

Publicity Activities of Global Mapping at Johannesburg Summit and Outcomes of the Summit

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Abstract

The World Summit on Sustainable Development (WSSD; Johannesburg Summit) was a very important opportunity to show a worldwide audience on the significance of the Global Mapping Project in the context of sustainable development, in order to further encourage the use and the development of Global Map. It was also necessary that Global Mapping should properly be written in the documents adopted at the Summit. To this end, the International Steering Committee for Global Mapping (ISCGM) actively participated in the Summit from the stage of preparatory processes of the conference. These publicity activities brought the result that the words “global mapping” are written in the Implementation Plan of WSSD. This paper describes the history of the activities at the summit including its preparatory committee meetings and gives an outlook of Global Mapping project based on the results of the Summit.

1. Introduction

The World Summit on Sustainable Development (WSSD) was held from August 26 to September 4, 2002, in Johannesburg, South Africa. It is therefore also called the Johannesburg Summit. Ten years after the so-called Earth Summit held in Rio de Janeiro in 1992, this Summit was held to review the Agenda21 implementation and to make concrete plans of action for sustainable development. It was one of the largest international conferences with 22,000 participants including more than 100 heads of states.

The Global Mapping project is an international collaborative initiative through voluntary participation of national mapping organizations of the world, which aims to develop globally homogeneous geographic data sets at a ground resolution of 1km. The Geographical Survey Institute (GSI) of Japan has been working as the secretariat of the International Steering Committee for Global Mapping (ISCGM) since its establishment in 1996.

The primary objective of the Global Mapping project is to contribute to sustainable development through the provision of a base framework geographic dataset. Currently, 127 countries, accounting for 80% of the land area of the Earth, are participating in the project and data from twelve countries have been completed and are downloadable through the Internet from the ISCGM website.

The development of the Global Mapping project has been written about by many authors, including Maruyama (1998), Estes and Kline (2000), Fukushima (2000), Une (2001a), Une (2001b), and Une and Kajikawa (2001). But the WSSD was a watershed event of global importance in the year 2002. There, Global Mapping reached a new horizon that it is mentioned in the Implementation Plan of the Summit and it is also included in the Koizumi Initiative (Concrete Actions of Japanese Government to be taken for Sustainable Development—Towards Global Sharing) announced at this Summit.

Therefore this paper reports on the activities of the ISCGM, GSI, and Ministry of Land, Infrastructure and Transport (MLIT) for the Johannesburg Summit and the activities and results of the Summit in terms of Global Mapping. It also intended to give a future outlook for the Global Mapping project based on the outcomes of the Summit.

2. Global Mapping and United Nations Activities to Tackle Global Environment Problems

The first conference that the United Nations sponsored on environmental problems was the United Nations Conference on the Human Environment (Stockholm Conference) held in Stockholm in 1972. This conference adopted the Stockholm Declaration that said “Man has the fundamental right to freedom, equality and

adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being.” The United Nations Environment Programme (UNEP) was established in 1972 under the auspices of the Stockholm Conference.

Global environmental problems were treated as major international issues in the late 80's. Responding to this increase in environmental interest, the “Global Environmental Problem Review Committee” with Professor Matsui from Nihon University as the Chair was established at the Ministry of Construction (MOC; at that time, now MLIT) and the Geographical Survey Institute. It surveyed many possible projects that could help solve the problems in surveying and mapping field. This report was published by the Printing Bureau of the Ministry of Finance as *Image Survey* (Geographical Survey Institute, 1991) in 1991. It reviews the history and then present status of many kinds of geographic information required to understand and make countermeasures against environmental problems. Here, estimated costs for developing each kind of geographic information are also given.

In 1992, the concept of Global Mapping that develops fundamental geographic information at a global scale was proposed at MOC. The surveys done at the committee and published as *Image Survey* were useful to turn this concept into an actual plan. The proposal of Global Mapping at that time was to make digital and paper maps at a scale of 1:1,000,000.

