

**Fifteenth United Nations Regional
Cartographic Conference for Asia
and the Pacific**

Kuala Lumpur, 11-14 April 2000

Item 12 of the provisional agenda*

Adoption of the report of the Conference

**Draft report of the Fifteenth United Nations Regional
Cartographic Conference for Asia and the Pacific**

Rapporteur: Drew **Clarke** (Australia)

Contents

	<i>Paragraphs</i>	<i>Page</i>
I. Organization of the Conference	1-16	3-6
A. Terms of reference	1	3
B. Welcoming ceremony	2	3
C. Opening of the Conference	3	3
D. Election of the President	4-5	3
E. Election of other officers	6	3
F. Objectives of the Conference	7	4
G. Adoption of the rule of procedure	8	4
H. Adoption of the agenda	9	4-5
I. Establishment of committees and election of chairmen and rapporteurs ..	10-12	5-6
J. Organization of work	13	6
K. Documentation	14	6

L. Report on credentials	15	6
M. Attendance	16	6
II. Plenary session	17-59	7-11
III. Work of Committee I: Cadastral	60-62	12-13
IV. Work of Committee II: Geodesy	63-67	14-16
V. Work of Committee III: Fundamental data	68-71	17-19
VI. Work of Committee IV: Development needs	72-73	20
VII. Work of Committee V: Geographical names	74	21
VIII. Resolutions adopted by the Conference		22
A. List of resolutions		22
B. Texts of resolutions		23-29

Annexes

I. Provisional agenda for the Sixteenth United Nations Regional Cartographic Conference for Asia and the Pacific	30-31
II. List of documents	32-37
III. List of participants	38-52

I. ORGANIZATION OF THE CONFERENCE

A. Terms of reference

1. The Fifteenth United Nations Regional Cartographic Conference for Asia and the Pacific was held in Kuala Lumpur, from 11 to 14 April 2000. The Conference was held in accordance with Economic and Social Council decision 2000/209 of 4 February 2000. For the first time the Conference incorporated the 6th meeting of the Permanent Committee on the Geographic Information System (GIS) Infrastructure for Asia and the Pacific.

B. Welcoming ceremony

2. On 11 April 2000, Dato' Abdul Majid Mohamed of Malaysia, President of the Permanent Committee on GIS Infrastructure for Asia and the Pacific, addressed the Conference. Amor Laaribi, representative of the Statistical Division of the United Nations, read out a welcoming address on behalf of the Director of the Division. The Minister for Land and Cooperative Development of Malaysia, Tan Sri Datuk Kasitah Gaddam, gave an opening statement.

C. Opening of the Conference (Agenda item 1)

3. The Fifteenth United Nations Regional Cartographic Conference for Asia and the Pacific was opened in Kuala Lumpur on 11 April 2000 by the President of the Permanent Committee on GIS Infrastructure for Asia and the Pacific, Dato' Abdul Majid Mohamed.

D. Election of the President (Agenda item 2)

4. At its 1st plenary meeting, on 11 April, upon the proposal of Amor Laaribi of the Statistical Division of the United Nations, the Conference elected Dato' Abdul Majid Mohamed President of the Conference by acclamation.

5. At the same meeting, the President made a statement.

E. Election of other officers (Agenda item 2)

6. At its 1st plenary meeting, the Conference elected the following officers by acclamation:

Vice-President: **Yang Kai**, China* (Vice-President of the Permanent Committee)

Rapporteur: **Drew Clarke**, Australia (Secretary of the Permanent Committee)

* The post of one Vice-President remained vacant.

**F. Objectives of the Conference
(Agenda item 3)**

7. The primary objective of the Conference is to provide a regional forum where governmental officials, planners, scientists and experts from Asia and the Pacific and other regions could meet to exchange ideas and information and to address the common needs, problems and experiences in the field of cartography and geographic information, including educational and training aspects, scientific and technological requirements, implementation issues and benefits. Additional specific objectives are to report on the assessment of the status of the resolutions adopted at the Fourteenth United Nations Regional Cartographic Conference for Asia and the Pacific; to report on the developments and contributions of cartography and geographic information in support of the implementation of Agenda 21; and to report on the progress in the development and implementation of national spatial data infrastructures. The Conference will receive reports from the Permanent Committee on its activities since the Fourteenth Conference and will establish requirements for the activities of the Permanent Committee for the next three years.

**G. Adoption of the rules of procedure
(Agenda item 4 (a))**

8. At its 1st plenary meeting, the Conference adopted the rules of procedure (E/CONF.92/INF.2).

**H. Adoption of the agenda
(Agenda item 4 (b))**

9. At its 1st plenary meeting, the Conference approved the following provisional agenda:
1. Opening of the Conference.
 2. Election of the President and other officers of the Conference.
 3. Objectives of the Conference.
 4. Organizational matters:
 - (a) Consideration and adoption of the rules of procedure;
 - (b) Adoption of the agenda;
 - (c) Establishment of committees and election of chairmen and rapporteurs;
 - (d) Organization of Conference work;
 - (e) Credentials of representatives to the Conference;
 5. Report of the Permanent Committee On GIS Infrastructure for Asia and the Pacific (PCGIAP).
 6. Country reports.
 7. Report on the implementation of resolution 3 of the Fourteenth Conference.
 8. Reports on the status of implementation of resolutions of previous conferences from

countries, the United Nations and non-governmental organizations.

9. Reports on achievements in surveying, mapping and charting in addressing national, subregional, regional, and global issues, including:
 - (a) New National Spatial Data Infrastructure (NSDI) and Asia and the Pacific Spatial Data Infrastructure (APSDI);
 - (b) Environmental management, including oceans and disaster mitigation;
 - (c) Public access to and exchange of information;
 - (d) Land reform, land management, planning and development;
 - (e) Human settlements – demography and policy;
 - (f) Desertification and land degradation;
 - (g) Development of human resources
 - (h) Safety of maritime and air navigation
 - (i) Other applications of surveying and mapping in support of the implementation of Agenda 21;
 - (j) Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States and the Declaration of Barbados;
 - (k) Policy and management of national surveying and mapping activities;
 - (l) Funding of national surveying and mapping activities;
 - (m) Technical cooperation and transfer of technology.
10. Review of achievements of the Conference
11. Provisional agenda of the Sixteenth United Nations Regional Cartographic Conference for Asia and the Pacific.
12. Adoption of the report of the Fifteenth United Nations Regional Cartographic Conference for Asia and the Pacific.

**I. Establishment of committees and election of chairmen and rapporteurs
(Agenda item 4 (c))**

10. At its 1st plenary meeting, the Conference decided to establish the following five technical committees to consider issues for adoption by the Conference:

Committee I: Cadastral
 Committee II: Geodesy
 Committee III: Fundamental data
 Committee IV: Development needs
 Committee V: Geographical names

11. Also at its 1st plenary meeting, the Conference elected the following conveners of the five technical committees:

Committee I (Cadastral) — Ian Williamson, Australia, representing FIG Commission 7

Committee II (Geodesy) — Majid Kadir, Malaysia

Committee III (Fundamental data) — John Estes, United States of America

Committee IV (Development needs) — Wu Guoxiang, Economic and Social
Commission for Asia and the Pacific

Committee V (Geographical names) — John Parker, Australia

12. At the same meeting, the Conference decided to authorize the technical committees to elect their rapporteurs.

**J. Organization of work
(Agenda item 4 (d))**

13. At its 1st plenary meeting, the Conference approved the proposed organization of work, as contained in the brochure “Fifteenth United Nations Regional Cartographic Conference for Asia and the Pacific — a milestone for sustainable development”, as orally amended, on the understanding that minor modifications might be made as necessary.

K. Documentation

14. A list of the documents submitted to the Conference appears as annex III to the present report. The technical papers are to be published in a separate volume, after review and editing, as proceedings of the Conference.

**L. Report on credentials
(Agenda item 4 (e))**

15. At the 5th meeting, on 14 April, the President of the Conference reported that the Credentials Committee had reviewed all credentials and had found them to be in order.

M. Attendance

16. The Conference was attended by 200 representatives and observers of 34 countries and territories and 12 intergovernmental and international scientific organisations. A list of participants is given in annex III to the present report.

II. PLENARY SESSION

17. At the 2nd plenary meeting, on 11 April, Dato' Abdul Majid Mohamed presented a report of the Executive Board of the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) (E/CONF.92/L.10) on the activities in geographic information infrastructure in accordance with the resolutions of the Fourteenth United Nations Regional Cartographic Conference for Asia and the Pacific, on progress achieved by the Permanent Committee in the accomplishment of its workplans and its proposed future activities.

18. At the same meeting, Rudolph Matindas, of Indonesia, Chairman of PCGIAP Working Group I, "Regional Geodetic Network", presented a report of the Group (E/CONF.92/L.11) on the achievements during the past three years in the implementation of a common geodetic network for the Asia and the Pacific region, as the basis for regional geographic information system applications.

19. Also at the same meeting, Peter Holland, of Australia, Chairman of PCGIAP Working Group II, "Regional Fundamental Data", presented a report of the Group (E/CONF.92/L.12) on the activities relating to fundamental data through development of regional fundamental datasets and mechanisms for sharing these data. A pilot project dealing with administrative boundaries has been initiated. Future activities dealing with policy on data sharing, assistance to national spatial data infrastructure and clarification of clearing house, data dictionaries and metadata are proposed.

20. Also at the same meeting, Drew Clarke presented a report of the PCGIAP Development Needs Taskforce (E/CONF.92/L.14) on the activities in geographic information infrastructure and institutional framework issues relating to spatial data infrastructure strategy for Asia and the Pacific region, determination of national spatial data infrastructure development needs and the elaboration of a glossary of terms. Essential spatial data infrastructure development needs priorities were identified, relating to national spatial data infrastructure policy and programmes, geodesy, GIS standards, coordination, cadastral systems and digital mapping.

