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

The meeting was held at Kolkata on 14th July 2009 and was chaired by Dr. P. Pande, DyDG (IT) and Convenor, Committee XI. Shri N. K. Dutta, DG, GSI was the guest of honour. The meeting was also graced by the presence of Dr B. Chattopadhyay, DyDG, PPM, Shri J. Singh, Sr. DyDG, STSS and other senior officers of GSI.

The meeting was attended by 8 State and 5 Central organizations apart from representatives from all Regions / Wings of Geological Survey of India.

Inaugural Addresses
Convenor: DyDG (IT) in his welcome address emphasized on the importance of Geoinformatics as an activity and the rationale behind the formulation of the new Committee and elaborated on the Terms of Reference. He made the house aware of the new dissemination policy of GSI in response to the new market demands and the steps GSI has taken to facilitate the fructification of this policy. He also requested the members of the Group to send their suggestions on GSI Portal so that necessary modifications could be made to make the Portal more user-friendly.
DDG, PPM: Stated the role of CGPB in controlling geological studies in India and need for constituting the new subcommittee XI on Geoinformatics and Data Management. This subcommittee should act as the think tank for geoinformation management in India. The need of the hour is: 1. Conversion of Earth Science data to digital format for archiving and public use. 2. Standardization of data format across all member organizations 3. To recommend how much data to be made available to public He also stated that all organizations should present the status of their data: Type, how it is kept, how that can be disseminated.
SrDyDG, STSS: Echoed DDG, PPM's opinion and stressed the importance of IT in Geoscience
DyDG, NIC, Mrs. Vandana Sharma: NIC is engaged in establishing IT infrastructure for government. It includes development of networking infrastructure, websites as well as looking into a spatial data framework for the country and making it accessible through one Portal. The main objective of all these is to utilize data from different organizations for nation wide projects like Bharat Nirman. She emphasized the need for developing a single GIS system for the entire country. She stated that standardization of spatial data is in its nascent stage. She also stated that this forum can be used as the platform for addressing these issues through information sharing and through interaction.
DG, GSI: DG welcomed all the participants and requested them to put forward a ***Roadmap*** and act for the benefit of the people of India as that is the ultimate goal of all the member organizations.

GSI Presentation on its IT initiatives
SR Sengupta, Director Geodata, GSI CHQ and Member Secretary presented an overview of Geoinformation activities in GSI– its history, current status and future aims. GSI hosts its Portal from its Central Data Centre. The Portal, apart from disseminating information to the public, provides interface to Enterprise GIS application, office automation applications (MIS), and scientific database pertaining to different activity domains of GSI. He detailed on the major components of the Portal Project and the future roadmap of building a geoscience network involving all State and Central Govt. geoscience organizations. He also commented on the ongoing data standardization activity in GSI. Future roadmap of Geoinformatics in GSI includes 1. Collaboration with stakeholders 2. Integration of multi-disciplinary data 3. Better utilization of computers and network resources 4. Interoperability 5. Integrated knowledge management
Discussion:
DGM, Andhra Pradesh: requested GSI to provide map data so that the geological, mineral and other information of GSI can be utilised as overlay on RP/RL information of the state on cadastral scale.
DDG, NIC: Sharing of data comes coupled with issues like IPR, Ownership, and copyright which the NSDI is dealing with.
Director, Geodata: GSI has already given all spatial data to AP State Govt. under Jaladhatri Project
Director, P&M: Asked to browse through the new information policy of GSI which is available in GSI Portal
DGM, Kerala: Duplicacy of data can be avoided if GSI can provide digital data
DyDG, PPM: opined that data sharing is both way traffic, state DGMs should also share data
DyDG, IT : mechanism has to be in place and this committee is the platform where it can be resolved
DG, Orissa: desired GSI to provide links to state Govt. DGM websites **Action: GSI**
Shri T. K. Chakravarty, Director, Geodata, CHQ presented an account of work done by GSI with special reference to the GSI Portal during the current field season.
Shri Asit Saha, Geologist Sr. demonstrated the GSI Portal live with special reference to the data and product information available for the State Government and other organizations.
DyDG, NIC: Appreciated the content and vastness of the GSI Portal and stressed on the importance of getting listed on search engines like Google at the top.
DyDG, IT: GSI would like technical help from NIC to get listed in Search

engines. **Action: GSI & NIC**
DGM, Kerala: Wanted to know how information about training by GSI can be obtained
GSITI: Detailed information about pool of faculty will be posted in portal with contact information. Training Calendar is already available **Action: GSITI**