As an institutional aspect of the project, the establishment of an international organization for the Global Map was proposed by considering that the development of data by each country would make it difficult to complete such data in the required time frame, based on the experiences with the International Map of the World (IMW)(Masaharu, 1992). This is different from the present organization of the Global Mapping executive body. Presently, ISCGM is a permanent body to implement the project as an NGO (non-governmental organization) and the GSI, as the secretariat of ISCGM, works with developing countries to prepare the Global Map. It can be said that the GSI plays a role in the international organization of the original idea to act not only as the secretariat, but also in preparing data of each country.

In 1992, the United Nations Conference on Environment and Development (UNCED; also called the *Earth Summit*) was held in Rio de Janeiro. This large-scale international conference in which about 180 nations participated, marked the beginning of the age of global environmental problem and sustainable development. The conference adopted *Agenda 21*, an action program for addressing global environment challenges while continuing to support sustainable economic development. *Agenda 21* clearly mentions that there is need for improved coordination between environmental data and information activities, and it emphasized the need to transform existing information into forms more useful for decision-making. Geographically specific spatial information is particularly critical. Spatial information enables us to enhance our understanding of global and regional relationships inherent in present status and processes that cause changes in key components of the global environment. To this end, in 1992, the MOC of Japan advocated the Global Mapping concept.

Though the need for global scale fundamental geographic information is not directly stated in *Agenda 21*, there are many references on the collection and utilization of data and information here and there. Naturally, a considerable part of these data fall in the category of geographic information. Chapter 40 of *Agenda 21*, entitled “Information for Decision Making,” emphasizes the need to strengthen data collection activities and improve the evaluation and analysis of data using new technologies such as geographic information systems. Therefore, Global Mapping can be said that this is a project along the idea of “Agenda 21” which is a general will of international society.

Activities in the United Nations have been emphasized in Global Mapping Project for appealing to the international society. The reasons are that it is the contribution from survey and mapping field to *Agenda 21* and that it has originally viewed the establishment of the international organization of the United Nations for the Global Mapping. These are well described in Une (2001b) for previous history to the Johannesburg Summit.

United Nations General Assembly Special Session (UNGASS; also called Rio + 5) was held in New York five

years after the Earth Summit, in order to review the implementation of agreements of the Earth Summit, such as *Agenda 21*. Paragraph 112 of the adopted document of this meeting, *Programme for the Further Implementation of Agenda 21*, states “A supportive environment needs to be established to enhance national capacities and capabilities for information collection, processing and dissemination, especially in developing countries, to facilitate public access to information on global environmental issues through appropriate means, including high-tech information and communication infrastructure related to the global environment, in the light of country-specific conditions, using, where available, such tools as geographic information systems and video transmission technology, including **global mapping**. In this regard, international cooperation is essential.” This is the first document of UN General Assembly that includes the term “Global Mapping.”

With this result, Professor John E. Estes, Chair of ISCGM, wrote a letter inviting national mapping agencies of the world to participate in the Global Mapping project. The letter was sent to every UN country with a recommendation letter from the director of UN Statistics Division. As a result, the number of participating countries in Global Mapping considerably increased and the Global

mapping project has become the most active data developing project. In this regard, the Johannesburg Summit that was held ten years after the Earth Summit was also an important conference for the Global Map. Therefore, we were actively working from the summit preparatory stage to promote Global Mapping development and utilization by further getting recognition of the international society at this conference.

3. Activities at the Summit Preparatory Meetings

The Earth Summit decided to establish Commission on Sustainable Development (CSD) for its follow-up under United Nations Economic and Social Council, with a CSD meeting to be held every year.

Our efforts for the Johannesburg Summit began with the participation in the ninth annual CSD session held in April, 2001. The activities included holding a side event to raise diplomats’ awareness about the importance of Global Mapping and geographic information as well as lobbying for the summit document to incorporate the Global Mapping.

