NIC, Madhya Pradesh Gateway for e-Governance in the State "the Heart of Incredible INDIA"

NIC, Madhya Pradesh is playing catalytic & significant role in architecting & implementing various e-**Governance initiatives with** the best possible technology support in the State, especially in Mantralaya. Appropriate backbone ICT infrastructure has been established in Mantralaya, which includes OFC-based Internet connectivity with 100MBPS Gateway, Gigabitbased Local Area Network (LAN), Video Conferencing, etc. supported by a team of highly qualified IT professionals.



SANJAY HARDIKAR Technical Director sjh@nic.in



M. VINAYAK RAO Sr. Technical Director & State Informatics Officer

adhya Pradesh, the second largest State of INDIA, lies in the heart of the Country. Its central location makes the State a strategic hub with many logistical advantages. NIC, Madhya Pradesh along with State Government has played catalytic & significant role in architecting & implementing several e-Governance projects in the State with an aim to leverage IT for transparency & better governance.

Edited by Anshu Rohatgi



ICT INFRASTRUCTURE

In order to achieve automation of processes & functions for e-Governance, the backbone of ICT infrastructure has been provided by NIC in Madhya Pradesh. This includes high-end servers, storage, GIS infrastructure, MPLS enabled Internet with 1~10 Gbps bandwidth, 34~1000 Mbps Leased Line based WAN connectivity to all districts, Video Conferencing facility etc. Turn key solutions for establishment of LAN/Campus Area Network/MAN/WAN, Mail Messaging Services, Video Conferencing, Anti Virus Support and Security Services are being provided to various Central/State/District level Departments/Organizations/users by a team of highly qualified IT professionals.

High Speed Video Conferencing Studios equipped with High Definition VC Systems and LCD TV at 50 District Collectorates & Secretariat, provide VC Services to monitor and review functioning of various Departments. Madhya Pradesh has made the cumulative per site hour utilization of more than 1.50 Lac during last few years. VC Services are used on regular basis by senior functionaries, including Chief Minister, Chief Secretary, etc., besides utilization of VC services by CIC and for various Nation/International sessions.

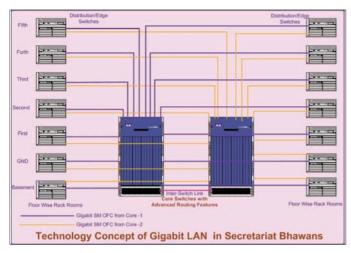
The Data Centre services include technical support for deployment & management of web-enabled applications, 24x7 operation & support for maintenance of over 580 websites to facilitate a greater access to all netizens.

NETWORK PROJECTS

Structured LAN at Secretariat Buildings: - Gigabit OFC backbone based 6500 Nodes structured LAN has been established at Vindhyachal Bhawan & Satpura Bhawan and 3500 Nodes LAN is already operational at Vallabh Bhawan, whereas establishment of LAN is in active progress at Vidhansabha to provide NICNET services to all the Senior Government functionaries, with OFC-based building connectivity. The solution is based on 2-Tier Architecture with Redundant Failover mechanism and upgradeable to 10G. Integrated Network Operation Center is also established for support on 24x7x365 basis, besides centralized Anti Virus and Patch Management Servers. The solution is fully IPv6 Compliant.

LAN at National Institute of Technical Teachers Training & Research, Bhopal: -

From the States/UTs



Gigabit OFC Backbone based Campus Wide LAN established for NITTTR, Bhopal. Layer-3 & Virtual Local Area Network based Traffic Management Solutions have been implemented to support Multimedia based Virtual Class Room applications and Internet/Mail messaging. The LAN is functional with around 500~600 nodes to provide various network based services.

GEOMATICS PROJECTS

(http://gismp.nic.in/iGeoApproach/)

i-GeoApproach (Internet Geomatics-based Application for Planning Rural Road Connectivity to Habitations is a web-based G2G solution based on SOA architecture developed for M.P. Rural Road Development Authority under PMGSY. Efforts have been made towards creation of enterprise level spatial GeoDatabase comprising of entire road network (national highway to village roads), habiation locations, railway network, major water bodies, etc. for the entire State.

