

Department of Electronics and Information Technology Ministry of Communications and Information Technology Government of India



Digital India

Workshop on Geo-Informatics

Madhya Pradesh SeMT

Mr. Swarn Shikher Pant

Progress of Madhya Pradesh in Implementing GIS based Decision Support Systems (DSS)

Sl. No	Name of the Owning State Department	Name of the Implementing Agency	Implementation Area <e.g. agriculture,="" aviation,="" disaster,="" etc.)<="" forest,="" health="" infra.,="" mining,="" natural="" th=""><th>Status</th></e.g.>	Status
1	Education	NIC	Education	Comp
2	Panchayat & RD	DoS&T	Watershed Management / Planning	Comp
3	Home	Home	Dial 100 – Homeland Security	Comp
4	Regist. & Stamps	DoS&T	Property Registration	IP
5	PWD	MPRDC	Accident Response System	Comp
6	State Election Commission	DoS&T	Pilot on Electoral Mapping & ward delimitation	Comp
7	Others			

Progress of Madhya Pradoch in Implementing

Status

Comp

Comp

Comp

Comp

Comp

IP

IP

Comp/ IP

Name of the Owning State Department		Implementation Area <e.g. agriculture,="" aviation,="" disaster,="" forest,="" health<="" infra.,="" mining,="" natural="" th=""></e.g.>				
GIS based Decision Support Systems (DSS)						
	, , , , , , ,	radesii iii iiiipieiiieiitiiig				

etc.)

Rural Road Management System

Health Infrastructure mapping & DS

Aanganwadi mapping and DSS

Infrastructure Planning

CSC Mapping

Land Acquisition Planning – Pilot / Project

Land bank visualization –prospective investors

Forest extent mapping and fire management

Agency

DoS&T

DoS&T

DoS&T

DoS&T

Forest

DoST

Simhastha Com.

NIC

SI.

No

8

9

10

11

12

13

14

15

Panchayat & RD

Industries

Health

DoIT

Forest

ICDS

Renewable Energy

Central Simhasth Comm.

Whether any coordination mechanism set by the State for GIS related work among its Departments?

- MPSSDI project Implementation Road map
- State Spatial Data Infrastructure Policy- 2014
 - Designated Nodal agency DoS&T
 - Mandate to Nodal agency for setting up MPSSDI and necessary institutional framework
 - State Spatial Infrastructure Committee (CS, GoMP as ex.oficio Chairperson) with PS of key depts, SIO-NIC, Secy IT as Member Secretary
 - Defined Roles of SSIC, Nodal Agency, MPSSDI

SSIC Roles

- Approve administrative and operational framework including <u>resources</u>, <u>roles</u> <u>and</u> <u>responsibilities</u>, <u>reporting system</u> and the like for SSDI;
- ❖ Approve rules and guidelines for effective implementation of SSDI;
- ❖ Approve the action plan for setting up SSDI and review its implementation on quarterly basis;
- SSIC will enjoy the status of <u>Project Screening Committee</u> as per the circular of the department of Finance, Govt of M.P., dated 18.01.2012 for review, administrative approval and screening of the same;
- **SSIC** will facilitate inter-departmental coordination required to meet the policy objectives;

Nodal Agency - Roles

- Selected by SSIC; shall function under the overall administrative control and supervision of the SSIC. Shall be bound by all policies, guidelines, directions and the like issued by the SSIC from time to time.
- ❖ Nodal Agency will setup State Spatial Data Infrastructure as a <u>dedicated wing</u> within the organization;
- Nodal Agency shall -
 - <u>Coordinate</u> with state <u>agencies</u> on spatial data needs, sharing mechanisms, data access and decision support requirements;
 - Procure on behalf of the state, high resolution or other required satellite imagery at defined intervals;

Nodal Agency - Roles

- ❖ Make appropriate use of data of state agencies for the benefit of citizens;
- ❖ If required, engage private or Govt agency for carrying out activities required for meeting the policy objectives;
- ❖ Enter into service level agreement or other agreements with state and other agencies to achieve the objectives of the policy;
- ❖ <u>Formulate the revenue model</u> governing charges, fees, costs and the like to be levied upon the state agencies and other users for usage and access to the spatial data, applications and the like;
- Coordinate with other states and spatial data providers for technology support and spatial data;

SSDI- Roles

- Providing seamless and standardized spatial data to State and other agencies through electronic or other means, under controlled access. The spatial data shall include :-
 - Co-referenced satellite imagery
 - Administrative jurisdiction boundaries including those of villages, wards and forests
- ❖ Facilitating, creating and providing to users, multipurpose integrated GIS data, comprising department specific spatial datasets and standardized administrative boundaries to state users;
- * <u>Providing the means (electronic or other) to state agencies for data updates</u>, so that it may enrich the central repository and be disseminated, through <u>secured</u> <u>data</u> <u>access</u> mechanism, to other state users;

SSDI- Roles

- * Facilitating development of decision support systems for better informed decision making by state departments;
- Maintaining state's spatial data and applications thereof;

General Policy Provisions

- The <u>State agencies shall mandatorily make available, by electronic or other</u> <u>means,</u> <u>their spatial data and updates, thereof, to the nodal agency in order to</u> <u>enable</u> <u>creation</u> <u>of standardized central repository of state's spatial data;</u>
- All state agencies requiring spatial context in effective decision making, shall mandatorily make use of spatial data;
- Project proposals of state agencies involving spatial data creation in the state shall require opinion of the nodal agency;
- State agencies shall present the centrally funded project proposals for the review of SSIC, which involve spatial data creation in the state

Whether any coordination mechanism set by the State for GIS related work among its Departments?

- MPSSDI Project under CS PMU monitoring
- Nomination of GIS SPOC from each department / agency

Whether any attempt has been made by the State, for integration among all the available GIS apps?

 <u>Apps</u> – custom tools on portal developed which can be plugged into departmental workflows for quick turn-around ...when developed on single platform

<u>Data integration</u> mechanisms under implementation

Scale of work undertaken

- Creation of seamless geo-referenced Khasra maps 52,000 villages (94%) and derived data layers
- Collation of existing GIS based ward maps & creation of remaining
- Online availability of entire data as service (access credentials)
- Created framework for departmental spatial data up-dation
- Protocols defined for data sharing with MPSSDI
- Regularly <u>Promoting use of common, co-referenced</u> satellite imagery
- On-going Requirement documentation for easier replicability

Current Role of SeMT and NIC in GIS Implementations

- Implementation of Road Map for State wide GIS implementation
- Coordination with key stakeholders NIC, RRSC, user departments
- Technology consulting support to state departments / agencies

GIS Plans / Goals - Madhya Pradesh

- Data level integration of key departments
- Data access to <u>district level users</u> for khasra level planning
- Establish data sharing protocols in agreement with owner departments
- Mechanisms to reduce bandwidth dependency
- Evolve capacity building programs of end users

Support Desired from DeitY

DeitY support on GIS

- GIS framework
 - Instituting an MMP ??... DPR
 - Usability of open source / community managed databases, software
- Capacity building w.r.t. -
 - usage and development of open source GIS tools

Thank You