The history of these activities at the preparatory committee meetings is shown in Table 1. The Preparatory Committees for WSSD (PrepCom) served as CSD10. Preparatory meetings at the regional level were held which

Table 1 Johannesburg Summit (WSSD) preparatory meetings and activities of ISCGM

Period	Name of meeting	Venue	Major Activities of ISCGM and the Results
4.16-4.27.2001	CSD9	New York, USA	<ul style="list-style-type: none"> • Side event “Global Mapping for sustainable development” with three presentation • Promotion of global mapping was included in the adopted document.
4.30-5.2.2001	CSD10 PrepCom1	New York, USA	<ul style="list-style-type: none"> • Did not participate • Chairpersons and schedules of the meetings were decided.
7.26-7.28.2001	Regional Preparatory Committee Meeting for North-East Asia	Beijing, China	<ul style="list-style-type: none"> • Actively promoted global mapping at the meeting. Global Mapping became well-known.
11.27-11.29.2001	Regional Preparatory Committee Meeting for Asia and the Pacific	Phnom Penh, Cambodia	<ul style="list-style-type: none"> • Report of the meeting included Global Mapping.
1.28-2.8.2002	PrepCom2	New York, USA	<ul style="list-style-type: none"> • Side event “Earth Observation and Global Mapping for sustainable development” with five presentations • Actively promoted Global Mapping at the meeting. Final chairman’s text included promotion of Global Mapping.
3.25-4.5.2002	PrepCom3	New York, USA	<ul style="list-style-type: none"> • Side event “Satellite Earth observation, Global Mapping and geographic information supporting sustainable development” with seven presentations • Explaining Global Mapping at a briefing of Japanese delegation to NGOs • Discussion of Chair’s text continued.
5.24-6.7.2002	PrepCom4	Bali, Indonesia	<ul style="list-style-type: none"> • Including “global mapping” in <i>World Implementation Document</i> (later renamed “Implementation Plan of WSSD”) was decided. • Japanese senior vice-minister mentioned the importance of Global Mapping at the Minister-level session of the meeting. • Side event “International partnership of Global Mapping and Earth observation for sustainable development” with eight presentations

Table 2 Presentations at Global Mapping side events at WSSD Preparatory Meetings

Meeting and date of side event	Lecturer	Title of Presentation
CSD9 April 24, 2001	Mr. Yoshikazu Fukushima, Infrastructure Development Institute, Japan	Global Mapping – Concept and recent progress
	Dr. John Kelmelis, U.S.Geological Survey (USGS)	Applications of the Global Map
	Mr. Naomasa Murakoshi, NASDA	Earth observation – Experience gained through the Tropical Rainfall Measuring Mission (TRMM)
PrepCom2 February 1, 2002	Mr. Naomasa Murakoshi, NASDA	Overview of the contribution of Earth observation
	Mr. Naomasa Murakoshi, NASDA	Global forest monitoring for sustainable development
	Ms. Riko Oki, NASDA	The monsoon and the global water cycle for water resources
	Mr. Minoru Akiyama, ISCGM & GSI	Overview of the contribution of Global Mapping
	Mr. Santiago Borrero, Agustin Codazzi Geographic Institute (IGAC), Colombia	International cooperation for development of Global Map
	Dr. John Kelmelis, USGS	Future applications of Global Map for sustainable development
PrepCom3 March 25, 2002	Mr. Naomasa Murakoshi, NASDA	Japan's commitment (applying satellite technology in achieving sustainable development)
	Dr. Josef Aschbacher, Committee on Earth Observation Satellite (CEOS)	Contribution of space agencies to international co-operation projects for sustainable development
	Ms. Tomomi Nio, NASDA	Initiatives to achieve better understanding of global water cycle, better water resource management and early warning systems for weather events
	Dr. John Kelmelis, USGS	Keys to better governance: effective use of applications of geospatial data
	Dr. Robert Ford, USAID	Needs of developing countries: examples of effective use of geographic information
	Mr. Hiroshi Une, GSI	A case study: global mapping used to assist shrimp farming in southern Thailand
	Ms. Alice Chow, United Nations Geographic Information Working Group (UNGIWG)	Proposals for sharing the benefits of global mapping world wide
PrepCom4 June 7, 2002	Mr. Shizuo Sato, MLIT	Global Mapping for Sustainable Development and International Partnership
	Mr. Takashi Hamazaki, NASDA	Earth Observation Technologies for Sustainable Development
	Brigadier General A H M Shahidullah, Survey of Bangladesh	Global Map for Flood Forecasting and Monitoring in Bangladesh
	Mr. Derek Clarke, Surveys and Mapping of South Africa	Global Map Applications in a Developing Country
	Dr. Milan Konecny, International Cartographic Association (ICA) & Masaryk University, Czech Republic	Sustainable Development and Information/Knowledge based Society
	Mr. Santiago Borrero, Agustin Codazzi Geographic Institute (IGAC), Colombia	Decision Making for Sustainable Development: The Need for Accessible Core Data in Latin America and the Contribution of Global Mapping
	Mr. Haggai Nyapola, Survey of Kenya	SDI Development, African Action
Mr. Minoru Akiyama, ISCGM & GSI	Regional Cooperation on Global Mapping in Asia and Europe	