GeoForest (http://gismp.nic.in / GeoForest) has been developed for Madhya Pradesh Forest Department. It is an internet based decision support system developed using J2EE wherein a GeoDatabase has been created covering entire Forest

area of Madhya Pradesh. The spatial layers include forest ranges, compartments with their legal status (RF/PF), classification of forest (forest type, Site quality) etc. Working circles, felling series & coupes pertaining to a working plan are also part of Spatial Database. GeoForest facilitates forest management towards stock mapping, processing & analysis of forest resource, review and monitoring of working plan, identification of potential forest planning & management areas & measures to be taken. This could help achieve not only the desired transparency and easiness in planning process but also facilitates efficient & effective system for forest management owing to its in-built scientific approach and open-ended design.

- iGeoAmpere (Internet Geomatics-based Application Model for Planning Distribution of Electricity to Rural Entities) has been developed for M.P. Paschim Kshetra Vidyut Vitran Company Limited in the Western part of Madhya Pradesh. iGeoAmpere, is enterprise internet-based G2G decision-support system based on Service Oriented Architecture & developed using J2EE front-end, which has access via intranet/ internet for authorized users. Spatial data to GeoAmpere includes distribution network comprising of substations, feeders, village locations & basic amenities associated with the Villages. iGeoAmpere provides an efficient & effective tool for planning rural Electric Distribution Network. It enables a faster response to the changing ground realities in the development planning, owing to its in-built scientific approach and open-ended design.
- GeoSearch (http://gismp.nic.in/GeoSearch) is based on web services and flex technology and facilitates identification of the location of a Village/Panchayat in the entire State. It is a G2G & G2C solution, available in public domain. GeoSearch uses Enterprise GeoDatabase on villages, Panchayats and major road network. Online distance can be measured (aerial as well as traversed) between selected locations, area cal-



Shri Vivek Chitale TD receiving the International Geospatial Excellence award from the Chief Minister Gujarat, Shri Narendra Modi



Mr. Jack Dangermond, President ESRI, USA presented the SAG award to Shri Vivek Chitale, TD

culation of user-specified circle, polygon and profile of villages/Panchayats are some of the salient features of this open-ended system. It allows the decision-makers to verify the constitution of Panchayats based on the proximity/distance.

- e-Governance Projects i-FFWMS (http://www.mpsc .mp.nic.in/ffms/) is an Integrated work-flow & role-based based application, designed & developed for Madhya Pradesh Forest Department to include forestry works, budget & financial management system. It is a user friendly, strategic accounting cum information system that considerably curtails the time spent in manual preparation of accounts. The application has been implemented at the offices of 150 DDO and 450 Sub-DDO Offices in the State.
- School Education Portal (www.educationportal.mp.gov.in/): - The portal is a workflow based bilingual system which has a suite of role-based e-governance applications to facilitate proactive, transparent & accountable governance in the school education sector, besides providing single source & common platform for all G2G, G2C and G2E services related to school education. The portal also facilitates the effective implementation of children's Right to Free and Compulsory Education Act 2009 in the State. The Portal also includes centralized payroll system & comprehensive HR-MIS for over 3.5 Lacs employees, which ensures timely payment of salaries & redressal of their grievances, besides online monitoring of performance of students, teachers & others officials. The education portal has bagged several honors & appreciations at State & National level.
- eKhanij (http://mpsc.mp.nic.in/e_khanij): Minerals play an important role in the industrial & economic development of the nation. The state of Madhya Pradesh is endowed with rich mineral wealth and ranks third after Jharkhand & Chhattisgarh, in terms of mineral production. Considering

From the States/UTs



NIC Madhya Pradesh team receiving CSI Nihilent e-Governance Award for i-FFWMS

the important role of the State in mining sector, a work flow based system has been designed & developed to take care of all the activities of the state & field offices helping authorities in management & monitoring of various activities.

