Minutes of the Fourth meeting of CGPB Committee XI: Geoinformation and Data Management

The meeting, chaired by Shri A.K.Malaviya, DDG, Mission-III, was held at Kolkata on 10th January, 2011. The meeting was graced by the representatives of state DGM of Kerala, Tamil Nadu, Chhattisgarh, West Bengal and Jharkhand. Besides officers from Geological Survey of India representatives from ONGC,AMD, CGWB, MECL, and Survey of India also graced the meeting.

Welcome Addresses: Shri B.Nageswaran, Member Secretary welcomed the distinguished gathering and in his opening remarks highlighted the Geoinformatics activities of GSI. He also gave a brief overview of the objective of the CGPB Committee – XI and what we could achieve during the last three meetings. He said that the Base Document for this committee has been prepared by GSI and sent for comments and suggestion to the member organisations. But the response has been very poor and he requested to not consider this as a mere GSI document. In his address he gave a brief account of the GSI initiatives like collaboration with NIC in developing some GIS services and the efforts of the GSI in utilising IT in every sphere of GSI core business activities which has been christened as Online Core Business Integrated System (OCBIS). He requested the member organisations present in the meeting to come out with more collaboration projects to take advantage of the objectives of this platform.

- **1. Convenor:** Shri A K Malaviya, Dy. DG (IT), and Head, Mission III: Geoinformatics in his welcome address emphasized on the following:
 - a) All Member organizations must put in place clear-cut data dissemination policy and directives to remove hindrance in data dissemination and sharing. He stated that if the member organizations have any 'Negative List', that needs to be circulated among member organizations.
 - b) Data regeneration or duplicity needs to be avoided. All member organizations must publish their data holdings and data dissemination policies through Portals / Websites, so that others know exactly what is to be done to access available data sets.
 - c) All member organizations must start to make necessary changes in their metadata as per NSDI Standard 2.0, the new upgraded version.
 - d) Members should take up collaborative projects to effectively utilize the data generated and maintained by different organisations to provide quality services to stakeholders and public.

Action - All members. NSDI

Proceedings

3. The Message of the Director General, who could not be present due to his preoccupation was read out. The Director General wished the meeting a great success. He said that the base Doecument is vital and it is going to lay down the path that every member organizations which deal with geoinformation may tread in to achieve their organizational goals as well as imbibe technological edge to effectively share their data for the benefit of other stakeholders as well as public. Success of CGPB Committee XI will be measured by the degree of 'inter-operability' that we can achieve within the targeted time and the 'quality' of data that are put in the public domain.

4. Minutes of the meeting of the 3rd Meeting of CGPB Committee XI held on 9th July, 2010 was put before the house and that was passed unanimously by all member organizations.

5) DMG, Kerala:

- a) Developed a Mineral Information system. At present database creation for 8 districts are complete. This and maps are uploaded in their website (www.dmg.kerala.gov.in). The website disseminates Taluk-wise information of mineral quarries and crusher units as downloadable pdf files without coordinates as per the policy of the department.
- b) The website contains information about department personnel, details of Gem testing certificates, mining leases, tenders and documents related to geology and mining.
- c) This site will be migrated to State Data Centre to prevent hacking. Future plan includes implementation of web GIS solutions using FOSS, e-governance software (Mining activities Management System) to be developed by NIC.
- d) DGM is also engaged in developing Spatial Database System in GIS platform.

Convenor, in respect of Point (a), stated that any mining lease related information is to be collated and compiled as per the IBM guidelines so that meta data generated can be incorporated into Tenement Registry System being developed by IBM. DMG, Kerala representative stated that unless Survey of India permits, they cannot put location data to public and rules regarding this have to be in place.

Action: Survey of India

Sri A Bhattacharya, Director, PSS-PM, GSI pointed out that unless some point coordinate data for the quarries is available in pdf, the duplication of work cannot be avoided.

- 6) DMG, Jharkhand: Shri A. K. Singh presented the progress of work related to geoinformation management
 - a) DGM Jharkhand has uploaded lease boundary and potential area maps for Bauxite, Laterite and Pyroxinite in Govt. of Jharkhand website.
 - b) Employee data is available in Portal (JHARPIS)
 - c) Several booklets & Publications (priced) uploaded in the portal.
 - d) A consolidated report on Limestone was prepared.
 - e) Their future work will involve preparation of georeferenced lease boundary maps on cadastral maps / toposheets with DGPS survey based on IBM guidelines. Requested SoI / GSI respectively to make available digital base maps and geological maps at 1:50 K.
 - f) DMG, Jharkhand has also consented to present to present IT related activities being undertaken in DGM, Jharkhand.

Action: Survey of India

Convener stated that GSI has already supplied hard copy geological maps on 1: 50K.

7) DGM, Tamilnadu: Stated that they are going to implement LANs at districts and connectivity to HQ within 1 month. Also, a Tenement Registry System is to be put in place along with development of a website.