21. Also at the same meeting, Dato' Abdul Majid Mohamed informed the Conference on the status of implementation of the resolutions of the Fourteenth United Nations Regional Cartographic Conference for Asia and the Pacific and proposed a prototype for a monitoring system, which constitutes a good mechanism to assess the implementation of the resolutions of the Conferences.

22. Also at the same meeting, Drew Clarke made a statement on the status of submission of the country reports. National reports were received from 14 of the countries attending the Conference - 13 reports from Asia and the Pacific countries: Australia, Brunei, China, Fiji, India, Indonesia, Japan, Mongolia, New Zealand, the Republic of Korea, the Russian Federation, Singapore and Thailand, and 1 report from Germany (see annex II). According to the reports, major trends in the Asia/Pacific region include: i) the progress in the adoption and recognition of the concept of the spatial data infrastructure (SDI), the acceleration in implementation of national SDI programmes, and the involvement of many countries in the implementation of region and global SDI; ii) the strengthening of communication and cooperation between countries in the region for the acquisition and sharing of spatial data, through the activities of the Permanent Committee on Geographic Information System for the Asia and the Pacific.

23. At the 3rd meeting, on 12 April, Derek Clarke, Chairman of the Global Spatial Data Infrastructure Steering Committee, presented a paper entitled "GSDI and emerging countries - challenges and

opportunities for global cooperation” (E/CONF.92/BP.2). It highlighted the intimate linkage between national, regional and global geographic information issues. Many development issues extend beyond national and regional boundaries and countries gain to benefit from cooperation with other countries. In addition global initiatives and programmes will only be effective with the full participation by member countries at the national and regional levels. To best participate in the global spatial data community, developing countries should first develop a national spatial data infrastructure (NSDI) which can then be merged into the regional and global models. Among the challenges facing developing countries, an emphasis was put on the institutional strengthening of national mapping agencies, with donor funding support.

24 At the same meeting, John E. Estes, Chairman of the International Steering Committee for Global Mapping, presented a paper entitled “International Steering Committee for Global Mapping: current status and future plans and challenges” (E/CONF.92/BP.3). He reported on current and future plans and challenges of the Global Mapping project. Reasons that led to adopting the 1:1000000 scale and 1km resolution were explained. An emphasis was put on the double-sided challenge: demonstrate that global data are locally important and vice-versa. What makes the product of the Global Map Project so unique is the increasing level of active participation by NMAs.

25 Also at the same meeting, Ian P. Williamson, Head of the Department of the Geomatics at the University of Melbourne, presented a paper entitled “The UN-FIG Bathurst Declaration On Land Administration For Sustainable Development- the role in spatial data infrastructures” (E/CONF.92/BP.4). He reported that SDI is a key element of land administration infrastructure, but its development must be driven by business needs. He asserted that multi-purpose cadastre is the future and sustainable development is rhetoric without land management system.

26 Also at the same meeting, Santiago Borrero-Mutis, President of the Permanent Committee on Spatial Data Infrastructure for the Americas, presented a paper entitled “Formation of the UN Permanent Committee on Spatial Data Infrastructure for the Americas” (E/CONF.92/BP.5). He reported on the three years process which led to its creation in February 2000, the role and the vision of this Committee. He also reported on a recent survey, showing how different is Latin American from others regions in the world and then the challenges the Committee is facing to support the development of spatial data infrastructure in this region.

27 Also at the same meeting, John Parker, immediate past chairman of United Nations Group of Experts on Geographical Names, Asia South-East, Pacific South-West Division, presented a paper entitled “Geographic names and the Asia-Pacific Spatial Data Infrastructure” (APSDI) (E/CONF.92/BP.6). He reported on the role and links of geographical names within APSDI, the benefits from consistent use of names and the opportunity for PCGIAP to provide a basis for geographical names across the region.

28. Also at the same meeting, Wu Guoxiang, Chief of the Space Technology Applications Section of the United Nations Economic and Social Commission for Asia and the Pacific, presented a paper entitled “The role of the Regional Spatial Applications Programme for Sustainable Development in the Asia and the Pacific Spatial Data Infrastructure” (E/CONF.92/BP.7). The representative of ESCAP reported on RESAP activities related to remote sensing data acquisition and updating methods, integrated applications of GIS and remote sensing for sustainable natural resources and environmental management. He emphasized the role of space applications to establish and support a regional SDI and the education and training support which is national capacity building oriented.

29. At the 4th meeting, on 13 April, Robert Foster, President of the International Federation of Surveyors (FIG), presented a paper entitled “Surveying issues and challenges for the 21st century”

(E/CONF.92/BP.8). He gave a comprehensive description of the role of surveying in the globalization development, in general, and in geographic information infrastructure in particular. For example, FIG could play the role of facilitator between UN organizations and other organizations related to the field of geographic information.

30. At the same meeting, Bengt Rystedt, President of the International Cartographic Association, presented a paper entitled “Leading edge cartographic developments and challenges” (E/CONF.92/BP.9). He emphasized the crucial challenges cartography is facing and the way to follow in order to play its role in supporting spatial data infrastructure. He asserted that traditional cartographer should step into the professional world as spatial information broker. He also presented the future events and plans of ICA.

31. Also at the same meeting, John Manning, Chairman of the International Association of Geodesy Sub-Commission on South Asia and the Pacific, presented a paper entitled “Densification of global geodetic networks” (E/CONF.92/BP.10). A comprehensive description of IAG activities shows its strong commitment to assist the geodetic based work in the developing countries within their resources, and to build a homogenous global geodetic infrastructure. For example, International GPS Base Stations network offers great services and products with direct relevance to the Asia Pacific community, in particular for densification of compatible regional geodetic networks for use in spatial data infrastructures. IAG also supports the work of the PCGIAP working group on Regional networks for Asia and the Pacific.

32. Also at the same meeting, Richard Groot, from International Institute for Aerospace Survey and Earth Sciences (ITC), presented a paper entitled “Corporatisation of National Mapping Agencies” (E/CONF.92/BP.11). This paper addressed a fundamental issue related to reconsideration of the mandate of National Mapping Agencies (NMA), which are under crossfire, according to the new developments and shifts occurred by new information and communication technologies and the emergence of geo-information concept. NMAs are facing a changing natural monopoly with privatization and value-added products, economic competition and efficiency issues. In order to assure their continuing relevance, NMAs must participate in the non-monopoly component of the value-added market.

33. Also at the same meeting, Frank Byamugisha, Principal of Rural and Natural Resources Sector Unit, Development Research Group, the World Bank, presented a paper entitled “World Bank support for land-related projects in developing countries’ experiences and implications for international cooperation” (E/CONF.92/BP.12). This paper reviewed the rationale for World Bank support for the land-related projects and policy reform in countries moving from centrally planned to market economies and other developing countries. The lessons that the Bank has learnt from these experiences and their implications for international cooperation are also reported. There is a need for greater sharing of spatial data (including cadastral data) at national and international levels and best practices in the design and implementation of land administration projects.

34. Also at the same meeting, Shoichi Matsumura, from Geographical Survey Institute, Japan, presented a paper entitled “The role of geographic information in JICA programs across the Asia and the Pacific region” (E/CONF.92/BP.13). This paper gave a description of technical cooperation programs by JICA and noted the increasing demand for GIS development. JICA affirmed its commitment to continue to assist developing countries across the Asia and the Pacific through geographic information programs.

35. Also at the same meeting, Keu Mataroa, from Ministry of Works Energy and Physical Planning, Cook Islands, presented a paper entitled “GIS development and challenges in Pacific island nations”

(E/CONF.92/BP.14). The representative of Cook Islands, as a small Pacific Island country, thanked the United Nations for the opportunity to attend and contribute to the Conference. He reported on the PCGIAP Pacific Workshop, hosted by Fiji, in Suva from 22-25 March 1999, sponsored by Australia and attended by 15 countries (from the 19 Pacific Island countries). He also reported on the formation of the PCGIAP Pacific Group, representing the 19 members. He emphasized Pacific Group development needs and priorities, including institutional strengthening, regional geodesy extension to include all Pacific members, and Pacific remote sensing data library requirements.

36. At the 5th meeting, on 14 April, the Conference took note of the reports of the technical committees and decided that the summaries of the reports would be incorporated into the final report of the Conference.

37. At the same meeting, Ian Williamson, of Australia, Convener of Committee I (Cadastral), introduced a draft resolution E/CONF.92/L.39 entitled "International Federation of Surveyors Bathurst Declaration on Land Administration for Sustainable Development", which was submitted on the basis of informal consultations.

38. Also at the same meeting, the Conference adopted draft resolution E/CONF.92/L.39, as orally amended (see chap. VIII, sect B).

39. Also at the same meeting, Ian Williamson introduced a draft resolution /CONF.92/L.40 entitled "The establishment of a working group on the cadastre", which was submitted on the basis of informal consultations.

40. Also at the same meeting, following statements by the representatives of China, Australia and the Philippines, the Conference adopted draft resolution E/CONF.92/L.40, as orally amended (see chap. VIII, sect B).

41. Also at the same meeting, Ian Williamson introduced a draft resolution /CONF.92/L.41 entitled "Economic aspects of modern surveying, mapping, geospatial data, infrastructure and land administration programmes ", which was submitted on the basis of informal consultations.

42. At the same meeting, following statements by the representatives of China, Australia, Brunei, India and Germany, the Conference adopted draft resolution E/CONF.92/L.41, as orally amended (see chap. VIII, sect B).

43. Also at the same meeting, Majid Kadir, of Malaysia, Convener of Committee II (Geodesy) introduced a draft resolution E/CONF.92/L.38, entitled "Regional geodetic infrastructure".

