

Informatics

AN  GOVERNANCE PUBLICATION FROM NATIONAL INFORMATICS CENTRE

- **e-Courts: ICT enablement for Judiciary**
- **ICT Initiatives in Assam**
- **RTI: A legal tool against Cyber-divide**
- **Hazaribag: ICT for good Governance**



Patron

Dr. B.K. Gairola

Editor-in-Chief

Neeta Verma

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R. Gayatri
Anshu Rohatgi
Prashant Belwariar

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WWW Version

P. Hemamalini

Print Coordination

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Circulation & Despatch

Anita Bhardwaj
Jasvinder Kaur

Editorial Assistance

Aditya Gogoi

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Editorial

The Indian Judiciary has been one of the front runners in applying ICT to their day to day functioning. e-Courts, one of the mission mode projects of the government has further strengthened the ICT initiatives in the Judicial System in India thus facilitating delivery of Justice to be faster & convenient to the citizens. Get to know in our lead story, all about the e-Courts and how ICT is in the process of making Justice contemporary and messianic through out the nation.

Application of ICT for delivery of public services at various levels in government is common. Get an overview of such initiatives in the States of Andhra Pradesh and Assam in our State in Focus Section. Districts like Purba Medinipur in West Bengal, Jalna in Maharashtra and Hazaribag in Jharkhand are also leveraging on the potential of ICT to provide convenient & efficient access to government information & services.

Keeping up on trends of the threads on our "Guest Column" section, we carry a comprehensive & thought provoking article on RTI Act from Md. Haleem Khan, Secretary, CIC

Our regular sections viz: Cyber Governance, News, Perspectives, International e-Gov updates etc shall appraise you of the new initiatives in the realm of e-Governance.

Wishing you all a sparkling & prosperous year ahead...

Neeta Verma

Editor-in-Chief

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सत्यमेव जयते

Dr. B.K Gairola
Director General
National Informatics Centre



National Informatics Centre, since its inception has been striving towards induction of Information & Communication Technology in the process of governance. In the recent years, there has been a significant shift from G2G domain to G2C Services. Large number of initiatives have been taken by the government at various levels to enhance the quality of services to citizens. The significantly enhanced scope of e-governance applications & services and the timeframe available to implement these have necessitated larger participation of IT Industry at different stages of the Projects such as Consulting, Development & Rollout.

This emerging scenario has changed the expectations of the Government from NIC, from a mere developer of applications to provision of high level support in managing the projects through its entire lifecycle. An important component of such an emerging role of NIC is to support the government in strategic control of the application development and services required to be outsourced to the industry. This requires reorganization & reorientation of the strategy by which NIC has been providing services in the past.

Another major role envisaged for NIC relates to managing of e-governance infrastructure set up under various government initiatives across the country. NIC is preparing itself to support the states to manage the state level e-Governance Infrastructure such as State Data Centers, State Wide Area Networks & State Portals. NIC is also signing the MoU with state governments under which it can provide the advise, consultancy and necessary technical support for effective and efficient management of the e-Governance Infrastructure.

Wish you all a very happy & prosperous Year ahead...

Dr. B.K Gairola

e-Courts Mission Mode Project: The Journey so Far

ICT enablement of judiciary is being pursued vigorously across the world. In India, ICT enablement of higher judiciary started in early nineties, covering the Supreme Court and all the 21 High Courts. Today, we have reached a stage where deployment of ICT in Supreme Court and the High Courts has reached a significant level of maturity. However, the lower judiciary, district and taluka courts across the country are largely untouched by the ICT revolution.

CLM Reddy
Senior Technical Director
clmr@nic.in

The e-Courts scheme aims ICT enablement of the lower courts across the country in their functioning. The project envisages deployment of hardware, software and networking to assist district and taluka courts in streamlining their day to day functioning. Key functions such as case filing, allocation, registration, case workflow, orders and judgments will be IT-enabled. Causelists, Case status, orders, judgments will be available on the web and made accessible to litigants, advocates, and general public. The project aims to build a national grid of key judicial information available 24x7 in a reliable and secure manner.

Project Modules, Phases and Timelines

The first phase of the e-Courts project was approved in February 2007. The duration of the phase is 2 years with a planned expenditure of Rs.442 Crore for different components of the project. Along with ICT implementation in district and taluka courts, the project will also manage and implement the ICT infrastructure upgradation at Supreme Court and all High Courts. The key modules in e-Courts Project are:

Laptops and Laser Printers, Personalized Training to judges, Broadband based Connectivity to judges, Connectivity at court complexes, Videoconferencing, Site preparation, Hardware,

Networking, Application Software, Technical Manpower, Upgradation of ICT Infrastructure at HCs and SC

Project Execution: Key Stakeholders - Roles and Responsibilities

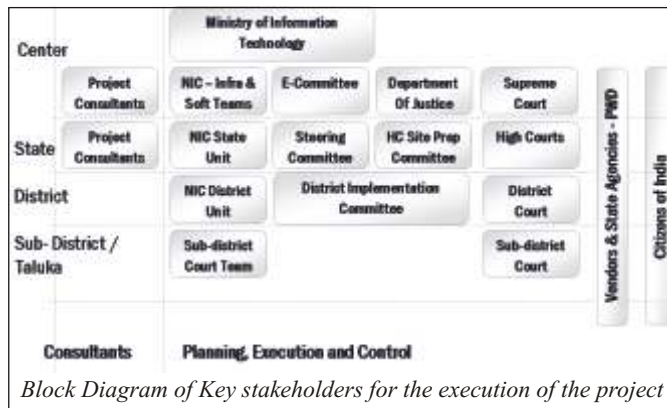
National Informatics Centre is the implementing agency for the project. NIC personnel at District level will be part of District Project Monitoring Committee, headed by District Judge, to look after progress of e-Courts Project in the entire District, including Taluka Courts. NIC technical personnel will advise the District Judiciary in site preparation activities, HW installation, Networking, Application SW implementation and all other technical issues.

The project is being implemented under the guidance of the e-Committee. The office of e-Committee provides the valuable interface to the judiciary, and also supplements NIC in all implementation aspects. Hon'ble e-Committee Chairman, Sh. Justice P.K.Balasubramanyan, has been personally visiting all High Courts and continuously engaging all High Courts for successful implementation of the project.



Hon'ble e-Committee Chairman, with Chief Justice of Norway and with delegation from Kazakhstan respectively

Department of Justice is providing key support for project monitoring and evaluation. All High Courts have appointed Central Project Coordinators for managing the implementation of the project.



Service Levels

The Key Service Levels to be achieved by this project, for litigant public, are:

- **Registration of case:** by auto-generated case numbers
- **Copies of Judgment:** judgments would be made available through web
- **Preparation and delivery of decrees:** Decree should be made available to the concerned parties by e-mail, where ever applicable
- **Generation of automated cause list:** Within an hour of conclusion of court service daily
- **Generation of court diaries:** Automated diaries
- **Availability of Case status:** Online 'case status' right from filing of a case till it gets disposed
- **Generation of daily orders:** As soon as the Judge signs the order and edited by the Court Master
- **Website for each court:** Every court will have its own website

The envisaged service levels for Registry are:

- **Submission of report of Commissioner/ pleader appointed for recording evidence:** Tracking of submission of commissioners' report on a timely basis
- **Storing of documentary evidence:** Scanning and digitally capturing the cases in the database

- **Calculation of court fees due and paid for:** Automated calculation of court fee at the end of each transaction and report generated on a daily basis
- **Release of orders to the copying section:** As soon as the judgment is signed.
- **Filing of written statement by the defendant:** Tracking of generation of written statement - to be generated within 30 days of the date of summons or 90 days (if allowed to be extended by the court)

Project Progress Monitoring System (PPMS)

To manage the nation wide project, NIC has developed a comprehensive Project Progress Monitoring System to capture key project data such as number of Court Complexes, Judges, High Court Committees, Project Personnel, Existing Hardware, Network etc. The PPMS also captures project progress details for Site Preparation, Distribution and Installation of Hardware and LAN, Training, Internet Connectivity, Laptop and Printer Status, etc. The PPMS provides access to key project documents; generate customized status reports for all stakeholders, general information on - Vendors, Product Installation, and Software Updates.

The District Courts have shown active participation in updating data on the website. The website today has 2280 court complex registrations including 756 district court complexes and 5545 Judges' registration. Other key data such as availability of Videoconferencing facility, DG Sets, hardware at district and taluka courts is being collected through the website. All District Courts are requested to provide information required by NIC through the website and ensure that data provided is complete, accurate and validated before being sent. District Courts that have uploaded data on the website are requested to update it on a regular basis. Going ahead in the future, the website would become the single most important source of project progress and reporting. NIC intends to use the website as the only source of data for implementation of the project.

Key Achievements

The key achievements of the e-Courts MMP project are summarized below:

- 13365 laptops distributed to district and taluka court Judges across the country

- 12599 laser printers distributed to district and taluka court Judges across the country
- Training on the basics of computers has been imparted to 11005 / 13365 Judges and 44020 / 60000 Court Staff.
- Broadband / Dialup Connections provided at 9733 / 13365 Judges residence, 489 / 525 District Court Complexes and 740 / 1530 Taluka Court Complexes.
- Funds released for site preparation to most of the District Courts
- Job Orders issued by NIC, for deployment of 600 System Officers at district court level, for a duration of 18 months.
- Empanelment process for hardware vendor completed.
- Application software is getting finalized
- Project Progress Monitoring System (PPMS) developed for capturing key project data

Site Preparation

The overall guidelines for site preparation are as under:

I. Computer Server Room (CSR)

- CSR not required (where no. of court in a complex is ONE)
- CSR required (where no. of courts in a complex are more than ONE)

II. (Judicial Service Center (JSC))

- There will be only one counter at JSC where no. of courts in a complex are up to five.
- There will be two counters at JSC where no. of courts in a complex are more than 5 but less than ten.
- There will be three counters at JSC where no. of courts in a complex are more than ten.

III. Other Guidelines

- Cost estimates and layout diagrams, to be approved by Committee
- NIC is releasing payment after receiving cost estimates
- Cost estimates should not exceed Rs.2.75 Lakh/site

- Completion certificate to be vetted by High Courts and District Courts
- Site Preparation excludes LAN
- AC/DG sets procurement - central empanelment

Application Software

District and Subordinate Court Software is being tested at 6 Pilot Sites viz. Mumbai & Chennai, Nainital (Uttaranchal), Gwalior (MP), Cochin (Kerala) and Kamrup & Nogaon (N-E). Additionally, feedback has been requested from users at Bhubaneswar, Shillong, Raipur, Silvassa, Ahmedabad and Kolkata. Work has been initiated for enabling selected software to provide support for major regional languages including Hindi.

- Application software will be based on common data structures and functionality
- Critical analysis of common view by software standardization committee
- Design, development, testing, and rollout of common view software by NIC

Hardware Procurement

A tender for empanelment of vendors for supply of hardware, software and networking was floated exclusively for the e-Courts project and completed the process of empanelment. The empanelled vendors will approach courts for certain pre purchase activities such as inspection of site readiness, LAN survey and preparation of bill of material etc. They will also get in touch with DIOs in this regard. A conscious decision has been taken to procure the hardware only when site is ready in all aspects and intimated to NIC by the courts. Each court will be provided with:

- 4 Computers (1 desktop and 3 thin clients) with 3 printers
- 2 computers in court, 1 in Judicial Service Centre (JSC), 1 for General purpose Payroll, etc
- 3 Printers 2 in Court, 1 in JSC/General Purpose
- All computers in a court complex will be networked to a server
- At each court complex one scanner will be provided

Technical Manpower

Technical manpower will be deployed at district courts where site preparation funds have been sent. At each District court 1 System Officer, 2 System Assistants will be deployed for 18 man-months. They will report to District Court Judges. Whenever need arises, they will visit the subordinate courts and TA/DA will be paid to them. The role of the technical persons at district court is:

- To manage and coordinate maintenance of ICT infrastructure such as computers, scanners, printers, LAN, Internet connectivity, communication equipment such as switches, routers, modem, Wi-Fi etc at the respective court complexes put under their charge.
- Interaction with vendors for maintaining and supporting the equipments as and when required by the court administration.
- Coordinate with concerned vendor, installation and maintenance of OS, office tools and the like.
- To maintain customized application with reference to reinstallation and upgradation with new modules/patches.
- Impart training to judges and court staff

They will be selected by a committee to be constituted by the high courts. The Selection Committee at HCs is to consist of High Court nominee, a technical expert from the State and Nominee of NIC. The vendor has to submit resumes of candidates in ratio 1:3, i.e. for one position, 3 resumes.

Challenges Faced

Some of the key issues faced by the e-Courts project are as follows.

Inadequate funds for Site Preparation: Cost estimates for site preparation in the original proposal were insufficient, due to increase in number of court complexes. Hence, additional funds are required for site preparation. Due to this reason it has been decided that priority should be given for site preparation of district court complexes. Once additional funds are made available all court complexes in the country will be covered.

Power Backup: Due to budgetary constraints, funds for providing connectivity from DG Sets to ICT Infrastructure may not be provided under the e-Courts project. All such cabling and installation costs have to be

borne by the High Courts. Recurring cost for maintenance of DG sets shall be borne by respective HCs.

Project Monitoring Website: There have been delays by HCs in uploading the required details on the PPMS website. Since NIC is dependent on the website for key project data, all High Courts must ensure that data uploaded is complete and accurate.

Videoconferencing Facility: The project envisages VC facility at 500 locations. Providing facility only at district courts without covering jails will not be beneficial. Since allocated funds are insufficient to provide VC facility at all jails, further funds are required.

Next Steps

Following are some of the important steps to be completed in the project:

- Site preparation activity has to be completed by the courts
- LAN survey and bill of material will be submitted by the vendors
- HW, SW and LAN have to be procured and get them installed
- WAN will be established at each court complex
- Deployment of technical manpower
- Unified application sw has to be finalized
- Training on the app sw will have to be imparted to the judges and court staff

Network Diagram for Connectivity for e-Courts

Following are the broad guidelines for providing internet connectivity at court complexes:

Bandwidth for internet connectivity will be provided by the Internet Service Provider

- Internet connectivity and all interfaces to the external networks are routed through the State Data Centre maintained by NIC. It performs two functions:
 - Network Address Translation
 - Ensures Network Security
- The internet connectivity to the court complexes may be provided through 3 modes:
 - NICNET upto 2 MBps leased line
 - SWAN upto 2 MBps leased line
 - BSNL broadband connectivity

The three modes will function in a unified IP address space. The primary internet connection at the court complex will be provided by either SWAN or NICNET (via 2MBps leased line) depending on the availability in the respective state. A dedicated BSNL broadband connection will also be provided at each court complex as a back-up connection in order to provide a reliable and redundant network.

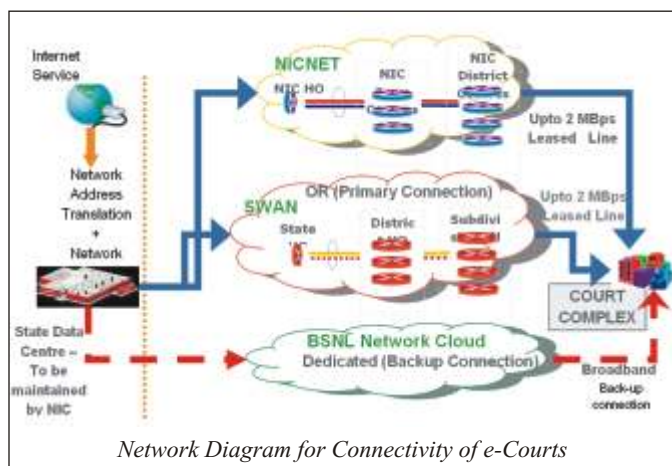
In places where NICNET and SWAN are not available, the BSNL broadband connection will act as the primary connection. The bandwidth of the broadband connection will vary according to the workload estimated for respective court complexes.

Connectivity for varying number of nodes within court complex

The internet connectivity will be provided to multiple nodes (end user computer) at various court complexes through router and switch in the following manner:

- through a dedicated BSNL broadband connection
- through upto 2 MBps leased line from SWAN or NICNET

Number of nodes in a court complex shall determine the number and configuration of switches (level 2 or 3) and routers.



Fast and fair trial has always been a long awaited dream for the citizens of India. The experience of a person undergoing trial has never been pleasant so far. Hence there was a need of an ICT based Indian Judiciary for quicker trial. It is hoped that in the coming time e-Courts will prove to be a landmark in the life of the people and transform their anticipations into reality.

