### i-GeoApproach

(UNDER PRADHAN MANTRI GRAM SADAK YOJNA) for Madhya Pradesh Rural Road Development Authority



National e-Governance Award 2009-10

> PRADHAN MANTRI GRAM SADAK YOJANA

## ROAD TOWARDS G-GOVERNANCE

Geo-portal: http://gismp.nic.in/GeoApproach

GEOMATICS DIVISION
NATIONAL INFORMATICS CENTRE
C - Wing Basement Vindhyachal Bhawan
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# OVERVIEW

### i-GeoApproach

Internet Geomatics – Based Application for Planning Rural Road Connectivity to Habitations (Under Pradhan Mantri Gram Sadak Yoina)







Purpose of the project is development of Geomatics-based web-enabled system for Rural Road Network of Madhya Pradesh.

### Scope of the project:

- Development of i-Geoapproach to help in preparation of District Rural Roads Plan in accordance with PMGSY guidelines
- Creation of spatial database consisting of road network (NH, SH, MDR, ODR), rail network, major rivers, water bodies, habitations etc.
- Linkage with location specific data such as demography, communication network, health, market facilities, administrative centers and Contractor/ Consultant details

### **Product Platform**

- ArcGIS Server
- Open Source (J2EE) based front end
- Apache Tomcat Web server
- Enterprise Geodatabase
- High-end Servers
- Client with IE 6.0 or higher javascript enabled browser

- SOA Architecture OGC compliant
- Web-based G2G centrally managed GIS application which facilitates inter departmental and enterprise requirements
- Generation & display of habitation and road profile
- Provides details & display of the nearest road from a selected habitation
- Distance computation & traverse
- Query map output
- Display & updation of thematic maps
- Tool bar for zoom, pan and map composition

### Salient Features

- Digitization of road maps of each block
- Map-based Monitoring of Contractor/ Consultants' road works
- Regular use for planning, updation & monitoring
- Lower cost of software ownership and increased return on investments through single, focused GIS Web application to support many users

### Impact/Benefits

- An efficient & effective tool for planning rural road connectivity to habitations
- Helps in better management of facilities
- Helps achieve transparency & easiness in planning & monitoring processes
- Efficient updation of thematic maps
- Offers scientific approach to rural roads planning