44. Also at the same meeting, following a statement by the representatives of Iran, the Conference adopted draft resolution E/CONF.92/L.38, as orally amended (see chap. VIII, sect B).

45. Also at the same meeting, Saeid Noori-Bushehri, of Iran, Rapporteur of Committee III (Fundamental data) introduced a draft resolution E/CONF.92/L.36, entitled "Fundamental data".

46. Also at the same meeting, following a statement by the representatives of Nepal, the Conference adopted draft resolution E/CONF.92/L.36, as orally amended (see chap. VIII, sect B).

47. Also at the same meeting, Keu Mataroa, of the Cook Islands, Rapporteur of Committee IV (Development needs) introduced a draft resolution E/CONF.92/L.37, entitled "Institutional strengthening".

48. Also at the same meeting, following statements by the representatives of the Russian Federation,

Germany and Australia, the Conference adopted draft resolution E/CONF.92/L.37, as orally amended (see chap. VIII, sect B).

49. Also at the same meeting, John Parker, of Australia, Rapporteur of Committee V (Geographical names) introduced a draft resolution E/CONF.92/L.42, entitled " Promotion of national and regional geographical names standardization programmes ".

50. Also at the same meeting, the Conference adopted draft resolution E/CONF.92/L.42 (see chap. VIII, sect B).

51. Also at the same meeting, Santiago Borrero Mutis, of Colombia introduced a draft resolution E/CONF.92/L.43, entitled "Cooperation with the United Nations Geographic Database Initiative ".

52. Also at the same meeting, the Conference adopted draft resolution E/CONF.92/L.43 (see chap. VIII, sect B).

53. Also at the same meeting, Drew Clarke, Secretary of the Permanent Committee, introduced a draft resolution E/CONF.92/L.44, entitled " Vote of thanks ".

54. Also at the same meeting, the Conference adopted draft resolution E/CONF.92/L.44 (see chap. VIII, sect B).

55. Also at the same meeting, Drew Clarke, introduced a draft resolution E/CONF.92/L.35, entitled "Provisional agenda for the Sixteenth United Nations Regional Cartographic Conference for Asia and the Pacific".

56. Also at the same meeting, the Conference adopted draft resolution E/CONF.92/L.43 (see chap. VIII, sect B).

57. Also at the same meeting, Drew Clarke, Rapporteur of the Conference introduced the draft report of the Conference on its fifteenth session (E/CONF.92/L.34).

58. Also at the same meeting, the Conference adopted draft report E/CONF.92/L.34 and authorised the Rapporteur to finalise it in consultation with the President and Vice-President, by incorporating therein the proceedings of the meeting.(see chap. VIII, sect B).

59. Also at the same meeting, the President made a closing statement.

III. WORK OF COMMITTEE I: CADASTRAL

60. At its 5th meeting, on 14 April, Ian Williamson, of Australia, Convenor of Committee I (Cadastral), presented the oral report of the Committee. The Cadastral Workshop discussed the following main issues:

- a) importance of raising the awareness of cadastral and land administration issues in government and the wider society,
- b) need to consider the economic options in cadastral reform and land administration systems,
- c) importance of involving local communities in cadastral reform,
- d) importance of quantifying the linkage between cadastral systems and sustainable development,
- e) need to quantify the performance of cadastral and land administration systems,
- f) need to recognise the difficulties in integrating cadastral and topographic data at a national level,
- g) need for care when developing ISO standards so they are not overly influenced by local issues.

61. The objective of the Workshop was to establish a working group on the cadastre within the PCGIAP to ensure an ongoing cadastral or land administration focus and to support for related activities, and to develop a work plan for 2000-2003. In order to justify the establishment of a working group on cadastre, the Workshop:

- a. Overlooked recent cadastral and land administration activities of the UNRCC for Asia and the Pacific and the PCGIAP to date:
 - 13th UNRCC for Asia and the Pacific – Beijing
 - 14th UNRCC for Asia and the Pacific – Bangkok
 - UN-FIG Bogor Declaration on Cadastral Reform
 - UN-FIG Bathurst Declaration on Land Administration for Sustainable Development
- b. Overlooked the activities of the Meeting of Land Administrators (MOLA) established under _____ (UNECE)
- c. Overlooked the activities of Commission 7 (Cadastre and Land Management), International Federation of Surveyors:
 - Statement on Cadastre
 - Cadastre 2014
 - Workplan 1994-1998
 - Workplan 1998-2002
- d. Discussed the cadastral and land administration activities of member States in the Asian-Pacific region:
 - Land titling or land administration projects
 - Integration of cadastral and topographic data sets as part of state or national SDI
 - Automation of cadastral systems
 - Development of national cadastral layers within NSDIs (including properties and

addresses) and particularly the activities of the Public Sector Mapping Agencies of Australia.

e. Discussed the justification and needs of member States for a cadastral and land administration focus in the UNRCC for Asia and Pacific and the PCGIAP:

- Need to share experiences on cadastral reform
- Need to justify cadastral and land administration infrastructures and reform in support of sustainable development
- A focus to implement the Recommendations from the UN-FIG Bathurst Declaration on Land Administration for Sustainable Development.

62. The outcomes of the Workshop were:

- a) The Workshop agreed to propose the establishment of a working group on cadastre to the PCGIAP,
- b) Eight persons from Malaysia, Australia, India, Fiji and New Zealand agreed to be involved in the operation of the working group,
- c) The Workshop agreed to propose a resolution to the PCGIAP and the UNRCC endorsing the UN-FIG Bathurst Declaration.

IV. WORK OF COMMITTEE II: GEODESY

63. At its 5th meeting, Majid Kadir, of Malaysia, Convenor of Committee II (Geodesy), presented the oral report of the Committee. The work of Committee II discussed the following matters:

- a) consideration of work for the previous period
- b) regional geodetic campaign items
- c) new projects 2000-2003
- d) development of the 2000-2003 work plan

64. Work for the previous period:

(a) Regional Precise Geodetic Network - the aims of this project are:

- establishment of positional values, within a global reference frame, for fundamental network of permanent geodetic stations across Asia and the Pacific region
- development of strategies for incorporating additional permanent stations
- contribution of data to International Earth Rotation Service (IERS), International Geodynamics Service (IGS) and ILRS as a regional contribution to the global reference frame.

The meeting was briefed by John Manning regarding the excellent progress made by working group I of PCGIAP in establishing regional precise geodetic network for GIS infrastructure for Asia Pacific.

The network was realized through two GPS campaigns, i.e., Asia Pacific Regional Geodetic Project 1997 (APRGP97) and APRGP98. In both observation campaigns, a number of techniques such as GPS, DORIS, SLR and VLBI were employed. The GPS data were processed by Australia, Japan, China, Indonesia and Malaysia. Both campaigns produced significant results and also achieved a degree of technology transfer for participating members. APRGP99 campaign has been successfully carried out and the data would be processed and presented at the workshop in Mongolia in August 2000.

(b) Local to Regional Datum Linkages - the aims of this project are:

- linkage of national geodetic datums together, so that all spatial information from individual countries can be readily assembled into a unified regional spatial data infrastructure for GIS purposes. Field GPS campaigns will assist in linking individual networks to the regional datum
- facilitation of the development of appropriate transformation parameters for conversion of spatial data from individual country databases to a regional spatial data infrastructure.

Working group I of PCGIAP had completed the following:

- observation campaign implemented with GPS, VLBI, SLR and DORIS
- observation campaign with good participation from 15 countries
- processing of GPS data and results delivered to IERS for inclusion in ITRF2000
- papers on transformation were presented by Iran and Australia and published in proceedings of second workshop.

(c) Regional Vertical Datum - the objective of this project is:

- development of strategy for most appropriate regional vertical datum, to be applied to the Asia and the Pacific region.

This will involve investigating of the most appropriate approach to an optimal seamless geoid and the concept of adopting a reference ellipsoid to link individual datums to a regional datum. Working group I completed the following:

- Iran prepared a paper and presented it at the second workshop, highlighting the need for inclusion of GPS observations at a number of sea level tide gauges for inclusion in year 2000 regional campaign
- ongoing communication item.

65. Regional geodetic campaign items include:

(a) Status of APRGP99

The meeting was briefed that the campaign GPS data would be distributed to member countries shortly. This is due to the delay of the inclusion of data from 10 stations in Iran. The solutions for APRGP99 will be discussed at third regional workshop in Mongolia.

(b) Third regional workshop in Mongolia

The Mongolian delegates briefed the meeting regarding the preparations made, including the place for workshop, travel information, planned activities.

(c) Geocentric Datums

Mr. Matsumura of GSI, Japan, briefed the meeting regarding the study on geocentric datum of Japan.

66. The meeting agreed to undertake various projects as follows:

- establishment of a regional geodetic vertical datum:
Indonesia agreed to take the lead in this project
- enhancement of a regional geodetic infrastructure through annual cooperative campaign

The meeting agreed to do the APRGP2000 campaign in October/November 2000, for 2001 and 2002:

Improvement to the regional geoid: to study the terrestrial (relative) gravity data weaknesses and developing a work plan for further observational requirements leading to an improved regional geoid.
Malaysia agreed to take the lead in this project.

Implementation of the Absolute Gravity reference system: to develop a proposal for regional absolute gravity observation campaign to connect relative gravity networks to gravity reference frames.
Japan agreed to take the lead in this project.

- development of transformation parameters for spatial data: to look at various available strategies of transformation and propose suitable strategies for implementation.
China agreed to take the lead in this project.
- geodetic technology transfer to Pacific Islands nations.
Fiji agreed to take the lead in this project.

