santa Barbara seminar participants.

Participants at the Santa Barbara seminar appreciated the effort made by the organizers and recognize the input of the seminar towards furthering the implementation of global mapping within GSDI. Participants recommend the following:

1. A Global Mapping Forum must be created bringing data users and providers together to facilitate creation of GSDI. A variety of national, regional and international organizations, NGOs, private sector companies, academia, NMOs, and space agencies, as well as other relevant organizations, must be involved in this effort. ISCGM should undertake a study to create such a Forum and determine the responsibilities necessary such as periodic assessments of progress, the harmonization of standards, and mechanisms for the establishment of a global mapping network. Such a network would be connected to the Internet and/or other means to facilitate communications.
2. Agencies implementing Agenda 21 accords should precisely define their spatial data and information requirements for implementation, compliance, and monitoring with the assistance of expert groups (e.g. ISCGM). These requirements should be included as priorities of the GSDI.
3. Financial and other incentives for project partnerships within the GSDI should be devised to facilitate the participation of national institutions of developing countries and economies in transition.
4. Donor agencies and development banks should increase assistance to institutions in developing countries and economies in transition to improve the quality of spatial data products and services, and facilitates access to these data for the creation of regional and global map products.
5. Issues related to spatial data policy and access must be discussed under the UN Regional Cartographic Conferences.
6. Overall Global Map development should be fostered under the umbrella of the United Nations and should recognize initiatives being taken at national, regional and global levels.
7. UN Environment Programme's Global Resource Information Database (UNEP / GRID) and other UN programs directly involved in GSDI activities should be strengthened to provide necessary technical support systems and metadata services to UN agencies and member countries.
8. Complementary efforts for the provision of technical support by a variety of national, regional and international organizations should be encouraged and coordinated in strengthening GSDI activities.
9. These recommendations should be embodied in a report to be presented to the Special Session of the United Nations General Assembly on the Implementation of



Agenda 21 in 1997. This report will make a clear and practical proposal for implementation developed under the auspices of

UN DDSMS with the assistance of the ISCGM.

### Second Meeting of the International Steering Committee for Global Mapping

Following the Seminar, on the afternoon of the 16th, the Second Meeting of ISCGM was held. Including 2 new Advisors, 12 Members and 3 Advisors from 11 countries (Members from New Zealand and the United Kingdom were absent) supported the Santa

Barbara Statement, and concluded the meeting by adopting the resolution including creation of working groups for developing a strategic plan and so on (The Resolution will appear in the next newsletter).

### Replacement of members and addition of advisors

Mr. Bill Harvey, ISCGM Member from Australian Survey & Land Information Group (AUSLIG), was replaced by Mr. Peter Holland, General Manager of AUSLIG.

Prof. Yang Kai, Deputy Director General, National Bureau of Surveying and Mapping (NBSM) of China, took the place of Prof. Chu

Liangcai as ISCGM Member from NBSM.

Dr. Ashbindu Singh, Regional Coordinator, Environmental Assessment Programme North America, UNEP and Dr. John F. Shupe, Chief Cartographer, National Geographic Society, were designated as new Advisors.

### Greeting from the new Secretary General

I was appointed to the Secretary General of the ISCGM last October. It is really exciting to participate in the Global Mapping initiative and to work with the full-time and part-time staff of the Secretariat.

At the Second Meeting of the ISCGM, we were able to carry out the task of the Secretariat, with the support of Chairperson Prof. Estes, Vice-Chairperson Dato' Abdul Majid, Members and Advisers of the ISCGM and all the related people. I would like to express my cordial gratitude to them.

This fourth issue of the Newsletter reports the Santa Barbara Seminar and the Second Meeting of the ISCGM.

All the staff of the Secretariat will do our best in implementing the resolution of the Meeting and the recommendations of the Santa Barbara Statement. Your cooperation



*Members of Secretariat, Mr. Nagai is seated in the center of the front row.*

and assistance would be greatly appreciated.

We are also looking forward to your suggestions and comments to the Newsletter and the Home Page.

(Nobuo NAGAI

Director, Geographic Department, GSI)