- Vidhan Sabha Questions Reply Management System (VQRMS) & e-Vidhansabha (http://mpsc.mp.nic.in/eprashna): - The web-enabled G2G system aims at achieving complete work flow automation for faster collection of questions raised in State Assembly, compilation & submission of reply to the Assembly from State Secretariat. The system covers key activities like online posting of questions, forwarding of these questions to different field level offices by the concerned department, submission of reply from field level offices, finalization of reply by the department for submission of final reply to State Assembly, etc. e-Vidhansabha covers the workflow of the questions starting from question registration while VQRMS takes care of the department requests.
- New Defined Contributory Pension Scheme: The application has been designed & developed for Directorate of Pension & Provident Fund, and is being used by more than 8000 DDOs under District Treasuries in the State. The system enables the State Government to prepare intermediary phase before joining the NPS architecture, as defined by Government of India and Pension Fund Regulatory & Development Authority.
- Land Records (www.landrecords.mp.nic.in): Bhu Abhilekh is "G2C" & "G2G" application to deliver excellent grass root governance within the domain of Land Management upto Tehsil level, covering 35 million Khasra (Plot/Survey) numbers comprising of 11 million landowners. Citizens can get copy of Khasra (ROR), Khatauni through the website. The Khasra maps are also digitized and the citizens can get the print out of the same from Tehsil offices. In addition, map modification facility is also extended to Tehsil offices.
- Recovery Incentive (www.dif.mp.gov.in/brisc/): - BRISC developed for Institution of Finance, helps in maintenance, management

From the States/UTs



NIC Madhya Pradesh team receiving Chief Minister Excellence Award from the Chief Minister of M.P, Shri Shivraj Singh Chohan

& monitoring of revenue recoveries against Loans given by banks under various incentive schemes of State Government. The web-based BRISC provides effective, efficient & transparent system for monitoring various BRISC schemes and facilitates maintenance of Revenue Recovery Certificates (RRCs).

- **Projects** Monitoring System Housing Board (www.mpsc.mp.nic.in/hbpms/): - Web-based system facilitates monitoring of completed/ongoing projects of Madhya Pradesh Housing Board at various stages of progress that includes onsite photographs, expenditure incurred, graphical projection, etc, The project also manages financial status of the projects and details of contractors, depositors & financial institutions.
- Revised National Tuberculosis Control Programme (RNTCP) [www.mpsc.mp.nic.in/rntcp/): - Web-based System has been designed & developed for Directorate of Health Services for effective implementation of "Revised National Tuberculosis Control Programme (RNTCP)", besides building Database of TB patients along with their treatment details. After successful pilot implementation of the System at Barwani, Hoshangabad, Indore & Jabalpur, the system is now being extended to remaining Districts of the state.
- e-Cooperatives (http://mpsc.mp.nic.in/ecooperatives): The web-based system covers major activities of the Cooperative Department, i.e., Registration of Societies, Membership, Share Capital, Working Capital, Profit & Losses, Liquidation & Inspection of Societies, Election of Societies, Audit of Societies, Court Cases, Storage, Distribution & Balance of Agriculture Inputs at Primary Agriculture Credit Societies (PACS), etc.
- e-ICDP (http://mpsc.mp.nic.in/icdp): Integrated Co-operative Development Projects (ICDP) is web based G2G, G2B, and G2C e-Governance application, which facilitates the effective monitoring of schemes and provides impact studies under Office of Registrar Co-operative Societies. Presently it

- is implemented in 17 districts of Madhya Pradesh covering 6 Lacs beneficiaries through about 2,550 societies in the State.
- Election Management & Information System (EMIS): The system is designed & developed by NIC, Shivpuri in consultation with O/o CEO Madhya Pradesh for automating various activities related to Elections i.e., Parliamentary Elections, Assembly Elections, Panchayats, Mandis, Nagar Paliks, etc. The activities cover, Formation of Polling Parties and Randomization of Polling Parties, Polling Stations, EVMs, Micro Observers, Counting Persons, etc., besides generation of various Reports. The system is regularly used by all the District Authorities in the State.
- JanSunvai: The online Grievance Registration, Management & Monitoring System is example of District level efforts of NIC towards e-Governance, under the JAN-SUNVAI initiative of the Chief Minister. The system facilitates timely disposal of grievances reported to the District Collector. The system is being used in the State after appropriate customization for District specific need.
- Samdhan Kendra: It is a joint initiative of District Administration and NIC for delivering more than 50 Citizen Services through Janmitra in Gwalior, SavaMitra in Seoni and through Samadhan Kendras in rest of the Districts.

