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Report of the Permanent Committee on Geographical Information
System Infrastructure for Asia and the Pacific

REPORT OF THE WORKING GROUP 4: INSTITUTIONAL STRENGTHENING

Submitted by the Permanent Committee on Geographical Information
System Infrastructure for Asia and the Pacific (PCGIAP)
Working Group 4: Institutional Strengthening **

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Permanent Committee on GIS Infrastructure for Asia and the Pacific

Working Group 4

Institutional Strengthening

STATUS REPORT

FOR 17th UNRCC-AP and 12th PCGIAP MEETING

Bangkok, Thailand

18-22 September 2006

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REPORT ON THE AWARENESS COURSE,

ON NATIONAL SPATIAL DATA INFRASTRUCTURE

FOR PERMANENT COMMITTEE ON GEOGRAPHICAL INFORMATION IN ASIA PACIFIC
(PCGIAP) MEMBER COUNTRIES.

FROM OCTOBER 12th TO 28th, 2005
Conducted by
Survey of India
at
Survey Training Institute
Uppal, Hyderabad – 500 039, INDIA

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BACKGROUND AND OBJECTIVE

Several agencies both in public and private domain collect and maintain enormous amount of spatial data in their day to day activities. However, the information on availability of data is not available to the common users, thereby depriving the utility of this precious information at the right place at the required time. The National Informatics Policy envisages to ensure that spatial data generated by various agencies, is made available to the common man for developmental needs. Accordingly, the National Spatial Data Infrastructure (NSDI) has been established with the main objective to act as a coordinating body to provide information on availability of spatial data collected and maintained by Government bodies, Public enterprises, NGOs and individuals (Stake holder) to the user community. Hence, it is essential that awareness is created among the stake holders on the role and functioning of NSDI.

PCGIAP is an autonomous body under the United Nations Regional Cartographic Conference for Asia and the Pacific (UNRCC-AP) to propagate the aims and objectives of creating knowledge on Spatial Data Infrastructure among the member countries in the Asia Pacific Region. Considering the progress made by India, in developing NSDI, decision was taken by the Executive Committee of PCGIAP at Chengdu (China) in September 2004, to conduct a two weeks course in India on awareness on NSDI for benefit of member countries in the region. The chairman of the Committee of group IV being Surveyor General of India, Survey of India has been entrusted the responsibility of conducting this course. Survey Training Institute at Hyderabad has the expertise and has been organizing short duration courses on NSDI since the inception of NSDI for participation by various stake holders. Hence, course on awareness on NSDI for the benefit of member countries of PCGIAP was conducted from 12th Oct., 2005 to 28th Oct., 2005 at STI, Hyderabad.

Eighteen participants from the Asian Pacific countries had participated in the course.

1. South Korea – 2
2. Malaysia -2
3. Mongolia – 1
4. Nepal – 1
5. Sri Lanka - 1
6. Laos – 1
7. Singapore - 1
8. Fiji - 1
9. Kiribati – 1
10. India - 7

The details of the participants is attached as Annexure - 'A'

FACULTY:

The following faculty officers from National Institutions / Organization / Industry and International Institutions delivered lectures / demo / practical.

1.	Maj. Gen. Gopal Rao	Surveyor General of India, Dehradun
2.	Shri Amitabh Pandey	Principal Resident Commissioner, Government of Punjab
3.	Dr. Pak Chagarlamudi	Director, International Corporation,

		Canada
4.	Mrs. Yola Georgiadou	International Institute for Geo Information Science and Earth Observation (ITC), Netherlands.
5.	Dr. S.K. Puri	Visiting Professor, ITC, Netherlands
6.	Brig M.V. Bhat	Deputy Surveyor General, Survey of India, Dehradun
7.	Brig (Dr.) Siva Kumar	Director, National Spatial Data Infrastructure (NSDI), New Delhi
8.	Shri Rajesh Mathur	President, NIIT GIS Ltd., Environmental Systems Research Institute, New Delhi
9.	Dr.M.K. Munshi	Senior Executive Officer, (Geospatial Division), Rolta India Limited
10.	Prof A.K.Gossain	Indian Institute of Technology, New Delhi
11.	Dr. Pujari	Professor, Central University, Hyderabad
12.	Dr. Mrs. A.S. Padmavathi	Indian Space Research Organisation, Bangalore.
13.	Shri N.K. Agarwal	Director (Retired), Survey Training Institute, Hyderabad
14.	Shri A.J. Kurian	Director, Department of Science and Technology, New Delhi
15.	Dr. P.S. Acharya	Scientist, National Resource Data

		Management Systems, Department of Science and Technology, New Delhi.
16.	Dr. D. Dutta	Scientist, National Resource Data Management Systems, Department of Science and Technology, New Delhi.
17.	Dr. Murlimohan	National Resource Data Management Systems, Department of Science and Technology, New Delhi.
18.	Dr. Anji Reddy	Professor, Jawaharla l Nehru Technological Institute, Hyderabad
19.	Dr. G. Ashwin	Society for Electronic Transactions and Security, Chennai
20.	Shri R.N. Nanda	Survey of India, New Delhi
21.	Shri K.K. Gupta	Survey of India, New Delhi
22.	Shri Sreedhar Sahu	Survey of India, Hyderabad

THE FOLLOWING TOPICS WERE COVERED DURING THE COURSE:

1. Spatial Data Infrastructure – Background, Concept, over view.
2. Global & Regional Spatial Data Infrastructure Initiatives.
3. National Spatial Data Infrastructure Initia tives.
4. Interoperability.
5. Capacity Building.
6. Geomatics in Environmental Management.
7. Partnership Approaches and Applications.
8. Applications on data Integration and analysis using GRAM ++.
9. Data Integration and Applications for decision making.
10. Geodetic Infrastructure in India.
11. Demonstration on Gram++.
12. Internet & Web Services.