were followed by four Preparatory Committee meetings (PrepCom1-4) at the global level.

ISCGM was accredited the status of NGO for the WSSD at the Third Preparatory Committee Meeting. This was a significant step in the process of our efforts for the Summit, because this enabled participation of ISCGM committee members and advisors in PrepComs and in the Summit itself. Several important members of ISCGM thus attended these conferences and made presentations at side events. This helped very much to strengthen the activities of ISCGM throughout the Summit.

Presentations were given at each preparatory meeting, as shown in Table 1 and Table 2. The lecturers included Japanese staff from MLIT and National Space Development Agency of Japan (NASDA) as well as

ISCGM committee members and advisors to emphasize the international appeal of the project.

As can be seen in the titles of the side events, we have been working with NASDA because Global Mapping has a complementary relationship with Earth observation by satellites. To prepare the Global Map, satellite remote sensing data is utilized in addition to the information collected in the field by each country's mapping agency. At the same time, the superposition with various kinds of geographic information is indispensable for understanding the present state of the global environment by using the earth observation data, and the Global Map becomes a basis for this.

Global Map and earth observation were recognized as contributing to sustainable development by the Japanese

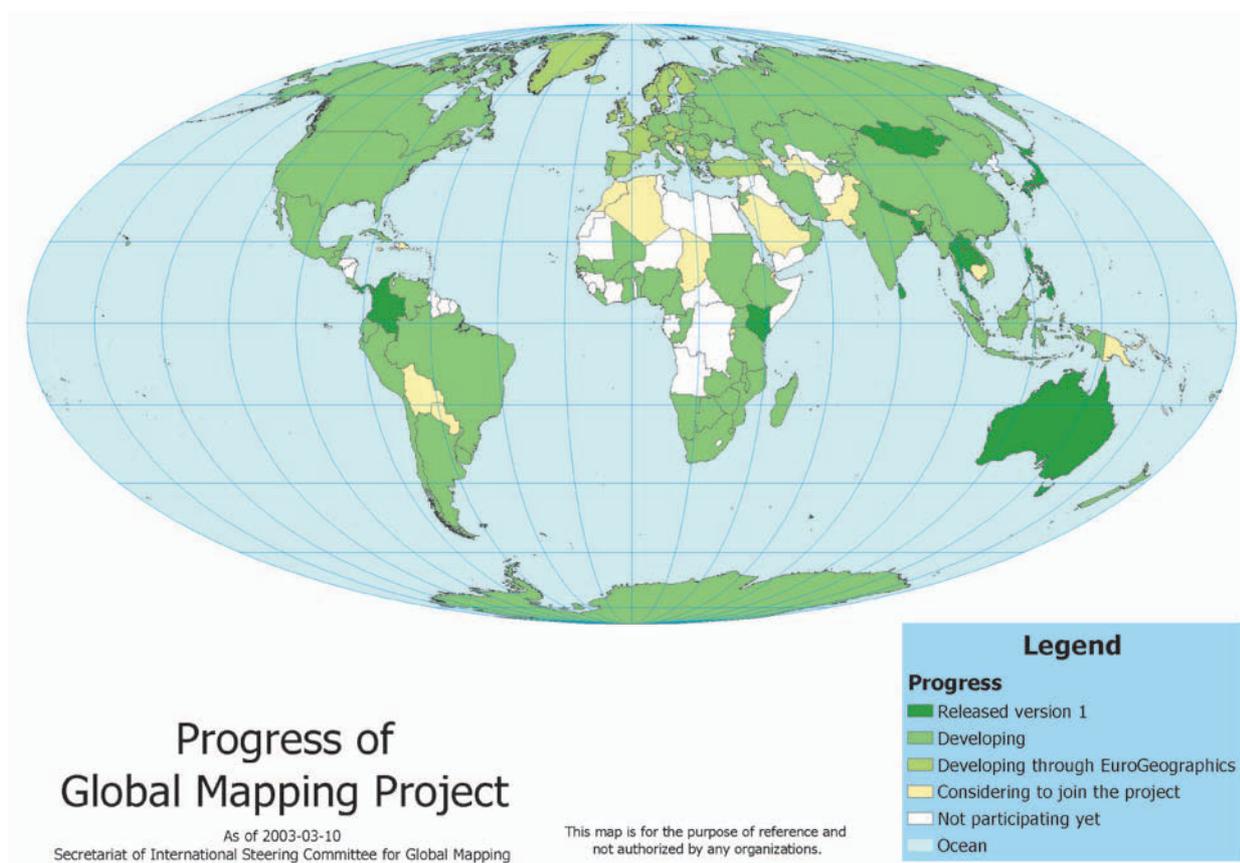


Fig. 1 Global Mapping Participation Status as of March 10, 2003.

In total, 129 countries are participating. Data for twelve countries have been released.

government at the Summit. Thus Global Mapping got support from the Japanese government delegation. It benefited us very much and helped to promote the Global Map. As a result, promotion of Global Mapping was described in *Implementation Plan of WSSD*.

Policy and decision making for sustainable development should be based on correct geographic information and other data. This would be common sense to geographers, who specialize in maps and geographic information. But it is not always self-evident to many people. The first draft submitted to the PrepCom4 did not have reference to Global Mapping although it was included in the previous document. This