67. Development of the 2000-2003 work plan. The work plan will be drafted.

V. WORK OF COMMITTEE III: FUNDAMENTAL DATA

68. At its 5th meeting, on 14 April, Saeid Noori-Bushehri, of Iran, presented the oral report of the Committee III (Fundamental data). Work of Committee III covered the following:

- a) development of the 2000-2003 work plan
- b) review of terms of reference
- c) composition of fundamental data group

69. The work plan for the next 3 years include:

1) Policy:

- policy for sharing fundamental data
- guidelines for custodianship

Under the policy PCGIAP member countries agree to share fundamental spatial data in an easy, efficient and equitable manner in order to address regional economic, social and environmental issues. The types of data subject to the policy are being defined by PCGIAP and are generally at a map scale of 1:1million.

Member countries agree to operate under a set of management principles that describe custodianship responsibilities; access conditions; data content and compliance requirements; linkages to spatial data infrastructures at national, regional and global level; and confidentiality, privacy, security and intellectual property considerations.

Peter Holland outlined the history and critical parts of the policy and stressed that this was more of a general policy and specific issues may be added at a later stage. It is very important to have some sort of policy endorsed at this conference (which can be built on) in order for members to know. The fundamental datasets are at 1:1M scale; that is was a deliberate decision to select this scale for a number of reasons: to reduce political sensitivity in making small scale data available to other users; and to make the sharing of these data at the global and regional level consistent with initiatives such as Global Map and GSDI. It was noted that fundamental data particularly in the Pacific region should be provided at a much larger scale in order to actually cover some of these islands – providing permission to make these larger scale data available was given by the member countries. Coastline data should be made available to use in a pilot project to test the policy against the reality. Policy – as presented at the meeting – was endorsed; the Russian Federation endorsed the policy and would also like to exchange administrative boundary data with countries it has borders with, and supported the working group activities.

2) Fundamental data

- Project being undertaken by the University of Melbourne.

Technical questionnaire needs further countries to answer – project is still in progress and is useful to gain a greater understand the position of member countries with respect to their holdings of fundamental data and access to these data. The meeting recommended that this project should continue and that results of the analysis, when completed, should be published.

- Report on PETIT prototype dataset presented by Glenn Johnstone: Useful lessons to be learnt from the European experience.

Julian Williams mentioned it might be useful to look at the activities associated with VMap development for the lessons learned in that process. Mr Williams also mentioned it would be worth investigating the edge-matching working group that MEGRIN set up to deal with problems on this issue for

the PETIT project. The Russian Federation said that there were a number of other regional projects nearing completion that may also be useful to examine in more detail – given that they have experienced similar problems to PETIT. For example, the Barents Sea and Baltic Sea projects. They also mentioned that there were some countries that participated in both initiatives that provided different data on the same theme to each project. The meeting endorsed the work already done and recommended the project be continued and expanded to include analysis of those projects mentioned above and any others of a regional nature.

- Report on Administrative Boundaries Pilot Project by Glenn Johnstone.

Status report given. Still require data from more countries before any analysis can be done. This is an important project and will provide important feedback on both the specifications for fundamental datasets and will also test the policy on sharing fundamental data. Project status was endorsed and the meeting recommended that the pilot continue, gather the required data, perform the analysis and report progress at the next PCGIAP meeting.

3) Data nodes

- Paper produced by Task Coordinator – Jun Chen, China.

Mr. Chen provided a brief summary of this activity and referred to the report attached to the working group status report. He particularly wanted to note the four recommendations of the status report:

- a) obtainment of feedback from the 3 collaborative nations about the design, improved the draft design and the prototype node demonstration as developed by China,
- b) establishment of candidate data nodes in 4 countries,
- c) testing of the first established data node,
- d) provision of technical services for other developing countries if necessary.

These four recommendations were endorsed by the meeting. There was a presentation by Minoru Akiyama from GSI about metadata and clearinghouse activities in Japan. It was noted that it would be good to have a multi-lingual node in place.

4) GIS applications

The head of delegation of the Russian Federation, Mr Alexandrov, made a presentation on the work they have undertaken in the last few years. He spoke of two laws in the Russian Federation, one governing geography and geodesy; and the other governing the naming of geographic features. Mr Alexandrov mentioned that the Russian Federation have been involved in a number of international projects and gave one example of a project within the Russian Federation (the Baikal region) that was done in conjunction with USGS. Delta region of Baikal examined (along with 2 other areas). All the work done was done using satellite imagery. Imagery going back to 1974 with a resolution 5-7 metres. Able to use the project to predict what would happen with various geographical areas if particular weather events took place. They were about 80% correct and colleagues in Baikal expressed amazement that all this work was done without visiting the region. Recommendations from the project meant that they were able to monitor illegal activities taking place in the region, monitor the changes in vegetation cover, other examples digital maps for the whole of the Russian Federation at 1:1 million, collect information from other organisations across the Russian Federation. The meeting endorsed the publication of the Russian Federation activities, as a PCGIAP publication, and noted that the Russian Federation would undertake research into similar projects to be reported at the next meeting.

70 Concerning the review of terms of reference, Peter Holland mentioned that since the policy on sharing fundamental data had been adopted, the next step was to monitor it for any changes in light of other organizations experiences in this regard.

71 The composition of the working group for the period 2000-2003 was endorsed by the meeting. China accepted to continue as Task Coordinator for the ASPDI Data Nodes task, Iran also continue as Task Coordinator for fundamental data and the Russian Federation to head GIS Regional Application. Policy to be monitored by Chair, Vice-Chair and Task Coordinators of the working group.

VI. WORK OF COMMITTEE IV: DEVELOPMENT NEEDS

72. At its 5th meeting Keu Matarora, of the Cook Islands, Rapporteur of Conference Committee IV presented the oral report of the Committee IV (Development Needs). The main issues discussed were:

- a) assessment of the work of the former PCGIAP Development Needs Taskforce that comprised of Malaysia, Iran, Japan and Australia, in particular:
 - publication of a document defining the regional infrastructure,
 - seeking information on national survey and mapping programmes and areas of GIS related development needs assistance through the circulation of a questionnaire, the conduct of Pacific workshop, and direct visits to countries,
 - drafting of a glossary (or dictionary) of SDI terms.
- b) PCGIAP Pacific workshop held in Suva Fiji in March 1999 to help complete the questionnaires for the Pacific countries and which saw the formation of PCGIAP Pacific Group to cover the unique and special interests of Pacific island nations in GIS and related development,
- c) preparation work including translation of PCGIAP material by Iran for a proposed West Asia workshop for Russian speaking countries,
- d) important areas of education and training especially regarding consistency of and access to education and training programmes,
- e) need for information on education and training programmes and noting the extensive work already done by the Russian Federation in this area,
- f) need for a working group to carry on and broaden the work of the former Taskforce.

73. The Committee also discussed the title of the proposed working group and it was agreed to be the PCGIAP Institutional Strengthening Working Group that would cover the areas of:

- PCGIAP member involvement such as participation in annual meetings and working group workshops
- education and training and the need for information on and access to consistent education and training programmes
- Asia and the Pacific sub-regional programmes where appropriate recognising the diverse nature of the Asia-Pacific region. Under the former Taskforce the four sub-regions were nominally West Asia, North Asia, South East Asia, and Oceania and the Pacific.

VII. WORK OF COMMITTEE V: GEOGRAPHICAL NAMES

74. At its 5th meeting John Parker, of Australia, Convenor of Committee V (Geographical Names) presented the oral report of the Committee. Matters discussed included :

- background to the formation of the United Nations Group of Experts on Geographical Names and the Conference on Standardization of Geographical names and some of its work,
- principles of standardization and consistency,
- importance of toponymic guidelines,
- examples of what maybe included in toponymic guidelines,
- identification of countries in the various UNGEGN divisions in the Asia Pacific region.

A number of documents from the United Nations and countries were passed around, including examples of how to achieve a standardized approach to naming, toponymic guidelines and field collection of names.

VIII. RESOLUTIONS ADOPTED BY THE CONFERENCE

A. LIST OF RESOLUTIONS

1. Fundamental Data
2. Institutional Strengthening
3. Regional Geodetic Infrastructure
4. International Federation of Surveyors Bathurst Declaration on Land Land Administration for Sustainable Development
5. The Establishment of a Working Group on the Cadastre
6. Economic aspects of modern surveying, mapping, geospatial data infrastructure and land administration programmes
7. Promotion of national and regional geographical names standardization programmes
8. Cooperation with the United Nations Geographic Database Initiative
9. Vote of thanks

B. TEXTS OF RESOLUTIONS

1. Fundamental Data

The Conference,

Recognizing the progress made by the PCGIAP Working Group on Regional Fundamental Data in its spatial data (or geographic information) infrastructure (SDI) projects in the past three years,

Endorses the policy for sharing fundamental data as tabled at the meeting,

Endorses the continuation of the PCGIAP Working Group on Regional Fundamental Data and,

Recommends that the Working Group develop and implement a work plan that takes account of the following:

- (a) A monitoring system for the policy on sharing fundamental data that takes into account new developments in policies from both member countries and regional initiatives;
- (b) Complete the analysis of responses to the technical questionnaire on fundamental data and publish the results;
- (c) Complete the pilot project on an administrative boundary dataset;
- (d) Complete the analysis of regional fundamental datasets being developed in other regions particularly the Barents and the Baltic Sea regions in Europe;
- (e) Develop specifications and an implementation plan for regional fundamental datasets;
- (f) Complete the APSDI Data Node pilot project;
- (g) Develop a specification and implementation plan for a Data Node network for the region, with priority given to metadata, data dictionary and clearinghouse issues;
- (h) Publicize the GIS application demonstration developed by Russia and further develop GIS application demonstrations to support those in the region that are involved in the development of SDI;
- (i) Establish links with organizations involved in standardization such as ISO TC211 and the Open GIS Consortium and develop a programme of technical seminars to involve scientists and other stakeholders in Working Group matters.