Upcoming ICT Events

First International Conference on eGovernment and eGovernance

March 12th-13th, 2009

Ankara, Turkey

<http://www.icegov.info/>

4th Global Conference: Cyber cultures - Exploring Critical Issues

March 13th 15th, 2009

Salzburg, Austria

<http://www.inter-disciplinary.net/ci/Cyber/cybercultures/c4/cfp.htm>

European Conference 'Towards eEnvironment 2009'

March 25th - 27th, 2009

Prague, Czech Republic

<http://www.e-envi2009.org/>

International conference on ICT and Development

April 17th 19th, 2009

Doha, Qatar

<http://www.ictd2009.org/>

International Conference "The Good, the Bad and the Challenging." The user and the future of ICTs"

May 13th 15th, 2009

Copenhagen, Denmark

<http://conference2009.cost298.org/>

eLearning Africa 2009 Learn, Share, Network

May 27th - 29th, 2009

Dakar, Africa

<http://www.elearning-africa.com/index.php>

9th European Conference on e-Government

June 29th - 30th, 2009

London, United Kingdom

<http://academic-conferences.org/eceg/eceg2009/eceg09-home.htm>

Assam: Weaving ICT Dreams into Reality

Assam popularly called the land of red river and blue hills, famous for its tea and one-horned rhinoceros, dominated by the mighty river Brahmaputra, is the gateway to the northeastern India.

The state has a large number of tribes each unique in its tradition, culture, dresses and exotic way of life.

The people of Assam have traditionally been craftsmen. Artists, sculptors, masons, weavers, spinners, potters, goldsmiths, artisans of ivory, wood, bamboo, cane and hide. Assam is renowned for its exquisite silks namely Eri, Pat and Muga silk.



Deepak Goswami
State Informatics Officer
sio-asm@nic.in



Tasiruddin Ahmad
Informatics Correspondent
tasiruddin@nic.in

NIC, Assam State Centre was set up in the year 1986. Since then the center has embarked on many e governance projects and simultaneously upgraded its ICT infrastructure & resources to the best in the industry.

ICT Infrastructure

Network Operation Centre (NOC): NIC commissioned 'Network Operation Centre' which also serves as the digital gateway for the entire northeastern states. The 100 Mbps links connects Guwahati Delhi while Guwahati-Hyderabad link act as a failover. All the NE State capitals are connected to this centre. The NOC is manned 24/ 7 and various software are installed for effective monitoring of the entire network.

All the 8 Blocks of the Secretariat are connected to the NOC with OFC backbone, each block having nearly 120 LAN nodes. The 23 districts are connected with dedicated 2 Mbps MLLN from the NOC in addition to DVB VSATs for data and DAMA VSATs for VC. Four other new districts are presently having VSATs connectivity.

Various post offices have been connected under the Department of Post (DoP) project. The Regional Passport Office (RPO), Census and Immigration Terminal at the airport are connected to NOC with MLLN line. The Guwahati Metropolitan Area Network (GMAN) connects nearly 42 Directorate offices using RF links. The four sites with RF hubs

are connected by 2 Mbps leased line, which acts as a backbone for the GMAN network. The residence of Governor and the Chief Minister are also connected with 2 Mbps leased line and RF Link. This centre is equipped with 1 TB SAN along with several mid-range servers for hosting several Intranet applications both under Windows and Linux platforms.

Video Conferencing: VC facilities presently exist in the Chief Ministers Residence Office, offices of the Chief Secretary, Minister of IT, Commissioner of IT, apart from the 24 districts and the state center. Most of these are IP-based and through 2 Mbps lease line connectivity.

Training: NIC, Assam has been regularly imparting Training since its inception. Training Division conducts about 35-40 courses per year ranging from general awareness and Office Productivity courses for government users, sectoral courses and Technology Update Courses for NIC personnel for the entire NE region.

Projects:

Land Records: A web-enabled ISO/IEC 9126 and ISO 12007 standards certified software for Land Records Computerization, named Dharitree, started as a pilot project in the Sonitpur district of Assam under NeGP. Dharitree is being replicated in all the districts of Assam as well as in the state of Meghalaya, and Nagaland. Dharitree facilitates up-to-date maintenance of Land

Records, automated mutation system including automatic correction of Chitha and Jamabandi records through online mutation system, efficient online delivery of quality services (mutation, copy of Record-of-Rights, various land based certificates etc.) to the citizens.

Registration (e-Panjeeyan): e Panjeeyan project deals with the computerization of the Document registration work at Sub Registrar Office. e Panjeeyan provides modules for Initial enquiry for stamp duty evaluation, cash collection, entry of basic data, verification by RO, scanning of registered document, digital photo and finger prints of 1st, 2nd Party along with witness and modules for generating various MIS Reports and searching of digitized documents. e-Panjeeyan has been implemented in all the four SROs of the Sonitpur district. It is being gradually rolled out at other Sub-Registrar Offices.



e- Panjeeyan Inauguration at Jorhat

Transport Vahan and Sarathi: The Vahan & Sarathi software helped in the transport department. The software has been implemented at 4 DTOs viz, Kamrup, Silchar, Jorhat and Sibsagar. In DTO Kamrup (which takes care of more than 50% of transactions of the State), smart-card-based Driving License and Registration Certificates are being issued.

Judiciary: Websites of Guwahati High Court, Legal Services Committee, district judiciary of Kamrup, Nagaon and Goalpara has been designed and hosted. High Court Case Status Enquiry, a web based online system for case details have been launched recently to help individuals, lawyers, petitioners to check their case details. The e-court project is also being rolled out in the state for computerization of the civil courts.



e-Court inauguration

Geographic Information System: NIC has been coordinating in updating village polygons and habitation point database for National GIS enhancement. Village polygons for 12 districts and habitation database for 17 districts have been updated. Base maps are created for a few circles with the help of Directorate of Assam Survey & Settlement, Guwahati.

North East Accounts Employee Empowerment: The web enabled (G2E) Integrated Accounts Information System for North Eastern States developed in PHP and PostgreSQL having five modules, namely Payroll, Income tax, Leave and Tour Bill processing has been implemented. Separate levels of access are provided for the SIO's of various NE States, the DDO's and NIC employees.

SDO Suite: The Subdivision is an important level of government hierarchy below the district and SDO-Suite takes care of various G2C services from the sub divisional office. This system helps in issuing various certificates like Land sale Permission, Legal heir, Issue of Passport Verification, Birth and Death Report, Non creamy layer, Permanent Residential, Meeting Order etc. The software has been implemented at three sub-divisional offices.

CIPA: The Common Integrated Police Application (CIPA) is a multilingual application to automate the processes at Police Stations and to build a crime & criminal Information system based on CrPC. Workshops cum training programs have been organized jointly by NIC and Assam Police for smooth implementation of the software. CIPA has been rolled out at twenty four police stations.

NREGA Soft : Data entry for NREGA Soft is being done in all the districts with the technical support from NIC. Training and workshop on the software for all the 27 districts has been conducted.



NREGA training Program

Plan PLUS: State and district level training on PLANPLUS software for creating the Annual and Perspective Plans, have been conducted for the 11 BRGF districts of Assam. The training support has been provided for other NE states like Arunachal Pradesh and Meghalaya.

PHED Project: A Web based software developed in .NET framework with SQL Server as backend covers all the work flows for the Public Health Engineering Department up to Sub division level for capturing the required information for 15 identified modules has been implemented. It generates reports and required queries.

Election: NIC consistently supported in the Lok Sabha, Assembly and Panchayat elections. The website of the CEO Assam <http://ceoassam.nic.in> has been hosted & maintained. NIC also developed a suitable computerized system to take care of the Affidavit management during filing of nominations by candidates in the last Assembly Election.

State Govt Employee Database: Database has been built for the employees of twenty seven districts of Assam. The details has been published on the website <http://wap.as.nic.in>.

Websites: At present over hundred websites are hosted and maintained by NIC for various govt. departments & institutions. Domain registration services, VPN accounts for secure update of websites are provided. e-mail accounts for government officials are provided for secure online correspondences within the departments.

Passport Computerization: Regional Passport Office (RPO) Guwahati has its jurisdiction over six North Eastern States of India viz Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram and Nagaland. The RPO, Guwahati was computerized in co-ordination with MEA Information Division, Delhi. Processing of applications for passport and other miscellaneous services has been fully computerized.

COMPACT Implementation: Comprehensive

Accounting System - COMPACT has been implemented at the Regional Pay & Accounts Office and National Highway Authorities. The system generates cheques, which can be directly printed for disbursement has benefited the employees.

Online GPF Accounting: An Online Portal for Accountant General maintains a huge database of approximately 5 lakh State Govt. employees and provides them online search facility for their latest position of GPF accounts with missing credit details. The web enabled GPF module of been developed in ASP.net and Oracle10g under linux.

Immigration Control for LGBI Airport: The Immigration Control System (ICS) developed by NIC HQ has been implemented at Guwahati airport to provide information on entry/exit etc. about travelers at the immigration counters.

Other Major Projects implemented are:

- e-Sanwad / e-Suvidha / e-Sewa - web-based systems for providing G2C services Software for the P & RD Department: support for schemes like Rural Housing, IWDP, SGSY, DRDAAdmin, etc.
- IEEE Counseling Project - provided support at IIT, Guwahati and NIT, Silchar.
- Dak Management Software - provides efficient management of Letter's or Daks received at various Government Offices.
- Online Web-based File Monitoring Software: Implemented at the office of Chief Secretary and Deputy Commissioner, Dibrugarh.
- Web-based Telephone Information System application to computerize all the telephone /mobile connections and bills of all the departments under the Government.
- Comprehensive DDO software - has been implemented at SSC, CAT, Income tax Appellate Tribunal, CGWB, NHAI and Regional Passport Office.
- Postal Life Insurance for Post office: Migrated existing computerized PLI system to Web based under Oracle 10g.

NIC Assam looks forward to provide ICT- based services to various government organizations in the State to promote e governance for the benefit of common people. **i**

For Further Information Contact

STD &SIO

NIC, Assam State Centre

Block F, Old Secretariat Complex, Guwahati-6

Deepak Goswami

asm-deepak@nic.in

Andhra Pradesh: A Right Place for Technology Breeding

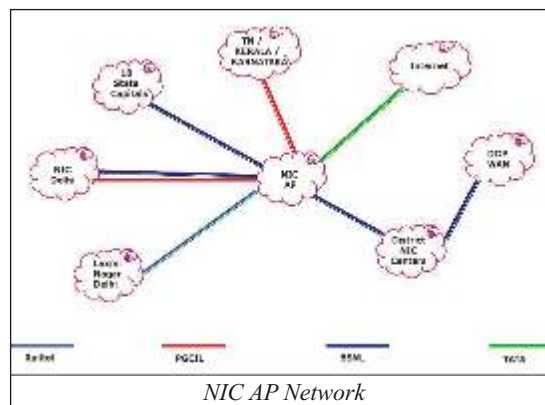
Andhra Pradesh also known as the "Rice Bowl of India" is the fourth largest state in India. The state is not only famous for its rich culture and heritage but also a favourite place for tourists worldwide for its spellbound beaches. Of late the state has received lots of accolades in the global platform for its endeavors in bringing government closer to its citizen through contemporary technologies. The following write up provides a sting of information on the various ICT initiatives taken by the Government for connecting people directly with the Government. Read Ahead...



Venkata Ramana, V.V.
Technical Director
v3r@ap.nic.in

NIC Andhra Pradesh was established in 1985 as Regional Centre with NEC main frame computer as a back bone to extend high power computing to Govt. of Andhra Pradesh. Since its inception, it has traveled a long way, by successfully completing vital projects for Central, State Govts. and Public Sector Departments.

Infrastructure: NIC AP State Centre has been identified as area 0 on MPLS cloud, at par with NIC Delhi for NICNET availability for terrestrial communications. Accordingly all the State Capitals are being connected through redundant routes on high speed CKTS to NIC Hyderabad which has a separate 122 Mbps Internet Gateway with scalable bandwidth on demand. NIC Hqs and



the DR Laxmi Nagar Centre are connected on STM1 links from Hyderabad.

A 9 meter Satellite HUB with 750W HPA has been established at NIC Hyderabad for disaster

recovery and load sharing of NICNET Satellite traffic. With a MCU installed at Hyderabad DAMA/PAMA, Direcway and Skyblaster (under installation) sites are supported from Hyderabad for voice, Video & data.

National Data Centre: A world class Data Centre has been established at NIC, Hyderabad using the best of the breed technology with the objective of providing high service availability and scalability. Built over 10,000 square feet area, the Data Centre is operated by offering continuous maintainability, system redundancies, multiple active power and cooling delivery pathways, fault tolerance, and enhanced physical security. The Data Centre is powered with state of the art ICT infrastructure including network and information security.

The Data Centre provides co-location services, managed services as well as hosting services. In a short span of four months after its construction in April, 2008 Department of IT (National

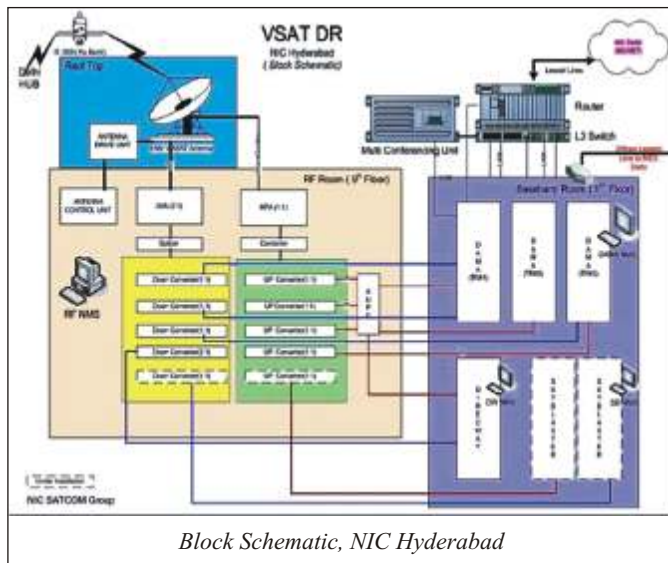


Inner View of Data Centre and Rack Area

Service Delivery Gateway), Food Corporation of India (Financial Accounting System), Ministry of Finance (eLekha and eSuraksha), Ministry of Health (NACO) and Ministry of Rural Development (NREGA) have already started using the services.

State Data Centre: The State Data Centre at NIC, Hyderabad provides hosting services to various States, Central and Public sector departments through 280 web sites/web applications under various platforms. The major applications include ePanchayat, Prajavani, Land Records, Rural water Supply and so on. The State Data Centre is also hosting mail server for extending mail services for over 3500 users.

Disaster Recovery Centre: NIC, Hyderabad also provides the Disaster Recovery and Business Continuity services for IDC (Delhi) & NICCA and State Data Centers of Government of Gujarat & Rajasthan. The major DR/BCP services of IDC include PMO and MEA mail services and web hosting services. In addition, SMTP gateway, DNS and LDAP services are configured for load balancing mode.



Some of the most Successful Applications

Common Integrated Police Application (CIPA): The CIPA project is implemented successfully in 104 locations of Guntur and Prakasam districts of Andhra Pradesh in the first phase (10% Police stations of the state). A web based application provides the FIR content of CIPA implemented Police stations.

SMS based tracking of Mobiles, Vehicle & Stolen Vehicles: A.P. Police (Closed User Group) can instantly track the stolen vehicles and mobile phones by sending SMS. It accepts Vehicle/Mobile Phone number as input and sends back the address details of the owner.

Immigration control System: It is implemented at the new Rajiv Gandhi International Airport, Shamshabad. About 95% of the flights are now being cleared by immigration authorities in less than 20 minutes using this application. On an average about one lakh passengers are being cleared every month.

Petition and task monitoring system: It is a web based Workflow Management System for monitoring complaints and is operational in 150 locations of Hyderabad and 80 locations of Cyberabad Police Commission-erates.

e-Panchayat: A comprehensive software solution suite to automate all Panchayat functions. It offers IT based solutions to Panchayat officials for Better, Effective and Transparent Administration.

Financial Accounting Software for Rural Development department: A Web based Financial Accounting software developed for monitoring the budget and expenditure of district offices of Rural Development department has been in use since August 2005. Periodic Uploading of the Transactions to the database, Uniform Codification of Budget Heads and Expenditure Heads across the departments, Cheque Book Generation, Generation of Bills/ Vouchers and Financial and Non-Financial Statements (including Cash Book, General Ledger etc) are some of its main features.