was due to the chairman's policy that action was important and the text had to be as short as possible. Modifiers had been cut off accordingly. Though Japan argued for an amendment which restored this and the U.S.A., etc. supported, it looked at that time that "global mapping" would not be described in the document. However, it was finally agreed to mention it. We believe this was due to continuous efforts and activities of Global

Mapping supporters as well as the fact that already more than ninety countries and regions (at that time, now it exceeds 120) of the world participated in the project.

4. Activities at the Johannesburg Summit

4.1 Overview of the Summit

WSSD was held from August 26th to September 4th, 2002 in Johannesburg, South Africa. The Summit conference, which was held on September 2-4 was attended by Japanese prime minister Junichiro Koizumi. It was a large-scale international conference with 191 participating nations, 104 heads of states, and over 21000 participants (breakdown: 9,101 government delegates, 8,227 NGO representatives, and 4,012 reporters).

The Summit was held in four places. The main venue for negotiations of the documents to be adopted and for speeches of the heads of nations and roundtable discussion was Sandton Convention Center (Photo 1) in the Sandton district, a new subcenter about 10 km north of central Johannesburg.



Photo 1 Sandton Convention Center, the main conference venue of the Johannesburg Summit.



Photo 2 Tensile One in Ubuntu Village.



Photo 3 Japan Pavilion in Ubuntu Village.



Photo 4 Plenary Session of WSSD (August 27, 2002).

Exhibitions and events took place at Ubuntu village, that is originally a cricket stadium with temporary facilities for exhibitions about four kilometers south of Sandton. The exhibition of each country's government and international organizations was carried out here. A large tent called Tensile1 (Photo 2) was the main exhibition place. The Japanese government had an exhibition here but it held also in another tent structure building (Photo 3). This Japan pavilion had exhibition space for Japanese government, NGOs and private companies, and space for seminars on various initiatives for sustainable development. The seminars were held almost every day during the summit period. Exhibitions and a symposium of the Global Map were also held in this Japan pavilion.