2. Institutional Strengthening, Education and Training

The Conference,

Noting the significant progress made by the Development Needs Taskforce of the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) since its establishment in 1998, and the need to undertake the remaining tasks from the Taskforce workplan,

Also noting the diverse nature of the Asia and the Pacific region,

Further noting that minimum levels of capability building, education and training are critical success factors for sustainable results of all geodesy, mapping, cadastre, remote sensing, GIS and land administration and land management projects,

Bearing in mind that the resources both qualitatively and quantitatively for capability building, education and training in the world are inadequate to meet this growing demand, and are particularly lacking in the areas of land administration and land management,

Recognising the many geodesy, mapping, land titling, cadastral and land administration and land management projects being undertaken by member nations,

Further recognising that education and training programmes and facilities across the region may not be consistent and accessible to all member nations,

Recommends the formation of a PCGIAP Working Group on Institutional Strengthening that would address the following items and develop a comprehensive workplan for circulation to Executive Board Members at least one month prior to the Board meeting in Japan in November 2000:

Member involvement:

- articulation of Member development needs
- participation in PCGIAP meetings and Working Group activities
- participation in regional workshops

Education and training:

- survey of education and training facilities (including but not limited to programmes, frequency, costs, student numbers)
- development, publication and maintenance of an education and training information data library for the region
- study of student movements following graduation
- glossary of spatial data infrastructure (SDI) terms

Sub-regional programmes:

- Pacific Group (institutional strengthening, regional geodesy, remote sensing data library)
- West Asia workshop
- ASEAN activities.

3. Regional Geodetic Infrastructure

The Conference,

Recognizing the great progress made in establishing a geodetic framework for spatial data infrastructure in the past three years,

Realizing the continuing need for the establishment of basic geodetic infrastructure for GIS in Asia Pacific and the desire to do various applications in the field of Geodesy and GIS, to promote technology transfer and information exchange between Asia Pacific countries,

Noting the importance of providing a homogeneous geodetic infrastructure as the basis for integration of spatial data for sustainable development decision making,

Bearing in mind the limited financial resources and availability of equipment and expertise in observation and processing of acquired GPS data,

Recommends that the PCGIAP Working Group on Regional Geodetic Network be continued for the next three years with project priorities as follows:

Establishment of a regional vertical geodetic datum

Enhancement of a regional geodetic infrastructure through annual cooperative campaigns

Improvement to the regional geoid

Implementation of an absolute Gravity reference system

Development of transformation parameters for spatial data

Geodetic technology transfer to Pacific Islands nations

And further recommends that external funding be sought to facilitate these projects and encourage cooperative geodetic projects between Asia Pacific countries.

4. Bathurst Declaration on Land Administration for Sustainable Development

The Conference,

Mindful, of the growing population pressures on the land, especially in urban areas, that the poor are becoming increasingly concentrated in slums and squatter settlements in ever-expanding cities, that gender inequities in access to economic and social opportunities are becoming more evident and that fresh water availability is now approaching crisis point, the challenge is not only to meet world population needs for food, shelter and quality of life, but also to ensure that generations, yet unborn, can also have their needs met,

Noting that without effective access to property that it is difficult to address these issues, economies are unable to progress and the goal of sustainable development cannot be realized,

Recognizing that insecure property rights use and investment in rural and urban land, and hinder good governance and the emergence of engaged civil society,

Further recognizing the essential role that land administration and spatial data infrastructures play in supporting sustainable development,

Endorses the conclusions and recommendations of United Nations-International Federation of Surveyors and Bathurst Declaration on Land Administration for Sustainable Development,

And further endorses the call for a commitment from the international community to providing effective legal security of tenure and access to property for all men and women, including indigenous peoples and those living in poverty or other disadvantaged groups,

And more particularly endorses the recommendation which calls for a commitment on the part of the international community and Governments to halve the number of people around the world who do not have effective access to secure property rights in land by the year 2010.

5. The establishment of a Working Group on the Cadastre

The Conference,

Noting the outcomes of AGENDA 21 which promoted the importance of efficient and accessible land markets based on cadastral systems and the establishment of appropriate tenure systems, as key factors in support of sustainable development and environmental management,

Recognising the interest of member Nations in sharing experiences on cadastral and land administration issues, and particularly the role that cadastral data has in developing spatial data infrastructures,

Further recognising the many land titling, cadastral and land administration projects being undertaken by member Nations,

Mindful of the difficulties member Nations and donor agencies have in determining the efficiency, effectiveness and performance, and appreciating the global situation, of cadastral, land tenure and land administration systems,

Bearing in mind the conclusions of the UN-FIG Bathurst Declaration on Land Administration for Sustainable Development which shows the importance of cadastral and land administration infrastructures in supporting sustainable development,

Recognising the acknowledged difficulties in establishing the necessary infrastructure to manage the complex arrangement of rights, restrictions and responsibilities within the marine cadastre,

1. *Recommends* that the Permanent Committee for GIS Infrastructure for Asia and the Pacific establish a Working Group on the Cadastre,

2. *And further recommends* that the United Nations within available resources, and in cooperation with the Working Group on the Cadastre under the Permanent Committee for GIS

Infrastructure for Asia and Pacific, and with the expert assistance of relevant organisations such as the International Federation of Surveyors and the International Hydrographic Office, undertake the following work plan for the period 2000-2003 to:

- (a) Facilitate discussion on marine cadastres, focusing on the issues involved in the establishment of appropriate administrative infrastructures to manage marine resources in the context of the United Nations Convention on Law of the Sea;
- (b) undertake a study of land administration issues such as the range of tenure and institutional issues, water, indigenous, mining and petroleum rights, gender, urban agglomeration, land disputes, problems and indicators, with the objective of producing a global atlas and related documentation, utilising the vast amount of existing land administration and land tenure data existing in United Nations agencies;
- (c) facilitate a workshop to develop an appropriate generic template for country profile analyses describing the status of cadastre and land administration, and the need for improvements, which will facilitate benchmarking and the development of performance indicators.

6. Economic aspects of modern surveying, mapping, geospatial data infrastructure and land administration programmes

The Conference,

Noting that all modern surveying and mapping, geospatial data infrastructure and land administration projects must compete for scarce economic resources with other valuable projects,

Recognising that many governments seek to reduce the cost to the taxpayer for fundamental and infrastructural geospatial data services by various forms of privatisation, cost recovery, outsourcing or revenue generating initiatives,

Considering that these initiatives have a significant technical, organisational and institutional impact on national surveying and mapping ,

Bearing in mind that the expanding array of options for professionals in the mapping field imposes choices in which economics plays a decisive role both in government and the private sector,

Recommends that Economic and Social Council within available resources, and in cooperation with other appropriate organizations and educational institutions, initiates an international workshop on economic aspects of modern surveying, mapping geospatial data infrastructure and land administration,

Welcomes the invitation of India to host of proposed workshop.

7. Promotion of National and Regional Geographical Names Standardization Programmes

The Conference,

Noting consistent use of accurate place names is an essential element of effective communication worldwide, and supports socio-economic development, sustainable development and national infrastructure,

Considering the importance of geographical names as a fundamental data set of the Asia Pacific Spatial Data Infrastructure,

Recognizing the role of the United Nations Group of Experts on Geographical Names and the United Nations Conference on the Standardization of Geographical Names,

Recommends the Permanent Committee on GIS Infrastructure for Asia and the Pacific supports the work of the United Nations by encouraging nations in the region to develop and/or maintain a standardized and consistent approach to geographical naming,

Further recommends countries be encouraged to attend meetings of the United Nations Group of Experts on Geographical Names and the United Nations Conference on the Standardization of Geographical Names.

8. Cooperation with the United Nations Geographic Database Initiative

The Conference,

Taking into consideration the relevance of global spatial data initiatives involving mapping agencies, non-governmental organizations, international agencies, industry, and academia,

Acknowledging the progress made by the PCGIAP in building a regional spatial data infrastructure and the resulting understanding of the technical, scientific, institutional and related resource challenges associated with this development,

Recognizing the efforts of the UN Geographic Information Working Group for creating a UN system-wide / multi-scaled UN Geographic Database,

Noting the establishment of the UN Geographic Database initiative by the GSDI, ISCGM, FIG, ICA, ISPRS, the regional Permanent Committee for Asia and the Pacific (PCGIAP) and for the Americas (PCIDEA),

Welcomes the synergistic support of the UN Geographic Information Working Group for coordinating their efforts with relevant initiatives of the UNRCC for Asia and the Pacific for mutual and complementary benefit.

9. Vote of thanks

The Conference,

Expresses its heartfelt gratitude to the Government of Malaysia, the Department of Survey and Mapping and its Director-General Mr. Dato' Abdul Majid Mohamed, for the kind hospitality extended to all participants in the Fifteenth United Nations Regional Cartographic Conference for Asia and the Pacific, through the gracious support provided.