- 8) DGM, West Bengal: Stated that they are in the process of converting 257 exploration block maps and 60 Tenement registry maps in GIS platform. The work is targeted to be finished by March, 2012.
- 9) DGM, Chhattisgarh: Presented the status of its present IT work and stated that
 - a) RP Tenement System is captured in GIS platform.
 - b) RP / RL list and details are uploaded in website.
 - c) Regularly sending lease data to IBM
 - d) Planning to upgrade their website through NIC.
- 10) Mineral Exploration Corporation Limited: Stated that
 - a) All data of MECL is in digital format. Since all are sponsored projects these data cannot be published. However, Executive Summary of 70 projects, sponsored by MOM, has been put in their website.
 - b) MECL has developed a Report Preparation System where entire project operation from field data capture to finalization of reports is done using IT tools.
 - c) MECL website contains application that can search Project Reports (Metadata) based on UNFC category, Commodity, State and District. Also, it contains the procedure to obtain them.
 - d) MECL suggested that all the Member Organizations should make their metadata public.

The Convener agreed that approach of all the organization needs to be changed so that all the data is available can be shared among the participating organisations.

Action: All Members

11) Central Ground Water Board: CGWB representative, Shri S. K. Samanta deliberated the Web Based Ground Water Information System, developed by NIC. The site contains last 5 years data on 1:1 M – 1:250K scale that is helpful for groundwater related works and planning purpose. The data is available in .png/.pdf format. The system contains several layers viz. groundwater, geological, water quality, hydrogeological boundaries, artificial recharge areas etc. For geological information CGWB has used GSI 250K quadrangle geological maps

The CGWB is also developing e-GEMS (Groundwater Estimate and Management System) in collaboration with NIC.

The Convenor commented that basin-wise water table maps would be more useful.

- 12) Atomic Mineral Division: AMD representative Shri Shanti Kumar stated their future activities regarding ICT implementation and application development.
 - a) All of the seven Regional offices of AMD and HQ have been linked through VPN.
 - b) Video-conferencing system is going to be implemented shortly.
 - c) Conversion of legacy data to RDBMS is to be taken up.
 - d) Thrust will be given to capturing current project data in database through customized applications.
 - e) Help from GSI is required to integrate their data in database; AMD also requires a) prospect level Geological maps, b) past data and c) beach data.

The convener stated that metadata of unpublished reports provide links to uploaded reports, which can be downloaded along with maps.

The Convener also stated that a meeting can be held where the GSI team will show the present database structure, applications and ICT infrastructure (Data Centre) after the meeting.

Action: GSI and AMD

13) DGM, Chhattisgarh: They have shown their website and the data therein.

14. Special Presentations

Shri S.K.Bohra of GSI (Nodal Officer of NSDI) presented recent developments that have taken place under NSDI platform and the related activities that GSI has undertaken.

- I. Major roadblocks in NSDI movement are lack of metadata, reluctance to share data, non-interoperability and absence of policy. Following decisions were taken in 4th meeting of the NSDI Executive Committee held on 30th November, 23rd and 24th December, 2010:
 - All the nodal agencies of NSDI will strive to convert analogue spatial data into digital format and will create metadata of these dataset. NSDI/DST will provide the necessary support, if required.
 - b. All the nodal agencies are requested to include NSDI as an item of agenda during their periodic conferences, seminars, etc. NSDI officer will participate, if invited.
 - c. It has been felt that the restriction to information has been disempowering. Hence, all the government departments should be encouraged to inculcate the culture of data sharing as that would serve the national interest. The proposed Spatial Data Sharing Policy should act as an enabler and a catalyst in this direction.
- II. NSDI has provided financial support during the F.Y. 2010-11 for creating necessary infrastructure including manpower / hardware / software/ connectivity to support NSDI portal in extraction, uploading and updating the metadata on NSDI Portal.
- III. To cater the need of NSDI, NIC, etc. GSI is setting up **Advance Spatial Data System Division** at DG Camp Office, New Delhi.
- 15. Shri B. K. Sareen of GSI (Nodal officer of NESDI) presented the development of Geoinformatics initiatives in North Eastern States. A project (Development of Northeastern Spatial Data Infrastructure) funded by DST and NEC was inaugurated in august, 2010 and attended by representatives of all the eight states of NEC besides central organizations like NIC, DST, GSI, SOI, NESAC, CWC etc. The following were decided in the meeting:
 - a) Geospatial Data generated through NEC fund would become part of NESDI data.
 - b) NESDI partners will be provided high speed Internet connectivity.
 - c) Metadata will be prepared by all partners.
 - d) GSI Training Institute infrastructure will be utilized training of human resource.
 - e) Eleven state organizations already involved in generation of geospatial data will become state level NESDI agencies.
 - f) Few blocks have been identified in the states of Meghalaya, Nagaland and Arunachal Pradesh, data from which will be utilized for the pilot project.