The exhibition on water issues was held at the Water Dome about 15 km northwest of Sandton. Japan concentrated its efforts also here, because the Third World

Water Forum will be held in Japan (Kyoto, Shiga and Osaka) in March, 2003. The exhibitions of NGOs were given at the NASREC exhibition center, about 10 km southwest of central Johannesburg.

The first week of the Summit (from August 26th to August 30th) was allocated to plenary sessions for problem areas, such as health, biodiversity, agriculture, water and sanitation, and energy. It goes without saying that intense diplomatic negotiations were conducted for each part of the text of WSSD Implementation Plan behind these plenary sessions. The summit level session held on September 2 to 4 featured general discussion sessions where heads of nations made speeches and roundtable discussions under the theme of "Making It Happen!" The afternoon and night of the last day were allocated to the plenary session that adopted the documents and the closing of the summit.

4.2 Activities related to Global Mapping at the Summit

For Global Mapping, six staff members from MLIT and GSI as well as Mr. Sato, Senior Vice-Minister for Land, Infrastructure and Transport, participated in the Summit. Besides these members, staff members of NASDA and some ISCGM committee members and advisors also participated in the Summit and gave presentations at the Global Mapping Symposium. As the text of the WSSD Implementation Plan related to Global Mapping had already been decided at the PrepCom4 held in Bali in June, 2002, we could focus our efforts to publicity activities on a wider audience, rather than following up the negotiation process.

4.2.1 Exhibition

We had poster panel exhibition of the Global Map with four large posters and example hardcopy outputs of Global Maps of several countries and distributed brochures, etc. during the whole summit period in a booth in the Japan pavilion (Photo 5). In total there were about 15000 visitors. Nearly 5000 brochures and other materials were distributed.

4.2.2 The symposium (Photo 6)

The symposium entitled “Global Mapping Partnership–Sustainable development and Geographic Information” was held at 15:30-17:30 on September 3rd under joint auspices of MLIT and ISCGM. The venue was the above-mentioned Japan pavilion seminar place in Ubuntu village. There was a total of 100 participants. There was occasionally a short visit of Japanese Prime Minister Koizumi during the symposium as he visited



Photo 5 Global Mapping exhibition booth in Japan Pavilion.

Ubuntu village on the day.

The first speech was a keynote address entitled “Global Mapping for Sustainable Development and International Partnership” by Mr. Shizuo Sato, Senior Vice-Minister of Land, Infrastructure and Transport. In his address, Mr. Sato emphasized the seriousness of global environmental problems and necessity and usefulness of Global Mapping in resolving these problems, and called for all countries to participate in Global Mapping.

After this keynote address, seven panelists made presentations. The titles and name of panelists are listed here in chronological order of their presentations.

- (1) “Application of Global Map for Sustainable Development”; Mr. Toru Nagayama, MLIT, Japan
- (2) “Importance of Global Map for African Issues”; Mr. Derek Clarke, Chief Director, Surveys and Mapping of South Africa
- (3) “Sustainable Development and Information Society: The Role of Geographic Information and Cartography”; Dr. Milan Konecny, International Cartographic Association (ICA)
- (4) “Application of Geographic Information for Global Environmental Issues”; Dr. Timothy Foresman, United Nations Environment Programme (UNEP)
- (5) “ALOS: Cost-cutting Mapper”; Mr. Yuji Osawa, NASDA, Japan
- (6) “GISD Initiative and Collaboration with Global Mapping”; Dr. John Kelmelis, United States Geological Survey (USGS)
- (7) “Collaborations with Global and Regional Initiatives, and Global Mapping Partnership Program”; Mr.



Photo 6 Global Mapping Partnership Symposium. (September 3, 2002)

Minoru Akiyama, ISCGM

After the presentations, there were lively exchanges between the floor and the panelist, which had to be cut off because of time constraints. The following are some of the topics that were discussed.