ANNEXES

I. PROVISIONAL AGENDA FOR THE SIXTEENTH UNITED NATIONS REGIONAL CARTOGRAPHIC CONFERENCE FOR ASIA AND THE PACIFIC

1. Opening of the Conference
2. Election of the President and other officers of the Conference
3. Objectives of the Conference
4. Organizational matters:
 - (a) Consideration and adoption of the rules of procedure;
 - (b) Adoption of the agenda
 - (c) Establishment of technical committees and election of chairmen and rapporteurs:
 - (d) Organization of Conference work
 - (e) Credentials of representatives to the Conference
 - (f) Election procedures for the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP)
5. Report of the PCGIAP
6. United Nations Regional Cartographic Conference for Asia and the Pacific reports:
 - (a) Implementation of resolutions of United Nations Regional Cartographic Conferences for Asia and the Pacific
 - (b) Tabling of country reports
7. Invited papers
8. Conference technical committees
9. Reports and resolutions:
 - (a) Reports of the Conference technical committees
 - (b) Adoption of reports and action plans
 - (c) Adoption of resolutions
10. Review of achievements of the Conference
11. Provisional agenda of the Seventeenth United Nations Regional Cartographic Conference for Asia and the Pacific
12. PCGIAP organizational matters
 - (a) Election of Executive Board
 - (b) Statutes

- (c) Working groups
- (d) Next meeting

13. Adoption of the report of the Sixteenth United Nations Regional Cartographic Conference for Asia and the Pacific.
-

II. LIST OF DOCUMENTS

<u>No.</u>	<u>Title/Country</u>	<u>Agenda item</u>
E/CONF.92/INF.1	Provisional agenda	4(b)
E/CONF.92/INF.2	Provisional rules of procedure	4(a)
E/CONF.92/INF.3 (Rev.1)	List of documents	
E/CONF.92/INF.4 (Rev.1)	List of participants	
E/CONF.92/L.1	GIS activities, 1997-1999 (Submitted by Singapore)	6
E/CONF.92/L.2	Development of Surveying and Mapping in China during 1997-2000 (Submitted by China)	6
E/CONF.92/L.3	Construction of National Spatial Data Infrastructure (NSD) in China (Submitted by China)	6
E/CONF.92/L.4	Application of Geo-Spatial Data in China (Submitted by China)	6
E/CONF.92/L.5	National Fundamental Geographic Information Production base of Sichuan (Submitted by China)	6
E/CONF.92/L.6	Progress of GPS Positioning in China (Submitted by China)	6
E/CONF.92/L.7	Technical Cooperation in Surveying, Mapping, and Charting (Submitted by China)	6
E/CONF.92/L.8	Cartographic Work in Japan 1997 – 1999 (Submitted by Japan)	6
E/CONF.92/L.9	Promotion of the Global Mapping Project (Submitted by Japan)	6
E/CONF.92/L.10	PCGIAP Executive Report (Submitted by PCGIAP)	5
E/CONF.92/L.11	Working Group 1 Report-Regional Geodetic	5

E/CONF.92/L.11a	Network Status Report (Submitted PCGIAP)	
E/CONF.92/L.12	Working Group Report 2-Regional Fundamental Data Status Report for 6 th PCGIAP Meeting, Kuala Lumpur (Submitted by PCGIAP)	5
E/CONF.92/L.13	Working Group 2 Report-Regional Fundamental Data Summary Report on Analysis of Regional Fundamental Datasets Questionnaire (Submitted by PCGIAP)	5
E/CONF.92/L.14	Development Needs Taskforce Status Report (Submitted by PCGIAP)	5
E/CONF.92/L.15	Statutes of the Permanent Committee on GIS Infrastructure for Asia and the Pacific (Submitted by PCGIAP)	5
E/CONF.92/L.16	Report on Resolutions of the Fourteenth United Nations Regional Cartographic Conference for Asia and the Pacific (Submitted by PCGIAP)	7 & 8
E/CONF.92/L.17	Country Report for Australia (Submitted by Australia)	6
E/CONF.92/L.18	Country Report on Cartographic Activities in New Zealand (Submitted by Australia)	6
E/CONF.92/L.19	Country Report on the current status of surveying, mapping and cartographic activities – India (Submitted by India)	6
E/CONF.92/L.20	Greetings from ISO/TC 211 to the 15 th United Nations Regional Cartographic Conference for Asia & Pacific (Submitted by International Organization for Standardization (ISO))	6
E/CONF.92/L.21	Country Report on the 15 th United Nations Regional Cartographic Conference for Asia and the Pacific (Submitted by Brunei Darussalam)	6
E/CONF.92/L.22	Country Report on the Implementation of the Resolution of the 14 th United Nations Regional Cartographic Conference for Asia & Pacific (Submitted by Indonesia)	6
E/CONF.92/L.23	Country Reports, April 2000 (Submitted by Republic of Korea)	6

E/CONF.92/L.24	Brief Information of the Mongolian Spatial Data Infrastructure (Submitted by Mongolia)	6
E/CONF.92/L.25	Country Report on the current status of surveying, mapping and cartographic activities: 1996-1999 (Submitted by Thailand)	6
E/CONF.92/L.26	Status of cartographic activities: Fiji's Experiences) (Submitted by Fiji)	6
E/CONF.92/L.27	Spatial Data Infrastructure and Geoinformation engineering – Germany's approach & experiences (Submitted by Germany)	6
E/CONF.92/L.28	Geodata and information systems A German Perspective (Submitted by Germany)	6
E/CONF.92/L.29	A new geodetic datum and related changes for Japanese nautical charts (Submitted by Japan)	9(h)
E/CONF.92/L.30	Present status of electronic navigational charts and paper charts produced in Japan (Submitted by Japan)	9(h)
E/CONF.92/L.31	Country Report of the Russian Federation (Submitted by Russia)	6
E/CONF.92/L.32	Surveying and Mapping in the Philippines (Submitted by Philippines)	6
E/CONF.92/L.33	Present status of survey development of Nepal (Submitted by Nepal)	6
E/CONF.92/L.34	Draft report of the 15 th United Nations Regional Cartographic Conference for Asia & Pacific	12
E/CONF.92/L.35	Provisional agenda for the 16 th United Nations Regional Cartographic Conference for Asia and the Pacific	11
E/CONF.92/L.36	Fundamental Data – Draft resolution submitted by technical committee III	9
E/CONF.92/L.37	Institutional strengthening – Draft resolution submitted by technical committee IV	9

E/CONF.92/L.38	Regional geodetic infrastructure – Draft solution submitted by technical committee I	9
E/CONF.92/L.39	International Federation of Surveyors Bathurst Declaration on Land Administration for Sustainable Development – Draft resolution submitted by technical committee I	9
E/CONF.92/L.40	The establishment of a Working Group on the cadastre - Draft resolution submitted by technical committee I	9
E/CONF.92/L.41	Economic aspects of modern surveying, mapping, geospatial data infrastructure and land administration programmes – Draft resolution submitted by technical committee I	9
E/CONF.92/L.42	Promotion of National and Regional Geographical Names Standardization Programmes – Draft resolution submitted by technical committee V	9
E/CONF.92/L.43	Cooperation with the United Nations Geographic Database Initiative – Draft resolution submitted by the President of the Conference	9
E/CONF.92/L.44	Vote of thanks – Draft resolution submitted by the Secretary of PCGIAP	9

Background papers

E/CONF.92/BP.1	Sustainable development as a global trend (Submitted by Division for Sustainable Development United Nations Department of Economic and Social Affairs (UNDESA))	9(i)
E/CONF.92/BP.2	The Global spatial data infrastructure and emerging nations-challenges and opportunities for global cooperation (Submitted by Global Spatial Data Infrastructure (GSDI))	9(i)
E/CONF.92/BP.3	The international steering committee for global mapping - current status and future plans and challenges (Submitted by International steering committee for global mapping (ISGM))	9(i)
E/CONF.92/BP.4	The United Nations – International Federation of Surveyors Declaration on Land Administration for Sustainable	9(d)

	Development (Submitted by the International Federation of Surveyors)	
E/CONF.92/BP.4a	Powerpoint Presentation (Submitted by the International Federation of Surveyors)	9(d)
E/CONF.92/BP.5	Formation of the Permanent Committee on SDI for the Americas – CPIDEA (Submitted by Colombia)	9(i)
E/CONF.92/BP.6	Geographic Names and the Asia Pacific Spatial Data Infrastructure (Submitted by the United Nations Group of Experts on Geographical Names (UNGEGN))	9(a)
E/CONF.92/BP.7	The Role of RESAP in the APSDI (Submitted by Environment and Natural Resources Development Division, United Nations Economic and Social Commission for Asia and the Pacific)	9(k)
E/CONF.92/BP.8	Surveying Issues and Challenges for the 21 st Century (Submitted by International Federation of Surveyors)	9(k)
E/CONF.92/BP.9	Leading edge cartographic developments and challenges (Submitted by International Cartographic Association)	9(k)
E/CONF.92/BP.10	The Role of IAG in densification of global geodetic networks (Submitted by The International Association of Geodesy)	9(m)
E/CONF.92/BP.10a)	Power point presentation	9(m)
E/CONF.92/BP.11	Corporatization of national mapping agencies challenges and opportunity – ITO (Submitted by International Institute for Aerospace survey and earth sciences (ITC))	9(k)
E/CONF.92/BP.12	World Bank support for land related projects in developing countries – experiences and implications for international cooperation (Submitted by the World Bank)	9(l)
E/CONF.92/BP.13	Technical cooperation programs of Japan for geographic information across the Asia-Pacific region	9(m)
E/CONF.92/BP.14	GIS development in Pacific island nations	9
E/CONF.92/BP.15 BP.15(a)	Cadastral workshop; and powerpoint presentation	9
E/CONF.92/BP.16	Background document for the 15 th UNRCC-AP	9

III. LIST OF PARTICIPANTS

STATES MEMBERS OF THE UNITED NATIONS

AUSTRALIA

Representative

Mr. Andrew Leigh Clarke, Head, AusIndustry, Analytical and Mapping, Department of Industry Science and Resources, Canberra

Deputy Representative

Mr. Peter Robert Holland, General Manager, Australian Surveying and Land Information Group (AUSLIG), Canberra