16. Shri Asit Saha of GSI made a presentation on the Base Document on Geoinformatics and Data Management. It was reiterated that for effective data sharing and collaboration, the following are essential:

- Existence of a well defined Data Dissemination policy
- Robust state-of-art ICT / spatial data infrastructure
- Development and adoption of standards
- Continuous interaction among agencies
- Development of Human Resource

The need of a Spatial Data Warehouse (SDW) infrastructure incorporating Pre-storage, Storage and Delivery mechanisms was mentioned. Along with this, a common gateway with metadata, catalog, map, symbology and database services has to be in place. All these will form the part of a Geo-science network, the top level architecture has been discussed in the meeting.

Also, an overview of future GSI activities in respect of Portal Phase III has also been presented.

Discussions: Representative of DMG, Kerala pointed out that the Base Document should mention version number and the contributors. He stated that security aspect of such ICT has to be dealt in detail in the document. He also stated that some mention of IT act 2008 should be there in the document.

Action: GSI

Important Conclusions

Highlight of the meeting consists of these important deliberations and decisions: **A. Base Document Finalization:** Suggestions regarding Base Document should reach GSI within 20th January, 2011, so that it can be placed in the 48th CGPB to be held during 3rd and 4th February, 2011.

Action: All members

- **B. Presentation of State DGM in CGPB meet:** Convenor requested representatives of State DGMs to come forward and give presentation in the forthcoming 48th CGPB meeting, since the focal theme of the meet is Geoinformatics. The Convenor Especially requested the representatives from Kerala and Jharkhand to make presentations. While the member from Kerala expressed his inability to be present in the meeting, the members from Jharkhand said they will intimate their status within 17th of January, 2011.
 - Action: State DGMs
- **C. Base Document:** A comprehensive draft document prepared as per OGC standard was given as hard print out to all participating organisations with a request to give feed back at the earliest. Also it has been sent to all member organizations who could not attend the meeting for their feedback. The final document after incorporation of the suggestions from all participating organisations will be placed to the CGPB meeting in New-Delhi.

All member organizations should give their feedback by 15th January, 2011

Action: All members

The meeting ended with vote-of-thanks proposed by the Member secretary.

List of participants:

Convener: A.K. Malaviya, Dy Director general General, (IT) Mission –III

Geological Survey of India

Member Secretary B. Nageswaran

S.	Name	Designation and Organisation
No.		
	Representatives from Central Govt.	
	Organisations:	
1	G. Sakarwal	GM (GP) KDMIPE, ONGC, Dehradun
2.	D.Dao	Officer Surveyor, S.O.I, Kolkata
3.	M.N. Sahay	Manager, Geology, MECL, Nagpur
4.	C. Shanti Kumar	Add Director, AMD, Hyderabad
5.	R. Mohanty	Regional Director, AMD, Shillong
6.	S.K. Samanta	Scientist-D, CGWB, Kolkata
	Representatives from State DGMs	
8.	Biju Sebastian	Geologist, DGM, Kerala
9	Somnath Das	Senior Geologist, DMM, West Bengal, Kolkata
10	Kumar Anjali	Dy Director, Geology, DGM, Jharkhand, Ranchi
11	A.K. Singh	Geologist, DGM, Jharkhand, Ranchi
12.	W.Palaniwelu	Joint Director, DGM, Tamilnadu, Chennai
13	Sanjay Khare	Assistant Geologist, DGM, Chhattisgarh, Raipur
	Representatives from GSI	
14.	K. Mahender Reddy	Sup. Geologist, WR, Jaipur
15	N. Subramani	Direcor, M &C Survey, Kolkata
16	S.D. Patbhaje	Sup. Geologist, CR, Nagpur
17	N.K. Punj	Senior Geologist, NR, Chandigarh
18	A. Bandyopadhyay	Director, NeR, Kolkata
19	B.K. Sareen	Sup. Geologist, WR, Jaipur
20	S.K. Bohra	Senior Geologist, DGCO, New Delhi
21	Saswati Chatterjee	Director, PGRS, CHQ, Kolkata
22	K.N.Nagraja Rao	Director, ER, Kolkata
23	K.N.Srinivasan	Sup. Geologist, M & C, CHQ, Kolkata,
24	D.P. Das	Director, M&C CHQ, Kolkata
25.	A. Bhattacharya	Sup. Geologist, CHQ, Kolkata,
26.	D. Bhattacharya	Senior Geologist CHQ, Kolkata,
27	Rajesh Kumar	Senior Geologist CHQ, Kolkata
28	S. Chattopadhya	Senior Geologist CHQ, Kolkata
29	N. Hazra	Senior Geologist CHQ, Kolkata
30	A. Saha	Senior Geologist CHQ, Kolkata
31	Basab Mukhopadhyaya	Senior Geologist CHQ, Kolkata
32	D.P.Das	Sup. Geologist, CHQ, Kolkata
33	Ravichandran R.	Geologist, CHQ, Kolkata