Deliberations by other Organisations
DGM, Andhra Pradesh: Going to host a website shortly; developing online mineral concession application processing system integrated with GIS; requested spatial data from GSI (GSI has already given all spatial data to AP State Govt. under Jaladhatri Project); At present there is no dedicated network.
DyDG-NIC commented that Network availability is not under the purview of this committee. DGM, AP should avail the benefit of different networking initiatives such as SWAN.
DGM, Nagaland: Data automation in absolutely initial stages – would like GSI to share data and help in human resource development.
DyDG, IT informed that training is free for state and central Government employees and all information is available through GSI Portal – contact TI through portal
DGM, Chhattisgarh: demonstrated their website which contains summary information about mineral resources in PDF. Chhattisgarh Govt. website also contains details of RP, PL, and ML.
DGM, Kerala: developed a depository of resource planning and management capacity building spatial and non-spatial digital data; presented a status on the availability of digital data sets and demonstrated their website which has been developed, hosted and maintained by CDIT. Requested for aerogeophysical data from GSI
AMSE, GSI: Multisensor survey done within 8-20° N latitude and the data is under processing and will be made available shortly **Action: AMSE, GSI**
DGM, Jharkhand: Demonstrated their website which displays leasehold areas as point geometry
IBM commented that polygon geometry is required for this purpose. Jharkhand should provide polygon data to IBM **Action: DGM, Jharkhand**
DGM, Tamil Nadu: Presented an overview on their geoinformation activities and the status of digital data; problem with availability of digital topographic base
DyDG-NIC commented that there is still problem with the Open map series of SOI and it may not be readily available
DGM, West Bengal: intends to build a Portal to disseminate the data holdings in near future – in the process of consolidating data sets

DGM, Orissa: Aeromagnetic survey data are available for most of the state (75,000 sq km) in both raw and interpreted format, at a price. Effort to convert legacy hardcopy data to digital format in process; planning to build a website and also prepare district resource maps and mineral belt maps
Director, Geodata, CHQ commented that District resource maps and Mineral belt maps are already available with GSI at a certain scale and DGM, Orissa should make sure that there is no duplication of work. Details about these maps are available through GSI Portal.
Regional Controller of Mines, IBM: stressed on the importance of all State Governments parting with the mining leasehold information in proper format for the Mining Tenement Registry. Also expressed the desire to establish a system where all State DGM's, IBM and GSI can work together. He also opined that detailed geological map at 1:4000 scale will be needed for the tenement registry database
DG, GSI and Director, P&M commented that generating geological map at 1:4000 scale is not possible as it will require a very large time span – even with large scale outsourcing.
MECL: demonstrated the benefits in standardization of data and symbolsets, and the process of 3D modeling and digital conversion of analog data followed at MECL. MECL categorically stated that most of the data in their possession are owned by their clients and thus they are not able to share the data. Dedicated internal network available
Director, Geodata commented on the possibility of collaboration with MECL in the field of 3D modeling
CGWB: Appreciated the data content and usability of GSI Portal and expressed the desire to build a similar portal in near future; proposed a CGPB like body for all State Ground water boards. Desired free of cost training from GSI
AMD: No mapping data available, obtains it from GSI; adopted mobile mapping extensively; constraints in sharing their data – only available to students for R&D purpose. Dedicated internal network being established. Requires information regarding mining concession applications from State Governments as they are the agency to provide mining clearance.
NIC: Appreciated the effort which has gone into making GSI Portal a reality; emphasized that development of connectivity at every level is of high priority to facilitate sharing of data and cited the SWAN as an example. Also expressed the importance of interoperability and standardization as prerequisites for data sharing and opined that these are long-term tasks and can be achieved only with well defined goal and active participation over a long period. Also stated that coupled with data sharing comes other issues like IPR, Ownership, and copyright which the NSDI is dealing with. Described NIC initiatives on developing single portal for countrywide spatial data for the benefit of public. This ultimately aims to provide spatial data as service which users can access and analyse on their own. Regarding adoption of Open map series it was stated that there are certain problems with data availability which cannot be resolved readily. Demonstrated the GIS initiatives of NIC through the website http://gis.nic.in. Stated that NIC is ready to collaborate with GSI in project form on spatial data management.

DyDG, IT welcomed the proposal for collaborating in the field of spatial data management with special emphasis on the adoption of Open GIS standards **Action: GSI & NIC**
NIC, MoM: appreciated the content and variety of GSI Portal and advised to impart importance to certain sections of the website to make it more user-friendly. Also stressed upon the issue of data standardization. Suggested that link for all state sites can be provided in GSI Portal and metadata structure being used in GSI Portal may be published.
DyDG, IT: Unpublished Report Metadata manual is already available in portal; All other metadatabase schema will also be uploaded. Suggestions are also invited from all other participants regarding further modifications in the GSI Portal. **Action: GSI**
DGM, Kerala: A distributed database development system contributing to a central repository can be developed where everyone can participate.

Presentation by Regions / Wings of GSI
All Regions / Wings and TI presented the current Geoinformatics activity respectively with special reference to data entry and usage of GSI Portal and other applications. Progress regarding the spatial database development was also presented by the Regions, Coal Wing and Marine Wing. Director, Geodata, Central Region made a presentation about the navigation features and data content of the Global Change Master Directory Portal.

During the concluding session the following points were discussed:

1. Long term policy needs to be in place for data standardization and interoperability. Standardization has to be done at all levels, the most challenging would be the semantic interoperability.
2. GSI and MECL can explore ways to collaborate in the field of 3D geological modeling using subsurface data generated through drilling
3. GSI and NIC can explore ways to collaborate in application of newer technology in the field of Geoinformatics with special reference to geological data. A project for creating map services using open source software and Open GIS platform can be explored
4. There should be links to all DGM websites in GSI Portal and vice versa.
5. All state government departments should provide relevant information to IBM for the Tenement Registry. All leasehold areas should be stored as polygon geometry and at cadastral level.
6. Keeping in view the interest shown by the participating organizations, the 2nd meeting, planned for December 2009, could be of 2-day duration along with a workshop on Geoinformatics