Alternates

Mr. Robert James Irwin, AUSLIG, Canberra

Mr. Glenn Johnstone, AUSLIG, Canberra

Mr. John Manning, AUSLIG, Canberra

Mr. James Curnow, Institute of Surveyors Australia, Adelaide

Mr. Steve Jacoby, Public Sector Mapping Agencies, Melbourne

Mr. Malcolm Albert Colin Lester, Consulting Surveyors Australia, Hobart

Mr. Peter Bowen, Mapping Sciences Institute Australia

BRUNEI DARUSSALAM

Representative

Pg Haji Matusin Pg Haji Matasan, Survey Department

Deputy Representative

Haji Mohd Jamil Ali, Survey Department

Alternates

Mr. Yong Teck Nyek, Juruukur Bersafu Konsultan

Hajjah Salmahwati Haji Mohsin, Survey Department

CHINA

Representative

Mr. Yang Kai, State Bureau of Surveying and Mapping

Deputy Representatives

Mr. Bai Bin, Ministry of Foreign Affairs

Mr. Bai Bo, State Bureau of Surveying and Mapping

Alternates

Mr. Xu Yanying, State Bureau of Surveying and Mapping

Mr. Niu Jing, State Bureau of Surveying and Mapping

Mr. Chen Jun, National Geomatics Center of China

Mr. Xu Yongqing, China Surveying and Mapping News

Mr. Cheng Pengfei, Chinese Academy of Surveying and Mapping

Mr. Yi Shubai, State Bureau of Surveying and Mapping

Ms. Jiang Xiaohong, State Bureau of Surveying and Mapping

COLOMBIA

Representative

Mr. Santiago Borrero Mutis, Director-General del Instituto Geografico Agustin Codazzi

FIJI

Representative

Mr. Barma Nand, Department of Lands and Surveys

Alternates

Mr. Kemueli Masikerei, Department of Lands and Surveys

Mr. Keresi Fonmanu, Native Lands Commission

GERMANY

Representative

Mr. Diemar Gruenreich, Federal Agency for Cartography and Geodesy

Alternate

Mr. Gottfried Konecny, University of Hannover

INDIA

Representative

Lt. General A. K. Ahuja, Surveyor General of India

Alternates

Mr. Amitabha Pande, Joint Secretary (Admn.), Department of Science and Technology

Mr. Prithvish Nag, Director, National Atlas and Thematic Mapping Organization

Mr. S.K. Makhijani, Second Secretary, High Commission of India, Kuala Lumpur

INDONESIA

Representative

Ir. R.W. Matindas, Secretary of the National Coordination Agency for Surveys and Mapping

Deputy Representative

Kolonel (L) I Wayan Mertoyoso, Secretary of Hydro-Oceanographic Service

Alternates

Mr. Sutadi, Counsellor, Indonesian Embassy, Kuala Lumpur

Dr. Sobar Sutisna, Official, National Coordination Agency for Surveys and Mapping

Ir. Bebas Purnawan, Official, Indonesian Surveyor Association

Dr. Budi Sulistyono, Official, Indonesian Surveyor Association

Ir. Agus Hermawan, Official, Indonesian Surveyor Association

Dr. Ir. Irawan Sumarto, Official, Bandung Institute of Technology

Dr. Lukman Aziz, Official, Bandung Institute of Technology

Ir. Edy Yudomo, Official, Association of Indonesian Survey and Mapping Company

Mr. Bekken BH, Technical Adviser, National Coordinating Agency for Surveys and Mapping

Ir. T. Ruchiatan, Official, Association of Indonesian Survey and Mapping Company

IRAN, ISLAMIC REPUBLIC OF

Representative

Mr. Mohammad Madad, National Cartographic Center (NCC)

Alternate

Mr. Saeid Noori-Boshehri, NCC

JAPAN

Representative

Mr. Yoshihisa Hoshino, Deputy Director-General, Geographical Survey Institute, Ministry of Construction

Alternates

Mr. Teruki Miyazaki, Director of Research Planning Office, Geological Survey of Japan, Agency of Industrial Science and Technology, Ministry of International Trade and Industry

Mr. Minoru Akiyama, Director of Geographic Department, Geographical Survey Institute, Ministry of Construction

Mr. Teruo Kanazawa, Head, International Cooperation Office, Hydrographic Department, Maritime Safety Agency

Mr. Shoichi Matsumura, Assistant Director for Geodesy, Geodetic Department, Geographical Survey Institute, Ministry of Construction

Mr. Toru Morikawa, Assistant Director of the UN Administration Division, Multilateral Cooperation Department, Ministry of Foreign Affairs

Expert

Mr. Naofumi Yamamura, Assistant Resident Representative, JICA Malaysia Office, Japan International Cooperation Agency (JICA)

JORDAN

Representative

Mr. Saliem Moh'd Khalifa, Engineer Director-General, Royal Jordanian Geographic Centre

Alternate

Mr. Malkawi Omar, Royal Jordanian Geographic Centre

LAO PDR

Representative

Mr. Thongchanh Manixay, Deputy Director, National Geographic Department of Lao PDR, Vientiane

MALAYSIA

Representative

Dato' Abdul Majid Mohamed, Director-General of Survey and Mapping

Alternates

Mr. Hamid Ali, Deputy Director-General of Survey and Mapping

Mr. Chia Wee Tong, Director of Management and Development Division, Department of Survey and Mapping

Dr. Abdul Kadir Taib, Director of Mapping Production Division, Department of Survey and Mapping

Mr. Hasan Jamil, Director of Geodetic Survey Division, Department of Survey and Mapping