- How can the Global Map be used for the activities of grass roots NGOs? → The Global Map is based on voluntary participation of each country. The data can be freely downloaded from the Internet and utilized. When more detailed data is developed in future, it will be effectively used for region level activities.
- What are the benefits of Global Mapping? → Environmental problems and floods know no borders. To cope with these disasters, trans-boundary data are indispensable. Therefore it is a great success of the Global Map to achieve international cooperation for this purpose. It will influence the policy of the governments to depict the state of environmental change on maps.

4.2.3 The partnership briefing

From 15:00 to 15:30 on August 30th, there was the partnership briefing of Japanese 23 initiatives that were registered as Type 2 partnership/initiatives for the Summit in the Sandton Convention Center.

Type 2 is a collection of registered partnership initiatives that governments and NGOs contribute to global environmental protection and sustainable development with their own responsibility. Type 2 initiatives are not negotiated while Type 1 documents such as *Plan of Implementation of WSSD* and *Johannesburg Declaration on Sustainable Development* (Political Declaration) have to be agreed by negotiations between governments.

That is to say, not only agreement in negotiations but also initiatives which promote sustainable development are important, and that the summit should provide the opportunity for cooperation and partnerships to activate these initiatives.

The Japanese government also regards Type 2 as important, and ministries, NGOs and local governments have registered various partnership initiatives. Therefore it arranged a briefing to introduce and explain these initiatives to the summit participants. Mr. Minoru Akiyama, Secretary-General of ISCGM, announced that

Global Mapping had been registered as Type 2 under the name of ISCGM and explained its activity and role in sustainable development.

4.2.4 Bi-lateral meetings

Mr. Shizuo Sato, Senior Vice-Minister for Land, Infrastructure and Transport, had energetic bilateral meetings with leaders of other countries during his stay in Johannesburg. Among them, meeting with Mr. Conrad C. Lautenbacher, Undersecretary of Commerce for Oceans and Atmosphere and Administrator of National Oceanic and Atmospheric Administration (NOAA), USA put on the agenda the cooperation between GISD and Global Map. GISD, which stands for Geographic Information for Sustainable Development, aims to make geographic information more accessible and useful to decision makers working on sustainable development problems, especially in regions such as Africa and is advocated by the USA. It was agreed to advance cooperation between GISD and Global Map at this meeting.

Mr. Sato also met Ms. Tokia Saïfi, State Secretary for Sustainable Development of France, and requested cooperation in promoting participation in Global Mapping among West African countries.

4.3 Results of the Summit

4.3.1 Description of Global Mapping in the text of Implementation Plan of WSSD

Implementation Plan of WSSD, the major result of the Summit, describes that Global Mapping initiatives and partnerships be promoted as cited in the following. We cite here the relevant paragraph and the immediately following paragraph that describes international cooperation in the field of surveying and mapping.

132. Promote the development and wider use of earth observation technologies, including satellite remote sensing, global mapping and geographic information systems, to collect quality data on environmental impacts, land use and land-use changes, including through urgent actions at all levels to:

- (a) Strengthen cooperation and coordination among global observing systems and research programmes for integrated global observations, taking into

account the need for building capacity and sharing of data from ground-based observations, satellite remote sensing and other sources among all countries;

- (b) Develop information systems that make the sharing of valuable data possible, including the active exchange of Earth observation data;
- (c) Encourage initiatives and partnerships for global mapping.

133. Support countries, particularly developing countries, in their national efforts to:

- (a) Collect data that are accurate, long-term, consistent and reliable;
- (b) Use satellite and remote-sensing technologies for data collection and further improvement of ground-based observations;
- (c) Access, explore and use geographic information by utilizing the technologies of satellite remote sensing, satellite global positioning, mapping and geographic information systems.

Direct reference to geographic information in *Implementation Plan of WSSD* can be found only in these two paragraphs. It may appear to be less significant than *Agenda 21*, which mentions data and information in almost every chapter. However it is not actually less because both the structure and the amount of text are different (*Agenda 21* has about 500 pages while *Implementation Plan of WSSD* has about 70 pages.). The description on collection and use of geographic information has been significantly expanded and strengthened, as can be seen from these two paragraphs reflecting the development in the ten years since Agenda 21.