TRAINING SERVICES

The fully equipped training centre of NIC, Madhya Pradesh State Unit conducts regular training programmes on various dimensions and aspects of ICT & eGovernance for the state government officials, while technology update sessions are held frequently for NIC officers. About 40 training programmes covering about 800 participants from nearly45 Departments/Organizations are conducted every year.

IMPLEMENTATION OF PROJECT

- National Social Assistance Programme (NSAP http://nsap.gov.in): - NSAP comprises of Indira Gandhi National Old Age Pension Scheme (IGNOAPS), Indira Gandhi National Widow Pension Scheme (IGNWPS), Indira Gandhi National Disability Pension Scheme (IGNDPS), National Family Benefit Scheme (NFBS) & Annapurna. It has been successfully implemented, covering more than 17 Lacs beneficiaries, in the State.
- CIPA (Common Integrated Police Application): The e-Governance application is customized & implemented for more than 350 Police Stations covering 18 District in the State for bringing transparency in the system of police working by automating the "Processes at Police Station level".
- e-Hospital: has been customized for implementation in Indira Gandhi Women & Child Gas Rahat Hospital, Bhopal and proposed to cover all the Hospitals under it's jurisdiction. Functionalities cover Patient Registration, Clinics, Emergency Registration, Path Lab (LIS), Radiology/Imaging (RIS), Blood Bank Management, IPD(ADT), OT



NIC Madhya Pradesh team receiving Chief Minister Excellence Award from the Chief Minister of M.P, Shri Shivraj Singh Chohan

Management, Pharmacy Management and Billing & Accounts. It is HL7 Development Framework (HDF) compliant and ISO/IEC 9126 certified end-to-end solution for managing processes & services in hospitals including providing tele-medicine services, besides web-based information dissemination features.

Mother & Child Tracking System (http://nrhm-mcts.nic.in/): - A webenabled system for tracking pregnant women & children for their ANCs and immunization. NIC MP initiated the project in the State during 2010 with State NRHM, Bhopal and contributed in refining the system for successfully implementing in the State. Presently, records of more than 12Lacs mother & child, along with treatment details are available under the system.

AWARDS

New Defined Contributory Pension Scheme bagged the Chief Minister's award for excellence for good governance in the State.

SevaMitra Samadhan Kendra of Administration, Seoni District received e-World Forum (Jury Award)

- Best e-District Initiative of the Year. NIC, Madhya Pradesh received International Special Achievement in GIS (SAG) award, announced during International ESRI UC Conference held in San Diego, USA for outstanding work carried with GIS technology.
- i-GeoApproach (Internet Geomatics-based Application for Planning Rural Road Connectivity to Habitations) bagged International Geospatial Excellence Award in "Governance" category and National e-Governance Award.
- Integrated- Forest Financial and Works Management System (i-FFWMS) bagged CSI Nihilent e-Governance Award for Excellence under G2G Category and Best Application Software developed in Madhya Pradesh
- Gwalior District received CSI Nihilent e-Governance Award for the Best e-District category.
- Janmitra Samadhan Kendra, Gwalior received SKOCH Challenger Award.
- Madhya Pradesh Scholarship Portal received Certificate of Appreciation -Excellence in e-Governance initia-

- tives under IT for Masses category.
- District Gwalior & Seoni bagged best e-Governed District of Madhya Pradesh Award.
- NCNP (NIC Coordinator for the National Portal) for Madhya Pradesh received Platinum Icon of Web Ratna Awards under NCNP category
- Madhya Pradesh State Education Portal bagged Golden Icon of National e-Governance Award and Manthan South Asia e-Governance Award for effective public service delivery through innovative IT application, besides Special Award to NIC, Madhya Pradesh team by the Governor of Madhya Pradesh for design & development of the Portal during 49th State level Teacher Felicitation Function.

For further information

STATE INFORMATICS OFFICER

NIC Madhya Pradesh State Centre "C" Wing Basement Vindhyachal Bhawan Bhopal (M.P.) - 462004 Ph. 91-755-2551447 (O) email - sio-mp@nic.in