Observers

Mr. Che Abdullah bin Md. Rejab, JUPEM, Johore

Mr. Ab. Rahman bin Mat Saud, JUPEM, Kedah

Mr. Muhamed Kamil bin Mat Daud, JUPEM, Kelantan

Mr. Nik Hisham b. Nik Manshor, Association of Authorised Land Surveyors Malaysia

Haji Hanafi Hj Mamat, Association of Authorised Land Surveyors Malaysia

Mr. Fadzillah bin Mohd Salleh, Hydrographic Department

Mr. Seet Chin Peng, Jabatan Mineral dan Geosains

Mr. Alias Mohd Sood, Jabatan Perhutanan Semenanjung Malaysia

Mr. Muhammat Puzi bin Ahmat, JUPEM, Kuala Lumpur

Mr. Hasan bin Jamal, Director of Survey, Geodetic Division, JUPEM, Kuala Lumpur

Mr. Azmy bin Ab. Rahman, JUPEM, Kuala Lumpur

Mr. Mohamed bin Yunus, JUPEM, Kuala Lumpur

Mr. Ismail bin Mohd Yosof, JUPEM, Kuala Lumpur

Mr. Mohd Noor Isa, JUPEM, Kuala Lumpur

Mr. John Elvis Koh, JUPEM, Kuala Lumpur

Dr. Teng Chee Hua, JUPEM, Kuala Lumpur

Mr. Abd. Rahman bin Mohd Don, JUPEM, Kuala Lumpur

Mr. Ali bin Ahmad, JUPEM, Kuala Lumpur

Mr. Tan Ah Bah, JUPEM, Kuala Lumpur

Mr. Md. Zaki bin Ad. Wahid, JUPEM, Kuala Lumpur

Mr. Ahamad b. Zakaria, JUPEM, Kuala Lumpur

Mr. Mohammad Nor bin Arifin, JUPEM, Kuala Lumpur

Mr. Samad bin Hj Abu, JUPEM, Kuala Lumpur

Mr. Patrik Wong, Jurukur Perintis, Kuala Lumpur

Mr. Yap Seng Peng, Jurukur Perintis, Kuala Lumpur

Mr. John Mokken, Jurukur Perintis, Kuala Lumpur

Mr. Ishak bin Yeop, Kementerian Pertahanan, Kuala Lumpur

Haji Yidris bin Abdullah, KTPK, Kuala Lumpur

Mr. Abd. Halim bibn ain, KTPK, Kuala Lumpur

Hj. Mohamad Nor bin Hj. Mat, KTPK, Kuala Lumpur

Mr. Fuziah Hj. Abu Hanifah, KTPK, Kuala Lumpur

Mr. Zainal Abdul Majeed, KTPK, Kuala Lumpur

Mr. Mohd Hafiz Hassan, Oracle System Sdn Bhd, Kuala Lumpur

Mr. Shahidah, Oracle System Sdn Bhd, Kuala Lumpur

Mr. Rohaimi Mohamed, Oracle Systems Sdn Bhd, Kuala Lumpur

Mr. Abdul Majid b. Abdul Hamid, Pejuta, Kuala Lumpur

Hj. Abdul Rahim b. Hj A. Wahab, Pejuta, Kuala Lumpur

Mr. Ahmad Rustami b. Hj Ramley, Pejuta, Kuala Lumpur

Mr. Andrew Phung Voon Seng, Pejuta, Kuala Lumpur

Mr. Chan Kuen Ming, Pejuta, Kuala Lumpur

Mr. Choy Hon Nang, Pejuta, Kuala Lumpur

Mr. Hashim b. Hj Sibelik, Pejuta, Kuala Lumpur

Mr. Lai Jiun Shyong, Pejuta, Kuala Lumpur

Mr. Misron b. Hj Yasin, Pejuta, Kuala Lumpur

Hj Mohaizi b. Mohamad, Pejuta, Kuala Lumpur

Hj Mohd Kamil b. Hj Mokhtar, Pejuta, Kuala Lumpur

Hj Mohd Nordin b. Hj Sabran, Pejuta, Kuala Lumpur

Hj Saiful Anwar b. Mortar, Pejuta, Kuala Lumpur

Mr. Shahrudin Musa, Pejuta, Kuala Lumpur

Mr. Teo Chee Hai, Pejuta, Kuala Lumpur

Mr. Wan Deraman b. Zakaria, Pejuta, Kuala Lumpur

Mr. Yong Lip Foo, Pejuta, Kuala Lumpur

Mr. Wan Mahadi Wan Ahmad, Pejuta, Kuala Lumpur

Mr. Tan Chwi Seng, Pejuta, Kuala Lumpur

Mr. So Sun Sing, Pejuta, Kuala Lumpur

Mr. Adnan bin Ismail, Pusat Remote Sensing Negara (MACRES), Kuala Lumpur

Mr. Abdul Samad bin Bahari, JUPEM, Melaka

Mr. Zakariah Khairuddin, JUPEM, Negeri Sembilan

Mr. Saharuddin bin Saat – LJT Rep., Jurukur Saharuddin El-Asas, Negeri Sembilan

Mr. Mohamed Azhari bin Mohamed Zainuddin, JUPEM, Pahang

Mr. K. Govindan, JUPEM, Perak

Mr. Marzuki Mohd Kassim, JUPEM, Pulau Pinang

Mr. Chan Hun Seok, Lembaga Jurukur Tanah, Pulau Pinang

Ms. Elizabeth Malangkig, Jabatan Pertanian Sabah, Sabah

Mr. Osman Hj Jamal, Jabatan Tanah dan Ukur, Sabah

Mr. Andrew Tong Vui Lip, Jabatan Tanah dan Ukur Sabah, Sabah

Ms. Doria Tai Yun Tyng, Jabatan Tanah dan Ukur Sabah, Sabah

Mr. Junaimie bin Dahlan, JUPEM, Sabah

Mr. Wong Lua Ming, Forest Department Sarawak, Sarawak

Mr. Ab. Razak bin Abu Hasan, Jabatan Laut Sarawak, Sarawak

Mr. Abdillah Ibrahim, Jabatan Tanah dan Survei, Sarawak

Mr. Sudarsono Osman, Jabatan Tanah dan Survei Sarawak, Sarawak

Haji Abu Husin bin Jantan, JUPEM, Sarawak

Mr. Julian Chong Teck Lee, ISM, Selangor

Mr. Jasni bin A. Rahman, JUPEM, Selangor

Mr. Khoiri Mohd Dimyati, Universiti Teknologi Mara (UTM), Selangor

Mr. Winston Poh, Spot Asia Pte. Ltd.

Mr. Nicholas Chia, Spot Asia Pte. Ltd.

Mr. Yvonne Uu, Spot Asia Pte. Ltd.

Mr. Ismail bin Mohamed, JUPEM, Terengganu

Mr. Zakaria bin Saat, JUPEM, W.P., Labuan

MONGOLIA

Representative

Mrs. Oyunchimeg Duran, Deputy (vice) Chairman, State Agency of Geodesy and Cartography

Alternate

Mrs. Munkhtsetseg Dalkhaa, Engineer, State Agency of Geodesy and Cartography

NEPAL

Representative

Mr. Babu Ram Acharya, Director-General, HMG Survey Department

NEW ZEALAND

Representative

Mr. Brent Limmer, Land Information New Zealand

Alternate

Mr. Mack Thompson, Land Information New Zealand

PAPUA NEW GUINEA

Representative

Mr. Omani Rei, Department of Lands National Mapping Bureau

PERU

Representative

Mr. Javier Gonzales, Embassy of Peru, Kuala Lumpur

Alternate

Mr. Enri Prieto, Embassy of Peru, Kuala Lumpur

PHILIPPINES

Representative

Ms. Evangeline C. Cruzado, Deputy Administrator, National Mapping and Resource Information Authority (NAMRIA), Department of Environment and Natural Resources

Alternates

Mr. Jose Galo P. Isada, Director, NAMRIA, Department of Environment and Natural Resources

Mr. Felino M. Cortez, Director II, Land Registration Authority (LRA), Department of Justice

REPUBLIC OF KOREA

Representative

Mr. Lim Jae Yong, Geographic Information Division, National Geography Institute

Alternates

Mr. Shin Hi Suk, Cartography Division, National Geography Institute

Mr. Kim Kye Hyun, Department of Geo-information Engineering, Inha University

Mr. Kim Jung-tack, Embassy of the Republic of Korea, Kuala Lumpur

RUSSIAN FEDERATION

Representative

Mr. Yokov Topchian, MPA “Kardgrfija” (Atkar)

Alternates

Mr. Alexandre Kraioukhine, Enterprise Uralmarksheideria

Mr. Victor Kuznetsov, Roscartographia

Dr. Victor Aleksandrov, Roscartographia

Dr. Raisa Yakovleva, Roscartographia

Mr. Vladimir Pleshkov, State GIS Center

Prof. Haryes Yambaev, State University of Geodesy and Cartography

SAUDI ARABIA

Representative

General Abdullah bin Mohammedd Anwar

Alternates

Col. Abdulaziz bin Ibrahim Al Ubaida

Major Yahya bin Yusof Alshahri

Major Turki bin Abd. Al-Usaimi

Captain Riyadh bin Salih Alkhashan

Mr. Fa'iq Hamzah Qattan, Geologist

Mr. Mohammed Abdul Rahim Halawani, Geologist

SINGAPORE

Representative

Mr. Low Oon Song, Chief Surveyor, Survey Department, Ministry of Law

SRI LANKA

Representative

Mr. Ranasinghe Silva, Survey Department of Sri Lanka

SULTANATE OF OMAN

Representative

Mr. Nasser Sultan Al-Harthy, National Survey Authority

TAJKISTAN

Representative

Mr. Bahor Irkaev, Main Department of Geodesy and Mapping

THAILAND

Representative

Col. Ratanakarn Nukool, Royal Thai Survey Department

Alternates

Sub.Lt.Pol. Rakthong, Professional Engineer for Survey, The Royal Irrigation Department, Ministry of Agriculture and Cooperatives

Mrs. Wanarat Thothong, Geographer, Chief of Photogrammetric Sub-Division, Division of Survey and Mapping, Land Development Department, Ministry of Agriculture and Cooperatives

Mrs. Ramphing Simking, Scientist, Remote Sensing Division, National Research Council

Mr. Thongchai Charupatt, Director of Forest Resources Assessment Division, Royal Forest Department, Ministry of Agriculture and Cooperatives

Mr. Preecha Chakeo, Senior Surveyor, Department of Energy Development and Promotion, Ministry of Science, Technology and Environment

Ms. Supawadee Vimuktanandana, Senior Geologist, Geological Survey Division, Department of Mineral Resources, Ministry of Industry

Mr. Suthisak Thowanich, Junior Geologist, Geologist Survey Division, Department of Mineral Resources, Ministry of Industry

Mr. Tuxapond Kanlayapradith, Head of Transmission System Survey Department, Transmission System and Land Division, The Electricity Generating Authority of Thailand

TONGA

Representative

Mr. Emeliano Vi, Ministry of Lands and Survey

UNITED KINGDOM

Representative

Mr. Julian Williams, DGIA (Military Survey)

VIET NAM

Representative

Mr. Tran Bach Giang, General Department of Land Administration (GDLA)

Alternates

Mr. Le Kim Son, GDLA

Mr. Nguyen Tai Duong, GDLA

Mr. Nguyen Kuu Chung, GDLA

Mr. Nguyen Dang Binh, Hanoi Land Administration Department

Mr. Nguyen Minh Dung, Ho Chi Minh Land Administration Department

Mr. Nguyen Sy Thanh, Intergraph Viet Nam

Mr. Do Duc Doi, Land Registration Department of GDLA

Mr. Letien Vuong, GDLA

NON-MEMBER STATES REPRESENTED BY OBSERVERS**HOLY SEE**

Representative

Mr. Dennis Mendez

**ASSOCIATE MEMBERS OF THE ECONOMIC AND SOCIAL COMMISSION
FOR ASIA AND THE PACIFIC (ESCAP)****COOK ISLANDS**

Representative

Mr. Keu Tekarakia Mataroa, Ministry of Works Energy and Physical Planning

HONG KONG, CHINA

Representative

Mr. Chan Hak, Deputy Director, Survey and Mapping of Lands Department

INTERNATIONAL SCIENTIFIC ORGANIZATIONS

ASEAN Federation of Land Surveying and Geomatics (ASEAN FLAG)	Mr. Dato' Abdul Majid Mohamed
International Federation of Surveyors (FIG)	Mr. Robert W. Foster, President
Commission 7 of FIG	Mr. Ian Philip Williamson, Department of Geomatics, University of Melbourne
GIS Forum South Asia	Mr. Ravi Gupta, Director, Centre for Spatial Database Management and Solution
International Association of Geodesy (IAG)	Mr. John Manning, Chairman IAG Sub-Commission on South East Asia and the Pacific
International Cartographic Association (ICA)	Mr. Bengt Rystedt, President
International Institute for Aerospace Survey and Earth Sciences (ITC)	Mr. Richard Groot
United Nations Group of Experts on Geographical Names (UNGEGN)	Mr. John Richard Parker, Immediate Past Chairman of the UNGEGN Asia South-East, Pacific South-West Division

INVITED SPEAKERS

Permanent Committee on Spatial Data Infrastructure for the Americas (CPIDEA)	Mr. Santiago Borrero-Mutis, President
Global Spatial Data Infrastructure Steering Committee (GSDI)	Mr. Derek Clarke, Chairman
IAG	Mr. John Manning
ICA	Mr. Bengt Rystedt

ITC Mr. Richard Groot

Mr. Menno-Jan Kraak

International Steering Committee Mr. John Edward Estes, Chair
for Global Mapping (ISCGM)

UNGEEN Mr. John Richard Parker

Economic and Social Commission Mr. Wu Guoxiang, Chief, Space Technology Applications
for Asia and the Pacific (ESCAP) Section, Environment and Natural Resources Development Division

World Bank Mr. Frank Byamugisha, Principal, Rural Development and
Natural Resources Sector Unit, Development Research Group

REPRESENTATIVE OF THE UNITED NATIONS SECRETARIAT

United Nations Statistics Division Mr. Amor Laaribi, Cartographer (GIS Specialist),
(UNSD) Office of the Director

SECRETARIAT OF THE CONFERENCE

Department of General Assembly Mr. Vladimir Zelenov, Deputy Secretary of the Economic
Affairs and Conference Services and Social Council, General Assembly and ECOSOC Affairs
(DGAACS) Division

ESCAP Mr. Chingchai Likitnukul, Chief, Conference Services Unit
Division of Administration