It is very significant thing that the Promotion of Global Mapping is included in the *Implementation Plan of WSSD*, the adopted document of the world's largest political conference. One comment should be made here. In the *Implementation Plan of WSSD*, the term Global Mapping is written in lowercase letters. This is because the *Implementation Plan of WSSD* does not support or endorse any particular project. In this sense, 'global mapping' can be interpreted to include not only the Global Mapping project ISCGM is executing but also other

similar initiatives for collecting global scale geographic information. This means that these two paragraphs of the *Implementation Plan* encourage and support all the people involved in surveying, mapping and geographic information. Therefore it is desirable to disseminate these results of the Summit to all relevant people.

At the same time, it should be noted that 'global mapping' was understood to mean the Global Mapping project of ISCGM when it was discussed and negotiated in the preparatory meetings of the Summit.

4.3.2 Registration of Global Mapping as a Type 2 partnership initiative

Global Mapping was registered under the name of ISCGM as a Type 2 partnership/initiative of the Johannesburg Summit. ISCGM has expressed its plan to complete global land area coverage of the Global Map by the year 2007 under partnerships with national mapping organizations, relevant academic societies and international organizations. This document is reported on the web page of a United Nations, and a summary is also given in the summary collection of Type 2 which the United Nations compiled.

Though 'global mapping' is written as a common noun in *Plan of Implementation of WSSD*, it is described in the Type 2 document with the executive body, ISCGM. Therefore the Global Mapping of ISCGM is recognized by the Summit with these two documents.

4.3.3 The Koizumi Initiative

The Koizumi Initiative: Concrete Actions of Japanese Government to be taken for Sustainable Development - Towards Global Sharing, was introduced in the plenary session of cross-sectoral issues (science and technology is also included here) by Japanese Ambassador Asakai on August 27. The Koizumi Initiative includes the Global Mapping as follows.

Koizumi Initiative (exerpts)

2. Important Areas and Concrete Measures

1) People and Hope (Human Resources Development)

- In order to realize sustainable development, it is indispensable that the ordinary people of the world are

motivated with hope to make full use of their ability under good governance.

- To that end, human resources development (in the fields of education, health and gender) is an area of the greatest importance. In other words, investing in people and sharing knowledge and technology are the keys to sustainable development.

c) Science & Technology: As a Breakthrough for Sustainable Development

- Promote Global Environment Monitoring through the Integrated Global Observing Strategy (IGOS) Partnership and Global Mapping
- Implement environmental science & technology cooperation

In the same plenary session, UNESCO and UNEP mentioned the importance of scientific information such as earth observation, and the EU, Japan, and the U.S.A. spoke about the importance of earth observation and geographic information. In his speech, Ambassador Asakai of Japan stated that Global Mapping is “an important tool which monitors land use change.”

5. Conclusion

We successfully endeavored to make Global Mapping and activities of collecting geographic information properly mentioned in the documents of the Johannesburg Summit held ten years after the Earth Summit in Rio de Janeiro. The achievements of the Summit related to Global Mapping can be summarized as follows.

- (1) Plan of Implementation of WSSD includes paragraphs that promote the development and wider use of earth observation technologies including global mapping.
- (2) The Global Mapping project by ISCGM is registered as a Type 2 Partnership Initiative of the Summit.
- (3) Global Mapping is also included in the Koizumi Initiative, which outlined at the Summit actions that the Japanese government would take for sustainable development.

With these achievements, ISCGM has taken another step toward the completion of Global Map development by the year 2007.

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GISD <http://www.opengis.org/gisd/>

Global Mapping <http://www.iscgm.org>

Global Mapping Partnership Symposium (at WSSD) <http://www.mofa.go.jp/policy/environment/wssd/2002/event3-2.html>

ISCGM <http://www.iscgm.org>

Johannesburg Summit (Official homepage by UN) <http://www.johannesburgsummit.org/>

Koizumi Initiative <http://www.mofa.go.jp/policy/environment/wssd/2002/kinitiative.html>