“The package is helping all the Project Directors generate reports to analyze the expenditure on monthly basis.” - Commissioner Rural Development.

Integrated Management System of Pay & Accounts and Treasuries (IMPACT): This Web Based Pre-Audit Transparent System has been implemented in three Branch Offices of Pay & Accounts Office, Hyderabad for Conducting Pre-Audit of Claims from 1200 DDOs, Maintenance of GPF Class-IV Accounts, Rendering Monthly Account to A.G./Government.

Prajavani: It is a Web based on-line Public Grievances Monitoring System implemented in 12 districts for

District Collectorates. Its salient features include facility to file a grievance at Kiosk, forwarding to a call Centre, marking to an officer with due date, response of officers, local language enablement, facility to see response at Kiosk etc.

Excerpt of the feedback concluded by N. Sridhar, IAS, DC, Anantapur District on “Prajavani” Software.



- It has made transparency of Grievance work flow from Petitioner to the Officers.
- Because of local language availability in the software, the understandability of the happenings on the grievance can be seen and understood by the petitioner having minimum educational qualification.
- Endorsement provisions on the petitions creates confidence to the petitioners for approaching the Officers concerned on the due dates without roaming around the Govt. Offices from the day of the grievance submission.
- Provisions of alerting the Officers on the grievances for which the action is due within a day or two (with Yellow colored petitions), will make the administration more impact oriented towards grievance redressal.
- Because of its online access to all the nodes i.e. Petitioners, Officers, Administrators and General public, it is having equal access to have the Live status of any grievance through Prajavani Software.
- It will be very helpful for the most responsive District Administration which shows highest concern towards the redressal of the Public grievances.

Rural Water Supply and Sanitation (WATERSOFT):

It helps the department to plan, monitor and execute the works taken up for providing Safe Drinking Water to the rural population of A.P. and is being implemented all over the state.

Integrated Pay Processing System: It has been successfully implemented in AP Secretariat consisting of 40 Departments and also in many Directorate Offices. This Web Application developed and implemented

around LAMP technology for handling monthly salaries of government employees.

e-Granthalaya: This Library automation application has been implemented in the libraries of A.P. Secretariat, Central Administrative Tribunal, BHEL-R&D Library, IGNOU, Hyderabad, AP State Central Library, Kendriya Vidyalayas in Tirupati, Gatakesar, Guntakal, Guntur, Vijayawada, Hyderabad and many other places. These libraries are now busy in making the past records available through this application.

Judicial Sector: NIC, State centre is extending support for work flow automation to AP High Court, AP Administrative Tribunal, CAT, City Civil Courts and State and District consumer forum. It covers Case Registration, Scrutiny, Cause-list Preparation, Dissemination of Judgments, Case Information etc.

Legislature: Extensive IT support is provided to Andhra Pradesh Legislative Assembly in the major areas of Assembly Business, Member Services and Administrative/ Accounts. The computerized system provides an on-line reference to Hon'ble Speaker, Government, Members, and Assembly Sections and also monitors activities like Proceedings, Questions etc.

Food & Civil Supplies Department (eAccounts): It is a Web Based Stock and Financial for the State Civil Supplies Corporation, computerising vouchers pertaining to receipts, payments, purchases, sales, etc and helps in preparation of Ledgers like Trial Balance, Profit & Loss Balance sheet etc.

Account General (Pensions): Pension Settlement and Management Information System (PSMIS) have been developed for AG's office of Andhra Pradesh for settling and monitoring pension cases. It automatically calculates the pension benefits and monitors case online among different Cadres/Stages.

Labour Welfare: Karmika Samkshema Nidhi Paryavekshana is a web-enabled application on LAMP stack to monitor the collection of Labour Welfare Fund subscription and Disbursement of aid to the beneficiaries through various Welfare schemes. Subscription towards the Labour Welfare Fund is collected from the employer and (approx. 1.8 lacs) employees of various establishments.

Agriculture: An MIS for WTO Cell, Seed Certification, Seed Testing under Seednet, APSCA, DACNET, Watershed, HORTNET, Dept of Oilseeds, Commodity Portals etc., have been developed and implemented in the agriculture sector. Agrometeorology portal has been launched in collaboration with the ANGRAU to render Agrometeorological Advisory Services to farmers. Rythu Samachara Darshini e-learning system for farmers, Agmarknet, Karshak Mithra / e-trading, Dharavani are some of the other initiatives taken in this sector.

Health Medical and Family Welfare

- **e-Hospital:** This application covers Patient Registration, Investigation, Medical Records, Blood Bank Management, Pharmacy etc and is being implemented at six Govt. teaching hospitals.

A Health Portal was launched for the benefit of citizens, doctors, NGOs, Govt. officials etc., Also an SMS based service on disease surveillance are being provided.

- **Institute of Preventive Medicine:** An online vaccination appointment system for international travelers and an SMS based water quality monitoring system have been developed and implemented.
- **Directorate of Medical Education:** An MIS for Nursing Examinations, Integrated Disease Surveillance System, Medical Bills Processing, Drug Indenting and SMS based Supply Chain and Infrastructure Management System have been developed and implemented.

Animal Husbandry Diary & Fisheries: MIS for breed improvement, Disease Surveillance and Livestock Institutes inventory etc has been developed and implemented. It also includes a Dynamic Portal to benefit the major stakeholders and to disseminate live stock census. An online system for IGCARL to Monitor the Implementation of the Project has been inaugurated by Hon'ble Chief Minister of AP.

Registration Department: To minimize Security Risks, Biometric modules have been incorporated in to CARD project. The photos and thumb Impressions of the citizens approaching Sub-Registrar's office for registration of Deeds are captured and electronically

preserved. These modules have been seamlessly integrated into legacy CARD application.


One Lakh Acres of Land Distribution Scheme: Information pertaining to the beneficiaries of this prestigious scheme of Hon'ble Chief Minister of Andhra Pradesh has been made available at <http://apland.ap.nic.in/>. Public can view village wise list of beneficiaries, while Administration can view village wise, Mandal wise and District wise statistics on caste, gender, minority, etc

Education Department

- **GIS Based Spatial Analysis System For Dept.of Education :** A Desktop Spatial Information System for the Department of Education has been developed and implemented for Mulakalapalli Mandal, Khammam district and Hyderabad district to assist in planning the access, enrolment, retention, quality and monitoring, teacher-child information etc.
- **Merging & Rationalisation of Schools:** A Spatial Analysis System to merge and rationalise the uneconomical schools has been developed as a pilot application for Nizamabad district with four mandals.

Information & Public Relations Department: Media Analysis Information System and Centralized Advertisements Issue System are the two systems that helps the Government in evaluating the performance of all the Departments in terms of News items as well as in Advertisements appeared in Print and Electronic media.

Training Activities

In addition to the regular training programs for the departments, extensive training programs are being conducted by the State centre. During 2008, as many as 6 Technological Updation Training Programs have been conducted on Various Subjects, in which about 150 NIC officials have participated. 

For further details contact:

State Informatics Officer

NIC Andhra Pradesh

A-Block, BRKR Bhavan

Tank Bund Road, Hyderabad -63

B.V Sarma

sio@ap.nic.in

Data Centre Operations and Management

Data Centre management is a pretty complex task and needs a multidisciplinary, highly skilled team to effectively & efficiently manage it. Larger the data centre the more complex is its management. Well planned operations, monitoring & management are critical to the success of Data Centre.



Neeta Verma
Senior Technical Director
neeta@nic.in

Data Centre Management covers a wide gamut of activities right from supporting delivery of services at agreed levels to providing continuity of services in case of any disaster. Providing scalability to existing applications in data centre to speedy launch of new applications by provisioning data centre resources on demand is another aspect of Data Centre Management. Higher availability requirements of services have also increased the density of Infrastructure in the data centre leading to huge energy costs. Reducing the recurring cost to an optimal level without affecting the service availability & continuity is another challenge in Data Centre.

Management of Data Centre essentially involves Delivery of Services at agreed levels of performance, Provision of DC Infrastructure on demand, Security Management, Optimization of resources, reducing the total cost of Operations, Disaster Recovery to Continuity of Services.

IT Infrastructure Management has become a discipline in itself. ITIL and similar practices recommend detailed procedure for IT infrastructure & service management. They prescribe a detailed methodology consisting of well defined processes right from service strategy formulation to its design, development, transition, operation to assessment & Improvement. Based on the size of data centre, range of services provided, Service levels, legal & constitutional requirements, one has to customize the procedures &

processes to best suit the scenario.

Availability is fundamental to the Data Centre Operations & Management. Availability of physical Infrastructure to Computing Infrastructure to Communication network & last but not the least Availability of Applications delivering the Services. Thus Availability management is a pretty complex task & larger the Data Centre (DC) the more complex it becomes.

Availability Management

Availability Management aims at ensuring application systems are up and available for use as per the conditions of the Service Level Agreements. Availability management involves understanding the availability requirements of different applications, services hosted in the DC, work out an action plan to achieve the same, monitor it on regular basis. While planning for the availability, one also needs to factor in the maintenance obligations.

Availability of Data Centre services is based on availability of its components. Various factors which contribute to the availability of an IT component are its reliability, serviceability & maintainability. Higher availability requirements generally translate to higher investments in Infrastructure & higher operational costs. Availability requirements for Citizen services & Intra-government applications could be quite different. One needs to assess the requirements and work out an architecture which best suits the situation with optimal deployment of

resources. It is advisable to classify the DC Infrastructure in different levels based on availability such as Mission Critical, Critical, Not so Critical and accordingly monitor & manage them.

Asset Management

Data centre asset management involves proactively monitoring and managing the uptime, health and connectivity of DC assets through their lifecycle right from its entry into the DC to commissioning, operation & maintenance to even exit from DC. While assets are usually synonymous with inventory, DC assets come with an extra layer of complications; they are dynamic in nature rather than static.

One generally thinks that Data Centre assets are the one which they can physically see, touch or hold such as storage, servers, routers, switches, racks & cables. These are only physical assets. Data Centres also have a whole lot of logical assets, which are equally important, if not more to the successful functioning of Data Centre. LAN, WAN connectivity, Internet access, layout of the space in the data center, Availability of uninterrupted power, cooling required to save the equipment from overheating constitute the logical assets of the data centre and should therefore be quantified and tracked.

DC asset management should make sure that all the physical and logical attributes within the data center are collected and monitored for availability. One is also needed to plan for regular maintenance as well as ad hoc outages. Make sure processes are understood and in place for such situations since ad hoc outages shall require a quick reaction from DC team.

Change Management

Changes in the ICT infrastructure may arise reactively in response to problems or externally imposed requirements such as legislative changes, change in scope or performance level of a service or through proactive action as a result of regular monitoring & analysis of DC components/assets. The objective of Change Management is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes to controlled IT infrastructure, in order to minimize the number and impact of any related incidents upon service. Change Management would typically comprise the raising and recording of changes, assessing the impact, fixing the suitable schedule, working out the action plan, obtaining

necessary approvals, coordinating change implementation, monitoring and finally closing the change request. It is recommended that all the controlled assets of DC whether physical or logical should pass through change management. However one can define separate processes for routine & emergency changes to avoid unwanted delay in change implementation.

Capacity Management

Capacity Management deals with management of resources in data centre in such a manner that they are available to users as and when they require. Capacity management deals with the availability of DC resources right from Rack Space, Power, Cooling to ICT resources such as Storage, Network Ports to Backup & DR capacities. Capacity management is generally carried out in a proactive manner rather than reactive. Data Centre manager has to constantly monitor & analyze the resource utilization. Based on past trends one can plan & upgrade the capacities of DC resources.

Data centre manager shall also interact with the users on regular basis to understand the forthcoming requirements for the services already hosted in data centre or proposed to be hosted in near future. Data Centre should facilitate & expedite the launch of ICT initiatives not the other way. One can also use the present utilization of resources & simulate the future loads to understand and estimate the future resource needs. Infrastructure sizing of applications to ensure required service levels is also an important aspect of Capacity Management.

Security Management

Security Management in the Data Centre is one of critical & resource intensive activity. To begin with one needs to understand the security requirements, potential threats & vulnerabilities of the systems and work out a comprehensive security management plan comprising of Policies, Procedures & Processes addressing threats at various levels from physical access to cyber space. These shall be further translated in action plans including monitoring, analyzing, assessing & auditing of various assets. One needs to make arrangement for establishing a multi tier security infrastructure as well as position a team for monitoring it on 24x7 basis. Formulation of well defined policy and action plans to address any security incident is also an important aspect of Security management.

Security Management in DC is generally based on the ISO Code of practice for information security management also known as ISO 27001. The primary goal of information security is to guarantee safety of information. When protecting information, it is the value of the information that has to be protected. These values are stipulated by the confidentiality, integrity and availability.

Security Management in DC is addressed from two directions. One is the addressing the security requirements of individual services/ applications as per their service level agreements and other external requirements from underpinning contracts, legislation and associated internal or external policies. Other is towards maintaining base level of security across entire DC infrastructure. This is necessary to provide the baseline security assurance from DC services to all its users. This also makes the process of security management efficient as well as more effective.

Service Continuity Management

Availability requirements of Services hosted out of Data Centre is generally quite high. Factors like failure of any component right from Servers, Storage, and Communication Infrastructure to even Power & Cooling can bring disruption of services in Data Centre. At the extreme any natural or manmade disaster such as earthquake, flood, and fire could bring down the entire services of data centre. Scheduled & Preventive maintenance, upgrade of firmware on hardware components & patches, service packs at software levels are other factors which could trigger the discontinuity of services. Such situations are quite common with any DC. Therefore to provide services at desired level & avoid any discontinuity of Services, one is needed to understand the availability requirements and work out Service Continuity Plans.


Disaster Recovery, Continuity of Services is generally achieved at a significant cost, whether one sets up a Disaster Recovery Centre in house or outsources to another DC. Moreover these costs are recurring in nature. One has to incur it, year after year even if there was no disaster during that period. Therefore it is essential to make an informed judgment, understanding all aspects and formulate an optimal Service Continuity

Plan. Most of these decisions shall be governed by the criticality of the service under consideration. Different Services in the Same DC may have different Service Continuity Plans.

Service Desk

Service Desk acts as a Single Point of Contact to meet the communications needs of both Users and IT Service Providers for any issue concerning Data Centre & its services. Any event which is not part of the standard operation of a service and which causes, or may cause, an interruption to, or a reduction in, the quality of that services is classified as an incident. The Service Desk handles incidents and service requests right from their detection, registration, classification, investigation, diagnosis to resolution & closure. Service Desk runs on 24x7 basis and is responsible for all the incidents & service requests till their resolution & closure.

Fundamental objective of Service Desk is to facilitate the restoration of normal operation of a service with minimal impact. Therefore, Incidents that cannot be resolved quickly by the Service desk shall be assigned to specialist Technical Support groups. Communication between the users & IT operations teams is one the fundamental tenet to the success of DC operations. Service desk supports all the communication between IT teams & users right from routine service request, incident management, change management to scheduled maintenance as well as ad hoc outages.

Highly skilled & experienced multidisciplinary team is the key to successful Operations & Management of a Data Centre. Regular Monitoring, Analysis, Recording & reporting is one of the important functions of Data centre. This not only helps in taking proactive actions in most of the cases to prevent the failure of any DC component, history of past events also make diagnosis & resolution of error situations much faster & simpler. For a small size Data Centre one can manage using excel sheets, however if the Data Centre is large, it is advisable to use software tools. Lot of such tools are available in commercial as well as open source domain. Besides regular monitoring, recording & reporting these tools can also facilitate automated discovery of Assets, their Configuration, Event simulation, modeling as well as correlation. 

Office Suites - Best of Both Worlds

Innovations in technology have historically provoked profound changes in literacy acquisition and expression. From the development of the written alphabet to the printing press, changes in technology affect the way we think, write, and communicate and, by extension, the way we teach written communication. The personal computer as writing tool is now as ubiquitous as the printed page, and like advances in writing technology before it, the computer has affected the process of writing at every stage, from invention, through revision, to delivery. The subsequent write up is all about the online office suites available for writing...