13. Marine Spatial Data Infrastructure.
14. Networking & Portal Applications.
15. Ontology.
16. Security and Privacy Issues.
17. Financing Spatial Data Infrastructure – Challenges & Legal Issues.
18. Capacity Building for Spatial Data Infrastructure.
19. Vision, Mission, Design and Strategy.

The detailed course programme is attached as Annexure 'B'.

THE PARTICIPANTS WERE TAKEN TO THE VARIOUS EDUCATIVE / INFORMATIVE CENTRES LIKE:-

Satellite data receiving Centre, Shadnagar

The participants were taken to the Satellite Data receiving centre of National Remote Sensing Agency (NRSA) at Shadnagar. They were exposed to the technology and gained an insight into data collection during the passes of Satellites IRS1D, P4, P5 & P6 for about 6 hours.

National Remote Sensing Agency

The officers were taken to the NRSA where the Satellite data is processed. They were taken to the different processing Laboratories. They were exposed to the project work going on water Land Management System using imagery. They were also demonstrated on Agricultural avenues for different types of crops based on Remote Sensing and GIS Analysis. The generation of DTM and geo spatial analysis was also demonstrated to the participants by using stereo imagery of latest carto sat satellite.

Microsoft

The participants were taken to Microsoft complex at Gachibowli where most of programming modules are being developed. It is one of the major hub of global networking. The participants were explained about its unique architecture and robust security system. Technical briefing was done where the strength, activity of the centre, networking, data security aspect were touched upon.

HYDERABAD IS A HISTORICAL PLACE HAVING VARIOUS PLACES OF TOURIST INTEREST. SOME OF THE PLACES WHERE PARTICIPANTS WERE TAKEN :

Charminar
Salarjung Museum
Nagarjunasagar Dam
Ramoji Film City
Dhole-re-dhani etc.

The participants were also taken to a Survey field camp at Ibrahimpatnam established by Survey Training Institute. Such field camps are established by STI as a part of its field training for various courses in a routine manner. This was one of such camps. A small demonstration on surveying was also arranged. The participants were exposed as to how trainees of Survey of India carry out training in real field conditions by staying in tents etc. Participants were much delighted and shown enthusiasm seeing the way training is imparted in the field.

- The course was inaugurated by the Chief Guest Dr. B. C. Jainaga, Rector, Jawahar Lal Nehru Technological University and other dignitaries in an Indian traditional manner by lighting the lamp.
- Sufficient course materials in the form of Hard copy as well as in CD was provided to all the participants.
- Lecture notes and Power Point Presentations were also provided to the participants.
- The strategy, how the benefit of NSDI can be utilized, in handling of geo spatial data for improving the developmental needs of the member countries was also discussed by the participants.
- At the end, the course was concluded with the valedictory function by awarding the certificates by the Chief Guest Mr. A. K. Goel, IAS, Principal Secretary, Planning & Chairman, APSRAC-GB, Government of A.P.

Overall, the participants were satisfied about the duration of the course, course contents, course material supplied, accommodation, teaching / training aid etc. However the gist of feed back is given be low.

GIST OF FEED BACK TAKEN FROM THE PARTICIPANTS AT THE END OF THE COURSE.

Duration:

"Adequate" is the general opinion. 2 to 3 participants preferred shorter period.

Course Contents:

Most of the participants say "Adequate" but a few pointed out the need for: -

- Avoidance of repetition of certain topics by different lecturers.
- Avoidance of locally relevant topics like GRAM++
- Having more exposure to GIS.
- Strict Adherence to subject by lecturers.
- Having only 1 or 2 lectures to drive home concepts of SDI and allocation of more time for hands on etc. to experience the function and advantages of SDI. A group project like, setting up a fictitious NSDI as a hands-on practice may be included.
- Inclusion of visits to NGDI/NSDI of the host country.

Course Material:

"Adequate", say most of the participants. Some suggest that Power Point Slides, PDF files etc. may be copied to CDs and given to participants.

Other target groups to be addressed:

- 2 to 3 participants from various departments of each member country.
- The community at large should become the target beneficiary.
- Policy Planners.
- University Professors.
- Junior Officers at working level.

Suggested frequency of the course:

General opinion is "Once a Year" but a few prefer "Twice a Year"

Does the course enhance professional competency:

"YES" is the unanimous answer and some say it loudly in more words.

Comments on Hospitality:

All praise for caring hospitality and excellent food. a lone voice wished if dinner could be served earlier than at 8 p.m. Another participant desired to have more continental food. There is a suggestion that accommodation should be arranged closer to Course Venue.

Other suggestions for improvement:

- All the participants staying together would have caused more interaction leading to better understanding of subjects.
- More hands – on needed.
- Less working hours preferred.
- Speakers from more countries may share experience of their SDIs.
- More Technology Demonstration by Product Vendors will be useful.
- Topics of Net-work Technology may be added to help trainees with non-IT background.
- Lectures on Internet GIS may be introduced.

Additional comments at course-end

- Experiences on SDI of small countries may be included in the course contents.
- Basics on how standard should be achieved may be addressed in topics.
- Legislators being planners also may be invited to participate in such courses.
- Hospitality superior to that at ITC.
- Visits were very educative / informative

RECOMMENDATIONS FOR FUTURE COURSES:

1. More hands on practice may be imparted to the participants.
2. It should be ensured that the participants of various countries have good knowledge of English language as the media of instruction is English.
3. More member countries should be encouraged to participate.
4. It is felt that the course was overall a success and more and more courses should be designed in future.