Mukesh Ralli
Technical Director
ralli.mukesh@nic.in

Thanks in part to the remarkable growth of the Internet and the explosion of high-speed Internet access, a new generation of Web applications is beginning to compete with traditional office-productivity products such as Microsoft Word, Excel, and PowerPoint. Unlike traditional applications that are installed and maintained on a local client, these online apps live entirely on the Web, and their files reside on the application provider's file servers. For example, Google Docs lets you create, edit, print, and save spreadsheet, word processor, and presentation documents without needing to install an application on your PC. These products also leverage the strengths of the Internet by allowing for the easy sharing of documents among office workers who are separated geographically from one another. And here's the kicker: Most of these online apps are free (or very low cost), which has captured the interest of many cash strapped IT managers. Few important online office suites available presently are as follows:

- **Google Docs** - An AJAX-based online office suite from Google, Inc. The suite includes a word processor, spreadsheet program, presentation editor etc.
- **OpenGoo** - an open source, fully featured online office suite.
- **ShareOffice** - A Web-based office suite which utilizes separate word processing, spreadsheet, and presentation applications from other vendors.

- **Simdesk** - this suite offers partial compatibility with Microsoft Office file formats (Word, Excel, and Powerpoint) but with a minor cost.
- **ThinkFree Office** - An office suite written in Java and includes word processor (Write), a spreadsheet (Calc), and a presentation program (Show) for Microsoft Windows, Linux, and Mac OS X.
- **Zoho Office Suite** - A perfect alternative of MS Word when you talk about online word processor. It doesn't have the features of complete MS Word but it gives you more than what a desktop based word processor can't give you and that will be Collaboration with other users. It's still in beta so you can expect some serious features in short time.
- **AjaxWrite** - It is a web-based word processor that can read and write Microsoft Word and other standard document formats. Anytime you need to open, read or write a word processor file, simply point your Firefox browser to www.ajaxwrite.com and in seconds a full-featured program will be available for you to open, edit, print and save.
- **Glide Write v2.0** - Enables users to create media rich documents and securely edit and share from desktop or mobile device. Program features integrated email, project management, and

live conferencing capabilities, making it possible for unlimited number of Glide users and non-users to collaborate on documents. Users can synchronize documents for online/offline access on Windows, Mac, and Linux PCs, as well as export documents to Word, PDF, and RTF formats.

- **Peepel** - Allows to import and export documents with Word and Open Office, collaborate with others on a document, and even work offline, and then re-sync when you can get Internet connectivity again.
- **Microsoft Live Office** - Not to be left behind in the race, the Microsoft too have offered this product for online use.



Advantages of Using Web-Based Office Suites

- When the demand is mainly to create document and view it without using the much advanced features which many propriety office suits offer, it is better to use online office suits which are well-suited for these purposes. The cost involved in the purchase of the offline office would be more than the cost spent on internet usage.
- The user is free of worries to take his/her document on any portable storage device but can review/edit the document from any part of the world.

- Keeps the user documents/presentations free from viruses. Remember 1999 Melissa virus which embedded itself in word documents and spread havoc.
- The hidden information which travels with offline created documents can reveal information related to your computer and other files on the system thereby compromising the security and privacy.
- The version compatibility of various offline office suites can create problems for the users whereas the online office suites take care of these version changes behind the scene without affecting the work.
- Online office suits allow inviting people either as collaborators, or as viewers, who can look at documents without being able to edit them. Still better different roles can be set for author, reviewers and viewers.
- When the purpose of creating a document is to share it online or through web-site, or blogs, it is better to use the online office suites.
- Last but not the least, most famous word processing software features are available across the different platform online.

Conclusion

Most of us don't really use advanced functions available in advance office suites. Those who do will probably continue to proprietary office suites, but for the vast majority of users, the browser is a fine place to work and the ability to work online and offline means that it isn't the same at all by virtue of the fact that your documents will follow you regardless of device (mobile, desktop, laptop) and you can work on them even when you don't have a connection.

*Online office applications cannot completely replace standalone software programs but will be complementary to offline applications. However, for creating and editing documents that are intended primarily to be read online, it makes a lot of sense to use a word processor that's native to the online medium. **i***

Reviewed by: **Vivek Verma**
vivek.verma@chd.nic.in

'Right to Information Act' - A Legal tool against India's Cyber-divide!

Mohammad Haleem Khan spoke exclusively to Informatics on Right To Information Act and CIC's ICT initiatives to empower the citizen to avail information they so desired:

India the home of billion plus population, by many a count one of the cradles of civilization, the birth place of at least three world religions and one of the most varied socio cultural milieu right from her Independence from the colonial rule had the benefit of two sets of 'do-gooders':

- Those who believed that there is a lot of distance to be covered in the arena of Governance by way of improvement in processes and putting in place institutions and instruments of governance so that it makes the system more participatory, accountable as well as transparent; and
- Those who happened to internalize that the society is suffering from moral decadence and unless the character, sense of belonging (patriotism) and moral values amongst the masses are persevered for their enhancement the inexorable decline is unlikely to be arrested and the utopia of 'Ram Rajya' which is rightfully India's destiny may be pushed farther and farther.

One may arguably say that but for the 73rd and 74th amendment of the constitution, for much of the later part of eighties, almost whole of nineties and the roll out decade of much awaited 21st century, it has been the 2nd category of 'do-gooders' who have been calling the shots. These were coming from both streams: the traditionalists who gave modern interpretation to religious thought and practices to solve problems of

governance and the modernists armed with the business management education with foreign degrees from ivy league colleges who presented concepts of 'behavioral sciences' and 'transactional analysis' and 'feel good' research and theories in a religious and philosophical cum metaphysical format. If one looks into the content of what is being purveyed as entertainment on TV and the mushroom growth of religion and culture based channels it may not require much convincing for being on board that the immense reach of audiovisual media has provided centre stage and an enviable proliferation of the second type of 'do-gooders'. This burgeoning growth of the 2nd type of 'do-gooders' fed on itself for its survival and cancerous growth.

Constitutional Provision to Publish Information in Public Domain

The roll out of the 'Right to Information Act, 2005' is a singular and equally momentous culmination of the legislative initiative post 73rd and 74th amendment of the constitution from the stable of the first set of 'do-gooders'.

The 'Right to Information Act' exhorts (vide section 4):-

4. (1) every public authority shall - maintain all its records duly catalogued and indexed in a manner



Mohammad Haleem Khan, IAS
Secretary of Central Information Commission
mhkhkhan@up.nic.in

and the form which facilitates the **right to information** under this Act and ensure that all records that are appropriate to be computerized are, within a reasonable time and subject to availability of resources, computerized and connected through a network all over the country on different systems so that access to such records is facilitated;

Read the above in the light of the preamble of the Act: -with empathy and 'the propensity to excel' in human me, led me to find in the RTI Act a rare legal tool to galvanize efforts against the cyber-divide. With this psycho philosophical drive I took the plunge to make it work to achieve that end.

ICT Initiatives at CIC

The Central Information Commission's tryst with the computerization was fueled more out

of compulsion before a new office being established in these times of lean manpower provisions. Not being undertaken after a rigorous system analysis it had computerized patches of workflow with manual interfaces. It served well to begin with but as the public awareness increased the inflow of **Complaint as well as Second Appeals** increased and the data entry at the inflow stage emerged as a major bottleneck- crying for more and more man-hours and machines. Data entry operators being picked up randomly through the service provider their learning curve did not give much cause for being sanguine about the quality and consistency of data entry per se.

In a typical business, as usual, mode the requirement of data entry operators started ballooning. To break through this self-constricting dysfunctional situation a way of tackling things differently was very much called for. The alternative conceptualized was to provide for: -

- Word processing effort made at the end of appellants should get tapped and integrated into the Commission's workflow thus reducing the need of data entry at the Commission's end to bare minimum,
- The felt need of providing acknowledgement should be met with out it being a chore of burden and a stand alone additional act just to meet this requirement at the Commission's end,
- The appellant should get a unique identity number for his appeal almost instantaneously without any intervention at the Commission's end. Thus the uncertainty of his appeal reaching the Commission is reduced to zero,
- The unique identity number should empower the appellant to trace the progress in his case sitting in a cyber cafe/home,
- The subsequent filing of papers /documents should not suffer from the uncertainty of getting misplaced, and of course
- The overall cost saving to all by doing away with avoidable need for interaction, the related travel need and consequential saving of time.

To meet above objectives web based **online filing of Complaint as well as 2nd appeal was conceived**. CIC approached NIC to transform the objective into a reality. In the step-by-step process probably the most daunting task (if it may be called one) for 'would be' Appellant was to reach either the Commission's web site or the National Portal of India. Once on the homepage the user-friendly interactive process was designed so as to provide

handholding comfort and adequate prompting to make it possible for a citizen sitting in any cyber café in the remotest corner of the world to file his complaint or 2nd appeal. Once the mandatory information was properly and adequately inputted the appellant was encouraged to check the document thus got generated for correctness and then take the print out. The 'click' to take the print out and simultaneously uploads his complaint/2nd appeal and generated unique ID. This ID, the appellant now had, becomes enough to locate the progress of his complaint/appeal subsequently. The appellant was only required to send the hard copy of his complaint/appeal thus printed out after putting in his signatures to make it a legal document.

At the Commission's end this meant lesser drudgery of 'data entry' after locating and harvesting the relevant information from the poorly drafted complaints/2nd appeals thus far being received only in hard copies. Add to this the element of empathy that goes into the word-processing by the complainant/appellant the quality of inputted data improved by leaps. The chances of 'garbage in garbage out' reduced to minimum. The wastage of time of the data entry operators in locating the relevant information from poorly drafted complaints/appeals also got saved for better use. The integration of data inputted by the complainant/appellant instantaneously into the workflow of the commission saved wasteful effort at both ends. It also improved the satisfaction level as the complainant/appellant can now watch the progress of the case instead of agonizing over whether his powers will be lost during diary.

2nd Appeal through National Portal

A web-enabled workflow based software interface has been designed and developed on the popular platform of Nation Portal of India, to receive online Complaint and



Interface of RTI

2nd Appeal at CIC, as per the requirements set forth by the Commission.

a) Citizen Interface: This module facilitates the citizens to submit their Complaints and Second Appeals to CIC online. A citizen on the internet can visit the CIC's website (<http://www.cic.gov.in>) or alternatively the 'National Portal of India' (<http://india.gov.in>) and can fill the form provided and submit his/her complaint/appeal online. While generating a hard copy, system generates a unique registration-number, which, can also be used by the citizens for further correspondence. The Citizen Interface (<http://rti.india.gov.in>) has following functionalities for the citizen to use:

Direct Complaint:

- Submit Direct Complaint to CIC citizens
- Save a draft Complaint, update and Final submit as desired
- Track status of your Complaint already submitted

2nd Appeal:

- Submit Direct 2nd Appeal to CIC by citizen
- Save a draft 2nd Appeal, update and final submit as desired
- Track status of your 2nd Appeal already submitted

The state-of-the-art citizen centric, easy to use solution, based on the Open Platform, has been developed under the umbrella Portal of india.gov.in. Help as per RTI Act on "When to file a Complaint and When to file a 2nd Appeal" is also given.

b) Internal Workflow Interface: The Internal Workflow Module (<http://rtiadmin.nic.in>) is designed to cater to the processing of Complaints and 2nd Appeals received at CIC. All decisions adjudicated by the respective Commissioners and the actions taken by the respective officers/officials at different stages of the process flow of the appeals/complaints are being captured by the module. Each officer/official with the specific roles has been assigned an individual login-id and password to perform actions on the complaints/appeals dynamically allocated into their account depending on the Public Authorities assigned to the Commissioners. Following are functionalities available for the CIC to use:

- A total of 12 stage life cycle starting from scrutiny to consigning the file to record room"
- Auto note sheet generation for processing the case as well as auto letter creation while getting information

from Public Authorities, on fixation of hearing date, etc.

- Auto mail dispatch facilities for sending letters
- Role based activities have also been built into the system

The software inter-alia aims at transforming the system more proactive in disclosing the information at various levels of decision making process whereby the citizens can know the status of their complaints/ appeals online even from the remotest corner of the country. Also, the software would enable placing of various reports in the public domain, which, would in turn, reduce the volume of RTI-Requests received by the PIO of the Commission.

Vision and Prospects

In a billion plus population even if one RTI application is filed per thousand households (a household being presumed to be consisting of five citizens) the number of application comes to more than 200,000 (1,000,000,000 / 5000). Imagine the wasteful man-hours saved by tapping the word-processing/scanning /photocopying done by so many applicants into the workflow of a practical regime of Right to Information thus envisioned.

My 'vision' and 'mission' will get accomplished once:

- Every Village Panchayat gets one commercially viable Public Call Office (PCO) converted into an RTI savvy Cyber Café (RCC) with an NGO to hold hand and Micro Finance institution to fund a laptop/desktop.
- A citizen knows which PCO to call/visit to file his RTI application the RTI fee either paid with the cost of call or with the user charge for using the PCO-cum-RCC.
- The status of an RTI application is only an SMS away.
- The voluntary as well as mandatory disclosure is comprehensive enough to make it possible for PCO-cum-RCC to cull out necessary information and supply without many needing to file an RTI application.
- The records in the Public authorities are catalogued, indexed, computerized and *connected through a network all over the country on different systems so that access to such records is facilitated.*

*I am sure even with this gain in transparency and consequent accountability towards the 'governed' and hopefully, the reduction in corruption there will be still enough left for the '2nd set of 'do-gooders' to remain in business of improving the moral fabric of the proverbial 'Babus' as our press prefers to anoint our civil service gleefully. **i***

Interview with Chairperson and Managing Director of Overseas Manpower Corporation Ltd, Tamilnadu

Mrs. Qudsia Gandhi, IAS is Chairman & MD of Overseas Manpower Corporation Ltd, A Govt. of Tamilnadu Undertaking talks to Informatics on how her trust with computerisation of various Sate Govt. departments is proving to be a catalyst for information dissemination.

My trust with computerisation started as Chairperson in the Tamil Nadu Teachers' Recruitment Board (TRB). The main job of the TRB is recruiting teachers for schools as well as for colleges. The manner in which candidates were evaluated gave room to manipulation. All data was available to anyone for asking and there was no confidentiality. Therefore I decided to create a database which would be accessible only to the Chairperson and the Controller of Examinations. This needed computerisation. Therefore, in the year 1996, I hired computers along with Data Entry Operators and started the work and sent the proposal to the Government explaining the need for computerization and asked for ratification and approval. After the interview, immediately marks should be submitted to the Chairperson and the Chairperson's Office (data center) will enter the interview marks along with the other weightage marks and publish the list then and there itself. There was resentment only by the people indulging themselves in corrupt practices. Other members welcomed it. The candidates were extremely happy because they were being selected absolutely on merit basis and the results were being published as soon as the interviews were over.



Mrs. Qudsia Gandhi, IAS
CMD, Overseas Manpower Corporation Ltd., Tamilnadu

As the Chairperson and Managing Director for Tamil Nadu Corporation for Women Development (TNCWD) I initiated the first paperless office in the State. We had the entire infrastructure except a few equipments which were purchased immediately. We could implement very easily and became a model for other Departments also. Not only the file movement was electronic but also generation of MIS on NGOs as well as monitoring and review of the Project Offices was being done electronically. Now this has been extended to other Project Offices also through network between the Head Office and Districts Project Offices.

My next posting was as Special Commissioner and Commissioner of Treasuries and Accounts Department. This Department had computers like 386, 486 and Pentium I was the highest configuration! The operating

system was DOS and Fox Pro and UNIX were being used for accounts compilation. Luckily the T&A Dept. was declared one of the Mission Mode department for e Governance. I just grabbed this opportunity and two proposals were submitted to the Government. One was Automated Bill Passing System: the idea was that no one stands in front out the treasury counter- minimal human interaction. Second was Electronic Clearance Services-all payments to be made through electronic mode.

So pilot was planned with the help of NIC, Chennai, who prepared the software for different levels of operations and bill processing right from issuing of computerized token to auditing of bills and finally passing of the bill. Everything was system generated and instead of cheque, the payment was made through Electronic Clearing System (ECS) in the bank. Efforts were made to get online scrolls from the bank by interfacing with the banks computers. As huge vouchers were being carried to the Accountant General's Office every month, software has been prepared to generate virtual vouchers which could be accepted by the Accountant General Office. So total online solutions where bills would be received online from the

Departments, processed online and paid electronically finally accounts would be rendered to the Accountant General electronically and also data to the RBI would be online. PAO Tamil Nadu Secretariat, Karur and Theni Districts were selected for the pilots.

Infrastructure: I asked for upgradation of the systems in all the 203 subtreasuries, 30 District Treasuries, 8 Pay and Accounts Offices, Pension Pay Office and the Administrative Offices of the Commissioner as well as the 3 Joint Directors. The Commissioner's Office was given new ambience with modular office and very high configuration systems. Throughout the State wherever necessary and possible buildings were repaired and modular offices provided for better connectivities. Minimal Computerisation was accelerated in other departments too to comply with the requirements of presenting bills in the appropriate format.

Change Management: The electronic processing involved process re-engineering and orientation to changes which was done in house as it was felt that the persons who are involved in their jobs as well as some of the retired stalwarts from T&A dept would be in a better position to judge which were the processes forms and registers that were redundant, out of date and were not of much use could be weeded out after making suitable amendments to the Treasury code. So very extensive brain storming sessions were conducted and ultimately 40 registers out of 117 were recommended for deletion and 13 for modification. 51 forms out of 145 recommended for deletion and 11 to be modified. 25 work procedures were scrutinized and all of them were reengineered (modified).


Training: The 3rd most important factor was training. Massive training programme was chalked out and with the help of Director of Technical Education polytechnics and engineering colleges were identified throughout the State and all the Treasury Personnel were given two weeks training for which syllabus etc. was prepared by NIC, Chennai. The resources infrastructure and personnel etc. of these institutions were used and within the period of 6 months basic as well as advance training to all the personnel were given. Once the initial fear was banished, the officers felt more comfortable and with the help of NIC they were trained in Treasury computerized accounts.

Now all the Treasuries are being net worked throughout Tamil Nadu through TNSWAN. Links would be established between all the District Treasuries, sub treasuries, banks, the Directorate, Finance Budget Department, Accountant General Office and the RBI. The

automated bill processing system is now being extended to other districts and by the end of this financial year at least 10 Districts would be starting the automated bill processing system. The ECS and ATBPS which were running parallel are now integrated in certain Districts. The pension payment in Chennai and certain other Districts is also through ECS. Mustering of pensioners is being done through video conferencing whenever demanded by pensioners who are residing in other States or who are abroad. In Madurai District, the mustering is being done through computers. Particulars along with the photographs of pensioners have been digitised. When a pensioner appears for mustering his/her pension pay office number is keyed and the whole data along with the photo appears on the screen. Website has also been created for giving latest information regarding Treasuries Department which has received the appreciation of Government of India.

The Treasury Department is the nodal department for employees Health Insurance Scheme which has also been totally computerised and has been launched by the Hon'ble Chief Minister. Like wise, The Head Office is also having paper less Office the software for which was developed in house by the Treasuries Department. Similarly the data of the All India Service (AIS) Family benefit scheme which is being administered by Treasury Department is available online.

Department reviews and monitoring of the Treasury e-gov is being conducted through Video Conferencing in which CGM and other high level officials of RBI participate at the Head Office and in the Districts bank Officials and treasury staff and some times District Officials of other departments also participate. Besides this pensioners' grievance and interaction with the pensioners is also done through Video Conferencing by the Director of Treasuries.

Now I have taken over as Chairperson and Managing Director of Overseas Manpower Corporation Ltd., which registers aspirants of all categories- unskilled, semiskilled, skilled and professionals. Right now we have 11000 people registered but the whole data collection is manual. I have planned to receive applications online too. Discussions are on with Tamil Nadu Electronics Corporation Ltd to digitise the Registry and also for giving appropriate solution package to the OMCL for working in a more transparent and efficient manner. Currently the interviews are being done through Video Conference facilities available in the Corporate Office. 

Rolling out NIC-GeP: The e-Procurement system in Orissa

Orissa has been the leading state in India to implement NIC-GeP -electronic procurement system by leveraging the Information Technology tools & the best practices.

The success story in government sector has inspired the Corporations / Government undertakings like IDCO, IPICOL, Gridco, and OMC to join this e-Procurement movement.



SK Panda
State Informatics Officer
sio@ori.nic.in



A.K Hota
Head, e-Proc Div.
akhota@ori.nic.in

National e-Government Procurement (e-GP) project is one of the Mission Mode Projects (MMP) under e-Bharat. The World Bank guidelines also emphasize Procurement Reform as one of the key areas of administrative reforms. Specific to Government of Orissa, tender fixing by formation of cartels among bidders and tender related crimes was a burning issue. Keeping in view of the same NIC Orissa initiated the move and Government of Orissa took the leading role to accelerate the implementation of on-line procurement to be applicable across all departments.

The pilot implementation started in March 2008 for two identified departments namely Works Department and Water Resources Department in both online and offline mode. The successful pilot implementation inspired Govt. of Orissa to take the resolution to implement total online tendering for four major engineering departments for works packages having tender value of more than Rs. 50 lakhs with effect from 1st July 2008. Subsequently the decision has been taken to host all tenders having tender value more than Rs. 20 lakhs from 1st Nov 2008.

Effective Programme Management Approach - Key behind the success

- **Constitution of High Level Committee headed by Principal Secretary, Water Resources** - The committee consisting of Secretaries of four major engineering departments, Finance Department, Law Department, IT Department, Chief Engineers/Engineer-In-

Chiefs of Concerned engineering departments, NIC has been formed to focus on various issues related to Change Management, Procurement Policy, OPWD Code revision etc.

Excerpt of the address from Dr. Aurobindo Behera, Principal Secretary to Govt, Water Resource Department, Chairman, High level committee, e-Procurement



The e-procurement system has given the reformist face to the Government & empowerment to bidders. Elimination of cartels & bidding related crimes, Reduction in adverse press reports, National level recognition for project and Acclamation for creating social Impact have added to the reformist face of the Government. Bidders have been empowered for Remote submission of bids, Reduced bidding costs, No more dependence on departmental officials.

I highly appreciate the effort put in by NIC team for making it a success.

- **Formulation of e-Procurement Mission team**- The e-Procurement Mission team has been formulated by pulling expert engineers from four major engineering departments headed by a Superintending Engineer from Rural Development Department with the objective to support the High Level Committee in Change management, Code Revision, to share domain input with NIC, Coordination with implementing departments etc.

- **Opening NIC Certifying Authority RA Office at Bhubaneswar** - NIC Certifying Authority (NIC-CA), New Delhi, decided to open its Registration Authority office at NIC Bhubaneswar, Orissa for smooth delivery of Digital Signature Certificates to all government officials. So far 1023 DSCs have been issued to the Government Officers.

Appreciation note from PK Mohapatra, IAS, Secretary, IT & SIO, Orissa



I am proud to be part of the e-procurement team of NIC. NIC Bhubaneswar deserves all congratulations, for setting the R.A office, which will do away, all trouble faced by Govt. of Orissa in getting DSCs.

Well done & all my heartiest best wishes to SIO, NIC and all the officials.

- **Formation of Project Management Unit (PMU)**- A PMU has been set up to provide support to e-Procurement Mission Team, extend Help Desk facility, support through Toll Free Phone, extend support in imparting training to bidders and Govt. Officials etc.

Capacity Building through Trainings, Workshops & Self-study CDs - Massive training programmes and workshops have been undertaken at different phases for different levels to build confidence among Government Officers as well as bidders. Hands on Sessions have been conducted at KIIT Deemed University Campus utilizing 100 systems available for practical sessions at a time.

District Informatics Officers and District Informatics Associates of NIC District Centers have been trained on the system to provide fast hand support for the project at district level.

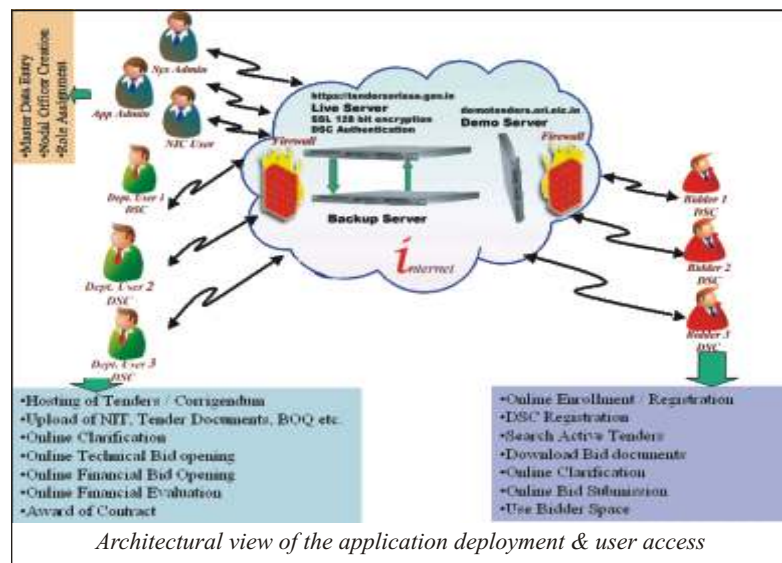


Officers attending e-Procurement Implementation workshop

A training center having 20 nodes with Internet connectivity has been established at “Nirman Soudh”, Bhubaneswar to impart training and support by PMU on continuous basis.

Technology and Security Management

Apart from the Live server, three more servers are being used for the project. Training and demonstrations are being conducted using the demo server. Test Server, the staging server is used for testing of new builds by NIC team as well as e-Procurement Mission and PMU team. Back Server is dedicated for regular backup.



Architectural view of the application deployment & user access

Security Certification has been obtained from STQC and CyberQ. The load testing has been conducted by STQC, Chennai. The Live server is running on HTTPS mode for which SSL certificate has been obtained from NICCA. All bidder documents are stored in encrypted form in the server using 1024 bit encryption. **i**

For details contact
sio@ori.nic.in

e-Governance in Central Excise and Service Tax

National Informatics Centre was entrusted the responsibility of computerisation of Central Excise Commissionerates, Central Board of Excise and Customs (CBEC), Ministry of Finance throughout the country in the year 1991.

The first version was released in November 1991.

Over the period, the SERMON evolved through various stages and now covers all the 93

Commissionerates and its 450 Divisions across India utilising the technological advances.



B. Koti Reddy
Principal System Analyst
kreddyb@nic.in

Over the past few years, various Web Based Applications were launched as a step towards e-governance. As on date, there are several applications hosted as listed in this report under <http://sermon.nic.in> which includes online registration of Central Excise and Service Tax Assesses and online filing of tax returns for the top revenue paying assesses of Central Excise. About 1.4 Lakhs Central Excise assesses have been registered with a unique 15 digit identification number based on the PAN. Similarly, e-governance in Service Tax also taken up and a comprehensive database of about 12.20 lakhs Service Tax assesses from all over India have been registered.

Apart from this, an Electronic Revenue Accounting Package (e-REVACT) was developed for the office of Principal Chief Controller of Accounts, CBEC and the Pay and Accounts Offices of Central Excise Commissionerates.

A database oriented communication system, Electronic Departmental Communication System (e-DECS), a totally new concept in communication is conceived and developed and implemented in Central Excise Department. The features includes, that the users can know the recipients have read the message or not, messages can be sent to a class of users, reminders can be sent to only defaulters etc..

A package called the Electronic Accounting System in Excise and Service Tax (EASIEST) has been launched for electronic transmission of challan data from Banks to the CBEC, PAOs and CECs etc. The EASIEST was formally inaugurated by the then Hon'ble Finance Minister.

System for Excise Revenue and MONitoring (SERMON): This package is an off line version which facilitates to capture source data. Various modules incorporated in this system are: Assessee Profile, Directories, Capturing of Excise Return data, Capturing of Challan Data, Reports (MIS), and Housekeeping

System for Allotment of Central Excise Registration Number (SACER) & System for allotment of Service Tax Payer Code (SAPS): These are web based application developed for online registration of Central Excise and Service Tax Assesseees respectively. This has made possible to bring to an end the manual registration procedure practiced in the department by building up of a national assessee directory on the central server and by monitoring various reports on allotment progress and on assessee profile.

SERMON Directory Module: This module is basically for maintaining the directories viz: Assesse Related, Formation Related, Duty Related, Return Related, Product Related, Quantity Related and Bank Branches which are being used in the SERMON project. All the central directories are maintained at single source thus avoiding inconsistency. Download option is available for all the authorized users.

Query Based Systems: Citizens can know by query regarding rate of excise duty, notifications, location code, taxable services and categories under service tax. For further details one can `l o g o n` `t o` <http://exciseandservicetax.nic.in> for interaction between the assesses and the department.

Electronic Filing of Central Excise Returns: Assessee can opt for electronic filing of the central excise returns, including dealer return anytime and from anywhere. As there is provision to upload the text file from the existing database, the department can download the data filed by the assessee and integrate it into the existing software for revenue monitoring. Online FAQ and Helpline is available to guide the assessee for error free filing.

Sermon Utility: *Assessee search based on PAN no. shows how many Excise and Service tax units are there for the same PAN*

All India SERMON database for TOP Assessee: A MIS system is developed to generate various reports regarding the Excise Revenue, Production and Clearance and is being actively used by various users. The data is related to the top revenue paying assessee on all India basis. The advantage of this MIS is that the reports can be generated as soon as the assessee files the return, since the return is filed online using the web based module. To view the old reports instantly, pre generated reports are placed on the server for quick access and to save the system time.

Cyber Revenue Realisation Summary (CRRS): Capture the details of revenue collected from each Customs, Excise and Service Tax commissionerates on timely basis.

Provisional Assessment Monitoring System (PAMS): Developed to monitor and take care of monthly clearance details of cases under provisional assessment. The main advantage is that a centralised database helps to monitor the cases by the higher authority.

Service Tax Revenue Monitoring System (STREMS): This software was developed for capturing Service Tax related documents filed by the assessee.

Electronic Revenue Accounting System (e-REACT): This is a package developed for the Pay and Accounts Office and Principal Chief Controller of Accounts Office, CBEC. This package captures the details of challans deposited in the bank and preparing the data for revenue reconciliation. Data at National level is available.

Centralized Delay Monitoring Module (CDMM): Using the final all India database of scroll and put-thru statement, received from the respective sources, the CDMM package generates delay in revenue receipts credited to Government of India Account and accordingly, interest is charged from the banks on account of delay credit.

Revenue Reconciliation (REVCON): Challan data captured by PAO through REACT and captured by

Commissionerates through SERMON are reconciled using this package.


System for NEPAL Refund (SNEPAR): The goods exported to NEPAL are cleared through a separate invoice and these invoices are entitled a rebate to Nepal Government as per a treaty. The objective of this package is to process these invoices and calculate the applicable rebate amount due to the Nepal Government.

Electronic Departmental Communication System (E-DECS): This is an intra-departmental database oriented communication system that automatically compiles the data received from various quarters for a single question. It facilitates to send a message to individual user or user class and only one copy of the messages resides in the server even though message is addressed to many users.

Electronic Accounting System in Excise & Service Tax (EASIEST): The system provides a facility to capture the GAR-7 challan data at the nominated banks. The concerned banks transfer the challan data to the National Securities Depository Limited (NSDL) server. Then the NSDL transfers this data to the NIC server. NIC facilitates this challan data to the PAOs and to the Commissionerates for further accounting and reconciliation purpose.

Sermon Help Line (SHL)/HELP DESK: The objective of this package is to provide solution to the problems faced by the field formations. Any user can post their doubts for clarification and the user department replies. There is also a module for FAQ (Frequently Asked Question). Technically speaking this is an Online Help facility for SERMON project.

MIS on Revenue Status (Indirect Taxes): A Management Information System is developed and can be viewed from the site <http://finmin.nic.in>, which gives information about the receipt of revenues from Central Excise, Customs and Service tax on monthly basis.

With the introduction of e-governance, the assessee got the benefit of reduced paper work and can file their returns from their office and the acknowledgement can be generated by themselves and no need to visit the department office. Like wise, the department is also benefited with less paperwork. They can do the online validation of the returns. Revenue collection trend analysis can be generated instantly. Various MIS reports can be viewed and can be printed by all the departmental users as per their jurisdiction. 

For further Information mail to -

O.P. Sachdeva

Sr. Technical Director,

cexffrig@nic.in

Publishing of Exam Results & Counseling from Internet Data-Centre, NIC

Internet Data-Centre at NIC (HQ) has been hub for e-governance activities be it a website, portal or e-gov project in providing a robust, reliable and secure platform for service delivery. Among the thousands of web/portals/e-gov projects hosted by NIC Data Centre, Electronic Publishing of Exam results and Counseling activity are the two projects being conducted as a part of G2C service at national level.



Vijay Kr. Vishwakarma
Technical Director
vijay.vk@nic.in

More than a decade back NIC had started hosting the exam results (of CBSE, state boards, university etc) on net. This year, NIC has hosted around 80 exam results received from around 25 Central/State Education Boards /Organizations.

Similarly on-line counseling process for admission to professional courses like Engineering, Medical etc., it has been carried out successfully by NIC for All India Engineering Entrance Examination (AIEEE/CCB) and various state counseling boards of Uttar Pradesh, Haryana, Delhi, Rajasthan, and Punjab.

Publishing of Exam Results

Electronic process has spun the Result publishing activity faster, better and more importantly in a dynamic and interactive way. NIC has responded to the needs of this new, fast-moving, paperless activity by offering a number of different methods and innovative combination of new and traditional technologies.

With the assistance provided by NIC, candidates can now accessed their results through Internet, Interactive Voice Response Systems (IVRS), and SMS. Students can register at www.results.gov.in for accessing their results for various examinations at student corner. Special corners are also being developed for Boards and Schools to address their result related request.

Some of the results that are being mostly visited during result

declaration by students/parents and teachers are CBSE, CA on the national level and Maharashtra, Tamil Nadu and Madhya Pradesh on the state level.

Publishing of counseling activity

Traditional counseling is quite cumbersome and time consuming which also requires personal interactions between students and counselors at various stages.

To overcome these hassles, NIC has implemented the counseling activity through online system, which in turn enhanced it by reducing personal interaction to some extent, speed up the process and increase the transparency level.

Solution provided by NIC allowed Central Counseling Board i.e. AIEEE/CCB and various State Boards to conduct their counseling activity on the on-line basis for allotment of seats to the candidate (based on the criteria filled by them like rank, category, choices) during their admissions process for various professional courses like Engineering, MBA, MCA, MBBS, BDS, BCA, BEd and Diploma courses.

The URLs provided to these counseling activities are as follows:

- <http://aieee.nic.in/ccb.nic.in> (AIEEE/ CCB),
- <http://seeuptu.nic.in> (UP state),
- <http://theadmissions.gov.in> (Haryana state),

- <http://cetdelhi.nic.in> (Delhi state),
- <http://psbte.gov.in> (Punjab state),
- <http://rtuadmissions> (Rajasthan state)

Thousands of candidates took part in the on-line counseling and greatly benefited by this system. Some of the statistical data for various counseling boards are as follows.

	Counseling Board/State Board	Name of Courses	Total Candidates qualified for counseling
1	AIEEEE/CCB	B. Tech	96000
		B Arch	11000
2	SEE-UPTU (UP State)	B. Tech	78105
		MCA	8738
		MBA	20194
		B. Pharma	4709
	CPMT	MBBS,BAS,MUMS,BAMS,BHMS	4910
	BED	B.ED	95188
3	HARYANA State	B.E / B. Tech	31335
		Diploma (Engg)	73076
		MBA	4524
		MCA	1973

Technical Features of Exam Result Publishing and Counseling

In this section we consider the technologies used for publishing results electronically as well as online counseling activity.



Inside view of Internet Data Centre and Communication Racks & SAN Storage at NIC (HQ)

Server infrastructure for both the process works on multi-tier application architecture model with having multiple Web/application servers configured on load balance clustering as front end servers and Database servers on high availability/mirroring clustering as backend Servers.

Hardware load balancer solution from CISCO has been used for smooth handling & proper distribution of

workload among the web servers. Technology used inside is ASP & ASP.Net on IIS 6.0 and Database on RDBMS SQL Server.

A Collaborative Exercise

To be successful, this exercise has to be borne out of a collective effort from all concerned viz. the Educations Boards, Counseling Boards/Organisations, the NIC Regional/State Centers and the technical experts from

the concerned group at NIC Headquarters. Sensitive to the needs and anxious state of the students, it has to be realized that disseminating the exam results /counseling through the Internet is not just an ICT exercise. The concerned team has to work at all odd hours to meet the varying requirements of different boards and ensure that the results are made available to the students in a timely, accurate and convenient manner. As it is a Collaborative exercise, the concerned State/UT centers and the divisions at NIC HQ have to work closely and cooperatively to make this exercise a success.

*Hosting of Exam Results and Counseling activity on Internet is being successfully conducted by NIC for so many years now. NIC Data Centre is being instrumental in providing scalable secure and readily available infrastructure support to e-Gov applications in this endeavour. **i***

East Medinipur - ICT Initiatives for Smart Governance

East Medinipur District, came into existence on 1st January'2002 after the division of the erstwhile Medinipore district, making it one of the eighteenth administrative units of the West Bengal state. The district is bestowed with natural beauty with 'Digha' being the most popular seaside resort for tourists and lies at the northern end of Bay of Bengal. It has industrial base at Haldia comprising chemical units, Dock complex and thermal power station at Kolaghat. Tamluk, Haldia, Contai & Egra are the four sub divisions with Tamluk being the district headquarter.



Sangeeta Biswas
District Informatics Associate
dio-tmk@nic.in



Motiur Rahman
Informatics Correspondent
motiur@nic.in

NIC, Purba or East Medinipur was set up recently but the center has leapfrogged in providing ICT based services to the district administration. Basic IT infrastructure has been put in place with VSAT connection and Video conferencing facility already been installed and network services extended to the head post offices at Tamluk & Contai.

Major projects Implemented are

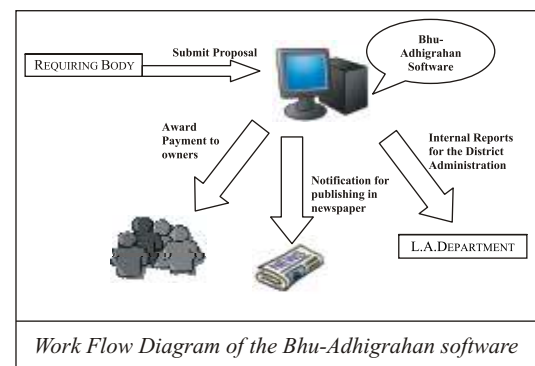
Bhu-Adhigrahan (Land Acquisition Information System): Government acquires land for various projects of public interest, making the process an important exercise. NIC associated itself and developed, implemented “Bhu-Adhigrahan” software, which monitored compensation and acquisition cases for the district administration thus making it an important e-governance activity. The software has been developed in VB.Net and SQL server 2000 database.



Bhu-Adhigrahan software home page

The software begins with the 'Land Requiring Party' submitting its

proposal. The necessary verifications are accomplished after passing through different user levels of the software. The various notifications and declarations are generated and compensation calculations are performed through the software. Important reports are generated for the department. The software has introduced efficiency and transparency in the land acquisition process at the district level.



Work Flow Diagram of the Bhu-Adhigrahan software

The software has following important features:

- Integration of ROR Data with Land Records (BHUMI)
- Bilingual interface with generation of reports in both English and Bengali
- Creation and Assignment of User Level permissions.

District Website: The Official Website of the district- <http://purbamedinipur.gov.in> has been hosted. The website provides necessary information on demography, administrative setup and historical background of the district. The 'Results' link

provides examination results and 'Tenders' are for uploading tender details. Facts and figures in the sectors like industry, agriculture, health, tourism, etc. are also available.



Homepage of <http://purbamedinipur.gov.in>

Document Registration (CORD): Registration of documents began in the district with implementation of CORD software at Registration office, Tamluk. The software has been implemented at all the Registration Offices of the district, except one. CORD provides features such as auto-valuation of property, calculation of stamp duty and fees, capture of photo & fingerprint, printing of all endorsements, scanning of deed, delivery of certified copy etc. Around 88075 Deeds have been registered in the financial year 2007-08 through this software.

Land Records (BHUMI): Certified copy of Record of Rights (ROR) is can be obtained in all the 25 Blocks of the district using BHUMI software. The other important module of the software such as Mutation, Conversion, Barga & Patta Enrollment etc. have been automated. Till date, 11,02,247 certified copy and 60,79,130 plot information has been delivered to the citizens through the computerized system.


Vehicle registration (VAHAN): The VAHAN software has been implemented at RTO Tamluk. Computerization of the Motor Vehicles Section has provided a single window solution for delivery of services like Registration of Vehicles, fitness, enforcement, Collection of Road Taxes and other miscellaneous taxes etc.

Arms License Monitoring System: Arms License Monitoring Software has been implemented at the district for the district administration. The software provides creation of database of the owners of arms licenses, monitor issue of new arms licenses and their renewal etc. This has helped the district administration in controlling & monitoring crime in the district.

CONFONET: CONFONET (Computerization & Networking of Consumer Forum) has been implemented at the District Consumer Redressal Forum. The software provides for court wise entry new case filing details, daily cause list generation, backlog entry of cases etc. The software has facility for uploading of daily orders and judgments on the website (<http://confonet.nic.in>). The software has proved beneficial to the consumers as well as the advocates.

Training: Regular training and software orientation programs are conducted by the district centre for computer awareness among district officials. Project based training & guidance has helped in increasing end-user understanding. This has also facilitated in promoting ICT culture in the district.

Other Projects Implemented in the District:

- COSA - used for Generation of Monthly Pay bills, pay slips, summary bills and various schedules for each DDO
- FCMS- used by the Principal Agriculture Office and Sub-Divisional Offices for entry of authorization and renewal of fertilizer manufacturers and dealers. The software can also be used for online fertilizer registration.
- E-Court -project for computerization of the District and Sub-ordinate Courts have been undertaken.
- NREGS Implementation - This project has been implemented in Purba Medinipur district in all the 223 Gram Panchayats. 

For Further Information contact:

Ms. Sangeeta Biswas
District Informatics Associate
NIC District Unit, Purba Medinipur

dio-tmk@nic.in

Jalna - Governance at the Touch of a Finger

Jalna district erstwhile a part of Aurangabad district was formed on 1st May 1981 by carving out Jalna, Bhokardan, Jafrabad, Ambad tahsils of Aurangabad district and Partur tahsil of Parbhani district. This commercial city of Marathwada well-known for its Hybrid Seed industries, Steel rerolling mills, Agro based industries has set an example by implementing various ICT initiatives and computerised services viz., Kiosk Based citizen interface.



Moiz Hussain Ali
Maharashtra Correspondent
hussain@nic.in

NIC Jalna providing ICT services to the various Govt. offices since 1988, and as a result lots of information available in the form of database that is to be made accessible for the common citizen. The touch screen kiosk is one of the most user friendly tools available to reach the public. Citizens that have little or no computing experience can use Information Kiosks. So under the valuable directives from District Collector to open these databases



District Collector Sh. Ranjeet Singh Deol, MLA Sh. Arjun Khotkar inaugurating Information Kiosk at APMC, Jalna

Information to the citizens, instead of waiting for request from RTI act., Information Kiosks was started at Collectorate, Zilla Parishad, Jalna APMC, District Court Jalna and at all the eight Tehsil offices and is also planning to extend it upto Circle level.

A slew of information viz. Land records, Village form 7/12 of all the 8 Tehsil Villages, Property Cards of Jalna city, Waiting List of Beneficiaries of Indira Awas Yojna, Employment dept website Rojgar Vahini, Jalna District Website, Other time to time Notices/Tenders etc can be gathered from Collectorate Kiosk, Zilla Parishad Kiosk, District Court Kiosk, District Court Kiosk, APMC Kiosk, Tehsil Kiosk

High-Tech Tehsils

Partur, Ambad and Ghansavnagi tehsils of the Jalna District in Maharashtra has set an example by implementing Village level Land record computerised services. Initially, on the pilot basis all Talathi's (Village officers) of Partur tehsil have procured Laptop computers through their own funds and Local MLAs have provided printers. This is the only Tehsil which is using Online Mutation software for updating Land record documents (Record of Rights 7/12). By using the NIC Land record software, computerised land record document 7/12 is being given at the village level itself, at these three tehsils. Information like digitised Village Maps, BPL list, Voters List, FPS list and other official information kept in these laptops. Soon remaining five tehsils will also start distribution of Computerised Land record document at Village level on Laptop.



District Collector Sh. Ranjeet Singh Deol Distributing Laptops to Village officers (Talathi).


Following are some the projects successfully implemented in the district.

For Collectorate

- **Tapal Information System**-A Client Server based s/w, implemented for all the branches of Collectorate over LAN, for Monitoring the Daily Inward/Outward correspondence to/from the Collectorate.
- **Record Room Information System** - The system helps to search any record file deposited in the record room as per their importance and year of deposition.
- **Land Acquisition Cases Monitoring System** - For Monitoring the various Land Acquisition cases in the district.
- **Reference Monitoring System (REFNIC)** - The s/w is developed and Implemented for monitoring the follow up of various references marked by Collector to various offices for compliance within a period, depending upon their priority. It automatically generates the reminders, notices and memos if compliance was not done in time thereby minimising the compliance pendency.
- **Land Management System (LMIS)** - LMIS implemented successfully in the District. Also standardisation of Master codes and merging of tehsil data are carried out at Data center.
- **Property Card Information System (PCIS)** - For Residential land, s/w implemented successfully for Jalna City. Computerised PR cards with Biometric Security are being distributed for the last 3 years.
- **File Monitoring System (FMS)** - The s/w is useful for monitoring the file movement from various tables. s/w is under Implementation phase, data entry of the pending files is going on
- **Mahanet** - All the Three Floor of the Administrative Building is connected through LAN to Control Room. All the offices in the LAN use Mahanet Email and Internet facility through LAN while some offices are connected through Dialup lines.
- **RF Network** - SP Office, Zilla Parishad, District Court, Irrigation, Registry Office and PWD offices connected via wireless RF Network.

- **Video Conference** - Video Conferencing working successfully via Lease Line
- **Lease Line** - 2Mbps Lease Line working fine, with Internet connections at Collector, RDC, DDE, Control room, Video conferencing and at user room. Five clients made available for the offices not having Internet facility for using BDS and other Internet applications.
- **District Website** - Designed and Developed the District Website <http://jalna.nic.in>

Support to Other Offices

- **District Court** - Online Case Filing upto taluka court, Payroll, Email/Internet and training support.
- **Zilla Parishad** - Support for Panchayat raj portal data collection and entry, BPL list and support for uploading various DRDA scheme information.
- **Employment Office** - Online registration of the unemployed candidates and distribution of computerised registration card with Photo identity is going on. Website of Employment and self-employment department kept on Kiosk for viewing.
- **Treasury** - Online acceptance of the Bills and generation of computerised cheque going on. BDS training and support to the DDOs.
- **APMC** - Implemented the AGMARKNET at all the APMC's of the District. Daily commodity rates will be uploaded on website.
- **CIPA** - Implemented Common Integrated Police Application at Police Training School for the training purpose of the Police.
- **IDSP** - Data Manager and Operator provided through NICS I for the IDSP Project.
- **CONFONET** - For the District Consumer Forum Office, for monitoring the cases at Consumer Forum. 

For further information, contact:

NIC District Center, Jalna

mahjal@nic.in

Ravikumar P. Padulkar

District Informatics Officer

Hazaribag - Harnessing ICT for good Governance

Hazaribag literally meaning 'City of Thousand Gardens', is situated at 2019 ft above the sea level in the North Chotanagpur Plateau. Congenial salubrious climate, abundant flora, fauna, wildlife sanctuary, lakes and hills have attracted tourists to this place since long and is also considered as a health resort.

The district town is located 90 kms north of Ranchi, the capital of Jharkhand. About 45 % of the area is covered by forest comprising medicinal plants, trees, Leopards, bears, exotic birds etc. Minerals like mica and coal are in found in abundance.



Shailendra Kumar Deo
DIO, Hazaribag
jhrhaz@nic.in

NIC Hazaribag District Centre was established in the year 1988, to promote ICT culture for better planning and decision support to the district administration. The center has played a leading role in promoting e-governance in the district. The website <http://hazaribag.nic.in> provides information on History, Tourism, Revenue administration and other important facts, figures & activities of the district.

Major ICT Activities:

Jail Computerization: With the implementation of “Prison Management System” (PMS) at the Central Jail, Hazaribag the bio data of prisoners with photograph, case details, crime history, medical information etc. has been computerized. The photograph based “Visitors Management System” (VMS) module has also been implemented, to control the visitor's access. The module has enhanced transparency and prompts services to the visitors /citizens.



VMS under operation at Central Jail Hazaribag

NREGA Soft: Hazaribag is the leading district in the state to start

online implementation of NREGA Soft Project. All the blocks are connected with JharNet the state wide area network for online data entry. This has ensured better planning and monitoring of NREGA implementation by the District authorities.

E-Nagrik Seva: The Pragya Kendras have been established in 160 panchayats in the district to implement the e-Nagrik Seva software. The software facilitates in the generation of various certificates like Caste, Income, Birth, Death and Residential.

Kuber (Online Treasury): A web based Treasury Information System - KUBER has been implemented in the district for maintaining treasury related transaction through secure and role based operations using JharNet. Biometric authentication at the label of Treasury Officer has been introduced to make the system foolproof

GPF/CPF Computerization: The Bhavishya Nidhi software developed on Visual basic and Oracle 10g has been implemented at the GPF office, Hazaribag. The system maintains the subscriber details, their contributions, advances, refunds etc. and generates the necessary accounts with proper checks. The GPF details of the subscribers can be viewed at

<http://jhr.nic.in/gpf>

Online VAT: VAT software has been implemented at Hazaribag division office of the commercial tax department. The software provides for compulsory registration of commercial establishments which has led to improved tax compliance, reduced tax evasion and has also brought many new commercial establishments into the tax net.

Transport Computerization: The VAHAN s/w facilitates registration of vehicle, Tax realization, Issue of Permits and vehicle fitness details where as SARATHI is used to issue smart card based Driving License and Registration Certificate Book.

Consumer Forum Computerization (CONFONET): The Consumer Forum has been computerized under CONFONET. The software also incorporates backlog entry of cases. The case monitoring systems records filing details, orders, case details and judgments etc. passed by the court. The cause list is generated and uploaded on the web for the benefits of the citizens.

Video Conferencing: VC facility has been established and extensively used by various government departments for monitoring developmental activities in the district. The video conferencing facility between the district Civil Court and the Jail has been established for producing under trails to the Court without moving them physically.



Hon'ble Justice, A Sahay, Jharkhand High Court inaugurating the VC centre at District Civil Court, Hazaribag

Primary Education: The Database of Primary school teachers and infrastructure details of the schools has been created for better monitoring of resources in the education sector. This software captures teachers profile, generates list of superannuating teachers, provides transfer, posting, promotion etc.

IT training: A district level IT Training center has been set up at North Chotanagpur Division, Hazaribag. Many government officials had been imparted project based IT training.



A training session on NREGA being imparted by DIO, Hazaribagh

Other Major Activities: Creation of Data base of old age pensioners, Health sector - MAMTA s/w & IDSP Project implementation, Computerization of Cattle census of Hazaribagh and Ramgarh District, BPL data base creation, Computerization of Elections in the district, AGMARKNET Project, DACNET project support, Online entry of MPR data at the websites - (<http://rural.nic.in>) for various schemes like MPLADS, PMGSY etc, Implementation of IMO software at district post office, Hazaribagh, Plan plus training support and implementation, IISFM Project implemented for FCI, Labour Court Computerization. **i**

Excerpt of the letter from Vinay Kumar Choubey, IAS, DC, Hazaribag.

I am happy to know that NIC is covering Hazaribag District in January'2009 issue of Informatics. Since 1988, NIC has been closely associated with the district administration on its various e-governance projects.



ICT initiatives by NIC at Hazaribag Central Jail, Treasury, Transport, Consumer forum, District Court apart from grass root level planning and support in the implementation of NREGA has been commendable.

The special effort put up by NIC officers during elections are extremely helpful in meeting the constitutional obligations.

I am confident that the district administration in coordination and support from NIC will bridge the digital divide and bring transparency to the various welfare schemes under implementation.

For Further Information Contact
jhrhaz@nic.in
Story Edited by: Prashant Belwariar

International e-Gov Update

Australia's National Web Portal Connects to Government Services

The national web portal australia.gov.au is an outstanding effort from the government of Australia to link and aid its citizens to services and information of the government at home, work and elsewhere. It links to information and services on over 700 Australian Government websites as well as selected state and territory resources.

As the go-to site for a nation of six states and 10 territories, australia.gov.au has much ground to cover -- literally and figuratively. The portal is adorned with a slew of features viz. an internal search engine; more than 800 links to public sites; separate directories of federal, state, territory and city sites and departments; travel information; weather updates; current and historical country information; an alphabetical list of government contact numbers by subject; an e-mail subscription service for news and media releases; and a really simple syndication (RSS) delivery option for news and pod casts. RSS enables people to receive news articles, headlines and other data via XML technology.

In an e-Governance survey designed by the UN in 2008 gauged australia.gov.au for delivering outstanding e-services to its citizens. australia.gov.au impressed surveyors with its comprehensiveness, information, links to government resources and how it serves as the gateway to other integrated portals, such as the national job search site, jobsearch.gov.au, and the Centrelink citizen information and services portal, www.centrelink.gov.au.

Visit: <http://australia.gov.au/>

People's Online Petition and Discussion Portal, Korea

The "People's Online Petition and Discussion Portal" launched by the Anti Corruption and Civil Rights Commission of Korea won the top award for best demonstration stand award in the e-Challenges Conference and Exhibition in Stockholm, Sweden. The Portal is an online model system to help citizens in hearing their grievances and solving difficulties.

The ACRC launched the portal www.epeople.go.kr in June 2006 by merging scattered online channels which had collected civil complaints and petitions. Slowly and steadily, the organization began to extend the online service to local governments allowing its citizens including foreigners living in Korea and overseas Koreans to suggest policies and join policy-making.

In the e-People service, a petitioner can file a petition with the Korean Administrative Agencies in regard to the following matters:

- Requests to explain or interpret administrative affairs - including laws, institutions and procedures - through inquiry or consulting
- Suggestions on improving government policies or administration systems and their operations
- Requests to solve problems like administrative agencies' unlawful acts, unfair or passive measures and unreasonable administrative systems, which infringe on people's rights, cause difficulty or place unnecessary burden on people
- Require administrative agencies to take actions on other matters

The portal provides an opportunity to promote South Korea's advanced e-government system at home and abroad. Based on reported complaints, the commission will advise related organizations to resolve problems and the central government to adopt strategic policies.

Visit: <http://www.epeople.go.kr/jsp/user/on/eng/intro01.jsp>

Utah's Official Web Portal

Utah's official web portal <http://www.utah.gov/>, is the recipient of the 2008 Best of State award in the category of Community Development, for rendering extensive e-Governance services to the citizens of the state. The Staff at the Department of Technology Services along with the other agencies who carry the responsibility for creating and maintaining the portal provides innovative and cutting-edge resources especially to business and citizens alike.

Whether one is planning a visit or have lived here his whole life, [utah.gov](http://www.utah.gov/) will help to find what one is looking for. The site is a nutshell for various online services providing its citizens a one stop platform for accessing around 1148 citizen centric services. Few popular online services are finding a job, renew vehicle registration and driver's license, apply for birth and death certificate, start a business etc. Utah.gov also includes information about the state's Judiciary, Government, State Agencies and contact information of various individual officials.

This award recognizes Utah.gov's robust functionality and its appealing design. The nomination was done on participant's merits, based on their innovative, originality and excellence in their respective fields along with their impact and contribution to the community as a whole and hence the success of the Utah's web site is revealed in it.

Apart from its effectiveness in service delivering, the portal has also gained recognition as being the most visited portal; leading up to almost two million visitors per month.

Visit: <http://www.utah.gov/>

Health Atlas, Ireland

The recipient of 2008 'Prime Minister Public Service Excellence Award' The Health Atlas, Ireland is responsible for providing Health and Personal Social Services for everyone living in the Republic of Ireland. This open source application analyses health related datasets using Geographical Information System (GIS) and statistical software.

The e-Government project Health Atlas Ireland is a joint Health Service Executive and academic initiative. The set of standards contained within the project provides the template for provision of care for the foreseeable future.

Various laws are in place to allow one as a member of the public to access both their personal information and general information. Information can be made available in a range of ways, and under certain conditions. Information can be access in the following ways:

- Routine Access and Administrative Access
- By means of a Freedom of Information request
- By means of a Data Protection request
- Oireachtas Members can access information through the HSE Parliamentary Affairs Division.

Making people aware of these information, it makes easier for them to select the most appropriate and quickest way to seek advice or help.

Health Atlas is an innovative project that greatly improves the quality and the efficiency of services delivered by health services. A user friendly interface supports web-enabled access across the Irish health sector and collaborating agencies. Health Atlas Ireland enables controlled access to maps, data and analyses for service planning and delivery, major incident response, epidemiology and research to improve the health of patients, their families and the population.

Visit: <http://www.hse.ie/eng/>

Enabling Effective Project Monitoring and Control in Government using web based CPM/Pert Technology

Enterprise Project management as a management discipline in Govt. underpins much economic activity. It is an effective project management that translates promises into well managed processes that improves everyday life. There is also an ever-increasing need and awareness to monitor closely the efficiency of various activities and operations in the Government. Project management offers a suite of very powerful solutions, which can help to deliver the right information to the right people at right time with a combination of rich functionality and elaborate security.



Daisy Gupta
Senior System Analyst, NIC
daizy@nic.in

“The amateurish management of high-priced projects is a problem organizations fail to acknowledge”

With an EPM system decision makers can have a control room type of scenario where they can closely monitor the progress of all ongoing projects, fund allocations, resources assigned to them and can maintain a strategic orientation to meet the desired goals of an organization and works to ensure that projects proceed on the basis of their strategic alignment to the objectives of the organization. It will bring transparency within the organization and this will further add a strong commitment feeling among all team members. This is where Good Governance through Enterprise Project Management comes in.

Advantages of an EPM System

- Enterprise Project management (EPM) is an enterprise view of an organization which entails linking of organization's vision, mission, goals, objectives and strategies in a hierarchical fashion to ensure that optimal resources are committed to the right projects at right time.
- An EPM system enables an organization to plan, implement and control all projects/activities within an organization from a central location that rigorously assures all projects progress report to a single source.
- If added an element of CPM/Pert based technology, it will help to

maintain all critical activities within a project and take the appropriate action.

- Take advantage of embedded best practices and customized template to simplify project Planning/developing framework of activities thereby quickly realize a return on investments (ROI).

EPM for NVS

Analytics & Modelling Division of National Informatics Centre has developed and implemented a web based CPM/PERT based Enterprise Project Management System for Navodaya Vidyalaya Samiti (Ministry of Human Resource and Development).

“Navodaya Vidyalaya Samiti (NVS) is an autonomous organization of the Department of Secondary and Higher Education, Ministry of Human Resource Development (MHRD). It has the mandate to provide the requisite educational facilities in rural parts in all the Districts of the country, helping the merit candidates of the rural India and backward regions to contribute for the socio-economic development.”

Navodaya Vidyalaya Samiti planned to construct 582 residential schools all over the country in the rural areas. The present cost of one Vidyalaya based in Delhi has been estimated to be Rs. 8.94 crores and duration of construction is approximately 24 months. NVS is awarding the construction of Navodaya Vidyalayas

to various construction agencies. These agencies in turn outsource these construction activities to the bidding agencies through well defined and approved tender processing.

MHRD entrusted NIC for the development of an Enterprise Project Management (EPM) system for NVS.

EPM Solution is built on Microsoft Windows Server, Microsoft SQL Server, and Microsoft Windows SharePoint Services. The Office EPM Solution also includes pre-built integration with the Microsoft Office system, ERP applications, and the Microsoft collaboration platform.

Need for Replacement of Existing System: Before EPM solutions were built into NVS, the organization was struggling to monitor the time and cost overruns for its geographically scattered projects. There was no control on regular status reports required for monitoring progress of all ongoing projects. Construction status information is transmitted through fax/phone/email as and when required.

There was a delay of about two to three months in reaching the required status reports to the planners and decision makers. With an EPM system in place, reports can be retrieved at each level of monitoring as soon as it is updated by site engineers and approved by the approving authorities.

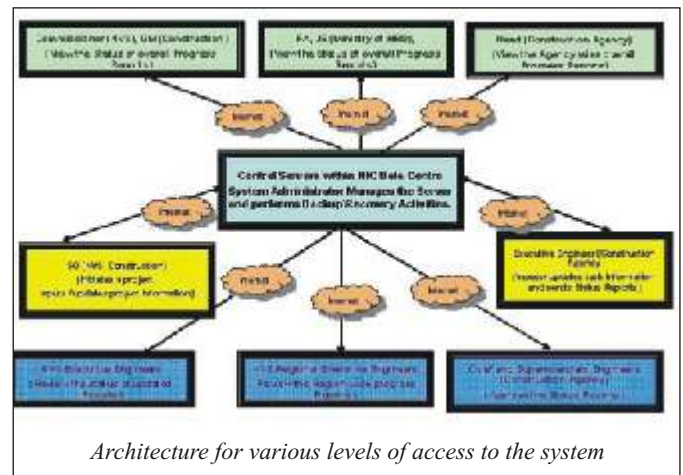
Beside this, there was non-availability of standard baseline PERT across different construction agencies leading to non-availability of a standard tool to compare the status of various ongoing projects.

Modus Operandi: The project management solution has been developed on Microsoft MS-Project platform. NIC through wide spread detailed consultations with NVS and its construction agencies advocated the baseline PERT for project management accomplishments in terms of key physical and financial indicators. More than 100 officials from NVS and various executing agencies had been trained to access the system.

Working Model: The Web application provides browser based simple interface to cater the need of various planners in terms of planning, monitoring and controlling the progress of various schools undertaken by NVS.

Initially when a project starts, PMO (NVS) will initiate a project by entering its basic information and publishing it on the web with templates for entering progress of various activities. Site engineers from various executing agencies has been provided a simple template to enter the progress

of various activities which get reflected at all levels of monitoring on immediate basis.



Central server having repository of data is placed at IDC Centre of National Informatics.

Benefits of the system

- NVS-EPM deployment will effortlessly collaborate and share essential information through Team Project Workspaces that use Windows SharePoint Services by-passing the constraints of geographical locations.
- Streamline the process and empowering at all levels including decision makers by providing customized reports/views alternatively ensuring timely information availability to Ministry of Education and other stakeholders on the progress of the projects
- All status reports which are being generated at present by various executive agencies can be accessed online.
- NVS-PMS is a unique application of this type in Govt. of India where alerts and warnings can be auto generated for effective project management or risk migration.
- Effective resource management by alignment of resources/schedules with strategic initiatives.

The extensibility and scalability of the Microsoft Office EPM Solution are additional advantages for MHRD and other govt. departments. Just having a solution based on the Microsoft Server technologies keeps the door open to all manner of extensions that they might find valuable in the future. Further since infrastructure and expertise exists within NIC, it is easier to take care of other similar EPM projects in MHRD as well as other govt. departments.

Cyber Governance

A look at some of the recently launched Indian Government Websites....

The National Library (<http://NationalLibrary.gov.in>)

This online version of Kolkata National Library under 'Department of Culture, Ministry of Tourism & Culture, Government of India' is an effort to bring the people of the world in close proximity with the real India. Being the largest Library in the country, it boasts of its vast assets from both historic as well as modern India in printed versions. The homepage clearly reflects the ownership of the site as all the major sections viz. history, collections of reading materials, administration, services, membership procedures of the library etc are reflected on it. Embellished, with simple navigation scheme and well laid out and clearly legible content, the site guides a user to the relevant information without any hassle. Hindi version of the site is also available.



Faridabad Police (<http://faridabad.haryanapolice.gov.in>)

The constitution of India grants Policing as a state power that entitles the responsibility to provide the common people with a “Good” Police Service. The recently launched website of Faridabad Police scores high on account of its citizen centric content. Content is well structured into sections that help the user easily find the information s/he is looking for. There is a slew of information and instructions for the citizen right from getting a missing persons list to tracking the status of firs related to vehicles. Besides this there is information on citizen partnership and a separate section by the traffic police.

Directorate of elementary education, Haryana (<http://harprathmik.gov.in>)

One of the integral parts of modern India is the need of Elementary Education i.e. is Education for all in terms of its framework, planning methodologies and strategies. The education department of Haryana added another feather to its cap with the launch of their official website on elementary education. The site caters to up-to-date information regarding activities, policies/schemes, achievements, budgetary provisions initiated within the department. Content wise, the site is well structured and properly titled with easy navigation tabs.



Finance Department, Govt. of Mizoram (<http://mizofin.nic.in>)

This official website on finance department of Mizoram carries a string of important information related to the financial functionalities of the department. Up-to-date information related to state budget, taxes and charges, and services to citizens can be easily acquired. Apart from this, the site also regularly updates its content for training programmes, tender notices, RTI, vacancy circulars, orders/circulars etc of the Mizoram finance department. The data published on the net are for rendering immediate information to the public.

Reviewed by: Lokesh Joshi

National Portal Update



'india.gov.in', the national portal of India provides single window access to information and online services for citizens and other stakeholders. The portal provides a unified interface to over 5000 Indian Government websites and is a mission mode project under the National e-Governance Plan (NeGP). It provides comprehensive, accurate, reliable and up-to-date information about India and its various facets with exclusive sections on Citizens, Business, overseas, Government, Know India Sectors etc.



Spotlight.... Focusing every month on an issue of National Importance or an e-Governance initiative. Visit 'india.gov.in' to know more about these..

Senior Citizen Act, 2007

Old age is a boon not a curse to humanity! It seeks respect and care as it has brought us humans from the Stone Age to the space age. The spotlight renders all the necessary Information for the maintenance, welfare and protection of senior citizens and parents so as to provide them a secured life of dignity, peace and security. Get to know all about facilities and welfare measures undertaken by the Government for its esteemed senior citizens under Senior Citizen Act, 2007.

National AIDS Control Programme

Curious to know all about this deadly disease! Read our special spotlight section on HIV Control Programmes. Ministry of Health and Family Welfare is assessing and monitoring on the vital aspects of AIDS to educate the citizens through National AIDS Control Programme on regular basis. With the growing complexity of the epidemic, there have been changes in policy frameworks and approaches of the NACP. HIV patients are not a threat to the society but at the end of the day what matters is - Prevention is always better than cure!

Newly Added Section

business.gov.in- Your online Business guide now in Hindi

Besides being the national language in India, Hindi is the largest non-English language used in India. The release of the Business section of "India.gov.in" portal in Hindi, offers all the features in our National Language with more flexibility, transparency and data control. Get a crystal-clear picture of performance in all customer-facing areas viz Starting Business, Doing Business Abroad, Investment Opportunities, Indian Economy, Taxation etc. at <http://business.gov.in/hindi/default.php>



In the News

CollabCAD Workshop at APWD, Port Blair

The CollabCAD Workshop was organized at APWD, Port Blair from 25th to 29th August' 2008. The Inauguration of the Workshop was done by Sh. R.K. Gosh, Chief Engineer, APWD on 25th August 2008. Sh. K.S.Nagesh Technical Director, NIC, New Delhi gave a detailed technical presentation of CollabCAD and its features. He emphasised the usefulness of CollabCAD to the department. Sh. K.Narayanan SIO, NIC also spoke on the occasion and explained about the NIC initiatives in Port Blair. Then CollabCAD Workshop was conducted for the Engineers at the Conference Hall of APWD, Port Blair. The Engineers created several 3D CAD Models like Sea Wall, Tetrapod, RCC Bridge, Model of a Buliding with rendering etc. It was well appreciated by the APWD, Chief Engineer and the certificates were distributed to the Participants on the final day of the Workshop.

K.S Nagesh, NIC



Workshop session going on in Port Blair



Officials including NICian during Training

Workshop-cum-training of NREGA at Patan district, Gujarat

Recently, a workshop-cum-training program on MIS of NREGA was successfully conducted at all seven Taluka head quarters in District Patan in close coordination with NIC. Sh. J.B. Soni, DIO, Patan demonstrated various modules of MIS of NREGA online in detail and also apprised the functioning of this software to the participants. More than 300 participants including TDOs, Junior Engineers, Village Panchayat Sevaks, Technical Assistance and other officers from Taluka Panchayat have attended the training programs.

At the end of the training program the feed back on the MIS was discussed and doubts of "Village Rojgar Sevaks" were sorted out.

Amit Shah, Gujarat

NIC J&K Provided IT Support during PM visit to J&K

Hon'ble PM Dr. Manmohan Singh was on two days visit to Jammu & Kashmir on 10th & 11th October 2008. During his stay in Raj Bhawan Srinagar, NIC J&K set up a special Computer Cell at the PM's Camp Office. Besides Computers and Laser Printers, Internet facility was also provided to the camp office as well as in the suits of Mrs. Sonia Gandhi, Private Secretary and the Principal Secretary. Other Office Automation software's including Hindi/Urdu language packages were also loaded in the Computers for their use. NIC's support during the visit of Hon'ble PM was highly appreciated by the officers/officials. Mr. Mujtaba Ahmad Bandy, In-charge NIC Office Raj Bhawan, Srinagar provided round the clock IT support during PM's visit.



Hon'ble PM inaugurating Hydro Electric Project in J&K

Jit Raj, Jammu & Kashmir

Showcasing ICT during Gaya's Pitripaksha Mela, Bihar



Sh. Behera, DIO & Sh. T K Sinha, SSA explaining the details to the Div. Commissioner & the DM

Dr. K. P. Rammaiah, IAS and Magadh Divisional Commissioner inaugurated a call center; operating 24 x 7 during Pitripaksha mela, held every year at Gaya, Bihar. Pitripaksha is an occasion when people pay tributes to the departed soul of their ancestors (Pitris) by offering Pindadan to perform Shraadh - a death ritual.

Thousands of people from different parts of the country visit Gaya during this period to perform the ritual. Every year the district administration carries out many preparations to provide basic amenities like cleaning of ghats, ponds, providing accommodation, security and safety to the visitors during the period.

The district administration in association with NIC Gaya set up a call center with two dedicated telephones to disseminate timely and relevant information to the citizens, thus delivering benefits of ICT.

NIC designed and developed software, which logged calls either voice or SMS to the database, provided timely and relevant information to the callers, guided them during the mela and generated necessary MIS for the administration. Sh. Sanjay Kumar Singh, IAS & DM Gaya reviewed call compliance during the mela period.

This nature of calls and problems faced by the people also helped the administration to assess and analyze its own preparedness. Volunteers from Nehru Yuva Kendra (NYK) were trained by NIC to manage the center round clock under the guidance of designated shift supervisor.

SN Behera, DIO, Gaya

Inauguration of NIC-CA RA Office Bhubaneswar, Orissa

The E-Procurement implementation in Orissa crossed another milestone when NIC Certifying Authority (NIC-CA), New Delhi, decided to open its Registration Authority office at NIC Bhubaneswar, Orissa for smooth delivery of Digital Signature Certificates to all government officials.

Sh. P. K. Mohapatra, Commissioner Cum- Secretary to Government, Department of IT, Government of Orissa, inaugurating the Office of the Registration Authority of NICCA at NIC Orissa State Centre, Bhubaneswar on 31st October 2008 congratulated NIC for setting up this facility in a record time and hoped that this would bring down the time to issue Digital Signature Certificates to users substantially.

Sh. Tapan Prakash Ray, Scientist-D & RAA, demonstrated the detailed process of DSC creation and IT Secretary printed a DSC card using the RA setup installed at Bhubaneswar.

Participating on the occasion over Video Conferencing Dr. Y. K. Sharma, DDG and Sh. Madhav Reddy, STD & Head NICCA Office, NIC New Delhi, informed that Orissa is privileged to be the second state after Karnataka to have the RA office. Sh. K. Srinivasa Raghavan, STD & Sh. M. Manivanan, STD from NIC Chennai have also joined in the interaction over Video Conferencing.

IT Secretary, interacting on the occasion expressed his sincere thanks to NIC Hqrs. for opening of RA office at Bhubaneswar which was a long standing demand of Government of Orissa to facilitate faster issue of Digital Signature Certificates to users in the Government domain.



IT Secretary & SIO inaugurating the RA Office

Sh. S K Panda, SIO Orissa informed that so far 971 DSC cards have been issued to be used with e-Procurement system out of which 71 cards have been printed and issued from RA Bhubaneswar setup as a process of test run conducted during last 3-4 days.

A.K.Hota, Orissa



Sh. SA Khuba delivering the presentation

Initiative to implement ST & other traditional forest dwellers in Dadra & Nagar Haveli UT

Dadra & Nagar Haveli UT is a geographically small UT located in between Gujarat and Maharashtra States. Tourism, Industry, Forest and Tribal Population are the most prominent features in the state profile of Dadra & Nagar Haveli UT. Dadra & Nagar Haveli UT has one Parliamentary Constituency which is reserved for Scheduled Tribes.

The Social Welfare Department of UT Administration has taken initiative to implement Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 in Dadra & Nagar Haveli UT. In this regard one day awareness training was organized recently in Town Hall of Silvassa. Office bearers of District Panchayat,

Group Gram Panchayat, NGOs, Media Persons, Govt. officials and staff have attended the said training.

Sh. S. A. Khuba, TD NIC (DNHUTC) Secretariat, Silvassa has given a presentation and live demo of Forest Rights Monitoring System using laptop having wireless internet connectivity. Forest Rights Monitoring System is a web based application software designed, developed and hosted by NIC (HQ) New Delhi. This has invoked curiosity of stake holders and convinced the usefulness of an ICT application for the benefit of the deprived tribal community.

S.A.Khuba, TD, NIC

Web Enabled GIS based Land Management System for Chennai Port Trust

Web Enabled GIS based Land Management System for Chennai Port Trust was launched on 3rd November, 2008. Land area of 586.96 acres (237.54 hectares) under its purview with various storage facilities are either rented or leased to different shipping agencies to facilitate their activities. The charges are collected quarterly or annually depending upon the agreement. Currently the entire system is being maintained manually by the Traffic Management Department, Chief Mechanical Engineering Department and Civil Departments of Chennai Port Trust.

GIS based Land Information System has been developed for monitoring the information of allotted / vacant land parcels / buildings for Chennai Port Trust geographically. The system has been developed completely using Open Source Software which interacts with the ORACLE MIS being maintained by Chennai Port Trust.

The system has been designed with an aim to provide thematic maps on Vacant, to-be vacant (in a month's time), currently occupied. It also facilitates browsing of Chennai Port Trust maps for the general public users. For authenticated Chennai Port Trust users, more queries and reports have been provided.



Web Enabled GIS based Land Management Interface

R.Gayatri, Tamil Nadu



Hon'ble CM, Sh. Nitish Kumar with Rt. Hon'ble Douglas Alexander at inaugural function

Inauguration of Official website of Bihar Prashasnik Sudhar Mission

The Official website <http://bpsm.bih.nic.in> developed and hosted by NIC, Bihar State Centre, Patna for the “Bihar Prashasnik Sudhar Mission” has been inaugurated by Hon'ble Chief Minister, Sh Nitish Kumar at C.M. Secretariat, Patna on 18th November 2008. In this inaugural ceremony of Bihar Prashasnik Sudhar Mission, Rt. Hon'ble Douglas Alexander, MP, UK Cabinet Minister for International Development, Sh. Narendra Narayan Yadav, Hon'ble Minister of Revenue and Land Reforms, Sh. Hari Narayan Singh, Hon'ble Minister of Human Resources Development, Sh. Jamshed Ashraf, Hon'ble Minister of State, Registration and Sir Richard Stagg,

Hon'ble British High Commissioner, India were present.

The Government of Bihar has decided to establish a Governance Mission BPSM to spearhead its efforts to improve the governance and administration of the state. The UK Department for International Development (DFID) will be supporting the Mission through a Bihar Governance and Administrative Reform Programme (BGARP).

Hon'ble CM Bihar has expressed satisfaction on ITC services provided by NIC Bihar and remarked that it is helping in expedite e-governance in State.

PC Sahoo, Bihar

CEO, J&K discusses Poll issues with District Election Officers and Returning Officers through VC

Sh. B.R. Sharma, Chief Electoral Officer (CEO), J&K on 3rd December 2008, reviewed the poll preparations being made in the districts of Badgam and Baramulla through an interactive session with the District Election Officers of Baramulla and Badgam through video conferencing at NIC J&K State Center, Jammu. These two districts are going to polls on 07.12.2008

Among the issues discussed were maintaining of 17A Registers, proper handling of EVMs by Presiding Officers, genuine voter-identity proofs, conveying of poll percentage well in time, maintaining of Returning Officers' Handbook, establishment of Joint Election Control Room for better coordination, stationing of security forces and poll personnel in respective polling stations during night hours ahead of the poll day. The Observers role during elections was also discussed.

The instructions were also conveyed for imposing restrictions on entering of Personal Security Officers with candidates inside polling stations and stopping their vehicles 100 meters away from polling stations. The candidates have been advised to use only three commercial vehicles during the poll day. The District Election Officer informed that 700 Micro Observers appointed for the district are being trained thoroughly and wireless for Returning Officers are being provided.

The Senior Superintendents of Police and Returning Officers of constituencies in these two districts and Sh. Saleem Khan, PSA and Election Project Coordinator from NIC J&K also participated in the VC session. The Chief Electoral Officer appreciated the facilities provided by NIC



CEO J&K attending VC Session with DEOs and ROs

Jit Raj, Jammu & Kashmir

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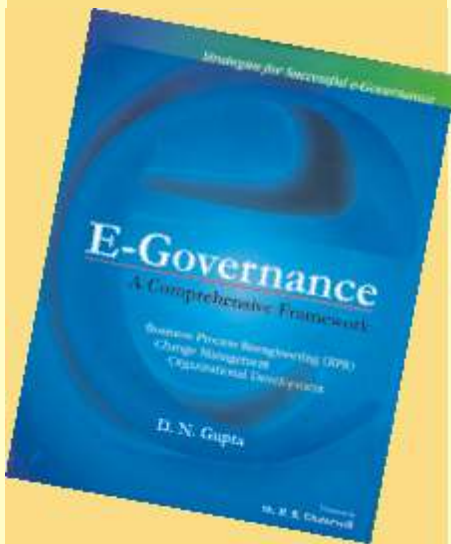
E-Governance : A Comprehensive Framework

The author, through a comprehensive research study of e-Governance initiatives in India, brings a marvelous research contribution which suggests a framework for successfully deploying people and processes across e-Government projects. Read Ahead...

Title - E-Governance: A Comprehensive Framework

Author - D.N. Gupta

Publisher - New Century



Dr. Susheel Chhabra
Associate Professor, IT
LBSIM, New Delhi
susheel@lbsim.ac.in

The objective of this book “E-Governance: A Comprehensive Framework” is to assist policy makers, academicians, researchers, and consultants to understand the essence of inter-dependence of technology, people, and processes and how to deploy e-Governance operations successfully. Some of the specific concerns addressed in this book include how e-Governance has helped citizens in accessing the services; whether the delivery system has adequate capacity to deliver services efficiently; and the measures necessary to strengthen e-Governance system for providing good governance.

The scholar uses various diagnostic tools and techniques to study the performance of some selected e-Governance projects in India viz., Janmitra, e-Bhoomi, and RDS in Karnataka, Gyandoot in Madhya Pradesh and OLTP in Andhra Pradesh. The study covered four aspects viz. (a) *service delivery*, (b) *performance of kiosk owners*, (c) *performance of service provider* and (d) *the delivery system*.

The book is divided into five chapters. The first chapter “E-Governance: An Introduction”, introduces the reader with the basic concepts of e-Governance and the need of conducting a comprehensive study in India to enhance efficiency and effectiveness of e-Governance operations. Second chapter, “E-Governance: Evaluation Framework”, depicts various approaches for designing evaluation framework for good governance. Some of the evaluation approaches used in the study and discussed in this chapter include a participatory approach to governance evaluation; people, process and technology models; and factors affecting quality of services using SERVQUAL and Growth Stage models.

The third chapter “E-Governance Projects in India: An Evaluation” deals with the detailed analysis of field study; factors affecting usage and quality of e-Governance services; performance indicators; and behavioral issues. The critical findings of the analysis are: e-Governance is more than IT connectivity; citizens lack awareness; there is a dearth of enabling environment and working conditions; processes are obsolete and cumbersome; little focus is on HRD issues; there is a requirement of change management in most of the projects; and capacity and conducive work culture needs to be created for good e-Governance. The chapter also discusses some of the selected case studies of e-Governance projects and illustrates their findings using SWOT analysis, SERVQUAL and Growth Stage models.

The most important aspects of the study are illustrated in the fourth chapter “System Design: Process Reengineering and Organization Development.” The chapter suggests a citizen-centric e-Governance system design framework based on process reengineering and organization development. The last contribution of the book, chapter five “Lessons Learnt and Way Ahead” brings salient concerns related to behavioral dimensions, prerequisites, challenges, future strategy needed to be deployed and important implications.

The book is a wonderful contribution from an eminent e-Government researcher. It has been written in a simple and non-technical language, which keeps the reader involved throughout the book. The book is a constantly up-to-date tool necessary for understanding and implementing e-Governance projects successfully for policy makers, researchers, scholars, and consultants worldwide. 