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# MOTHER & CHILD TRACKING SYSTEM

- National Consumer Call Preference Registry (NCCPR)
- Electronic Transfer of Social Security Benefits in Haryana
- e-Awas Government Accommodation Management System
- Manipur Providing e-Services at District Transport Offices
- ICT in Districts: Kupwara (J&K), and Palakkad (Kerala) and Chittorgarh (Rajasthan)
- Agile Development Model For e-Governance Software

# **Informatics**

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# **Editorial**

Promising e-governance initiatives by governments at different states and the centre have flung wide the doors of transparency, opening up unprecedented amounts of data to the public and inviting citizen to actively participate in the great work of e-building our nation.



This issue serves volume of information in regards to projects being carried at international and national panorama. You will have pleasure going through comprehensive story on Mother and Child Tracking System (MCTS). MCTS has marked a shift in the approach towards monitoring health and family welfare programme as it is aimed at ensuring delivery of maternal and child health services to all pregnant women and new born in an effort to reduce maternal, infant and child mortality in the country.

From the State/UTs section put forth all-embracing study of Madhya Pradesh and Andhra Pradesh, as ICT is being leveraged by our state governments. Districts of Kupwara (J&K), Palakkad (Kerala) and Chittorgarh (Rajasthan) have their exclusive fragrance of e-gov implementations.

Our regular columns viz. E-gov Products and Services, International e-Gov updates, In the News and Cyber Governance shall appraise you on the events and initiatives in the realm of e-governance in India and abroad.

Happy reading...

NEETA VERMA Editor-in-Chief

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We would like you to contribute to Informatics. You can send your contributions to our State Correspondents or can also send directly to us at the following address.

# **NEETA VERMA**

Editor-in-Chief Room No-375, 3rd Floor, NIC-HQ A-Block, CGO Complex, Lodhi Road New Delhi-110 003 editor.info@nic.in The broad objectives of the programme through the software is to reduce infant mortality rate (IMR), to improve the nutritional level of the child, to ensure completion of immunisation in children by tracking the proper growth of the individual child, and to reduce mother mortality rate (MMR) and reduce total fertility rate (TFR).



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# Mother & Child Tracking System

he health of women and children has been an abiding development concern in India right since Independence. It is estimated that around 60 thousand women in the country die every year due to complications associated with pregnancy and delivery while many more suffer from pregnancy and birth related ill-health. It is also estimated that every year around 1.25 million new born fail to survive up to their first birth day.

Most of these premature deaths can be prevented. The available medical technology has the potential of preventing more than 95 per cent of all maternal deaths and infant deaths. The most common reason why this potential could not be realised is that the health care delivery system is not able to deliv-

er even the low cost appropriate medical technology to all pregnant women and children. It is argued that if the efficiency of the health care delivery system is improved in terms of ensuring universal access to all pregnant women and children to maternal and child health services, reduction in maternal, infant and child mortality can be accelerated significantly.

Mother and Child Tracking System (MCTS) is an IT enabled application (http://nrhmmcts.nic.in) which will facilitate monitoring of universal access to maternal and child health services by all pregnant women and children. The system is developed jointly by the Ministry of Health and Family Welfare and National Informatics Centre and it was launched by the Government of India in December 2009 in collaboration with States/UTs. It is an innovative application of the information technology directed



towards improving the efficiency of maternal and child health services. MCTS is designed to capture and track all pregnant women right from conception up to 42 days post partum and all new born up to five years of age to ensure that the pregnant woman and children receive 'full' set of medical services thereby contributing to the reduction of maternal, infant and child mortality and achieving the goals laid down in the National Rural Health Mission as well as Millennium Development Goals.

MCTS serves two purposes. It facilitates the service provider at the grass roots level in delivering services to women and children according to their specific needs. At the same time, MCTS supports health and family welfare managers and policy makers in measuring and monitoring the efficiency of the maternal and child health services in terms of needs, effectiveness and capacity, efficiency and evaluating up to what extent the increase in efficiency in the delivery of maternal and child health services has contributed to the decrease in maternal, infant and child mortality. In this way, MCTS facilitates justification of investments in the public health and family welfare services delivery system.

# MAIN FEATURES OF THE **APPLICATION:**

MCTS relies heavily on information technology tools and techniques. Innovative application of information technology tools and techniques makes it possible for the grass roots level health care providers to track every pregnant woman during pregnancy and every new born during first five years of life so that basic maternal and child health services can be delivered to them.

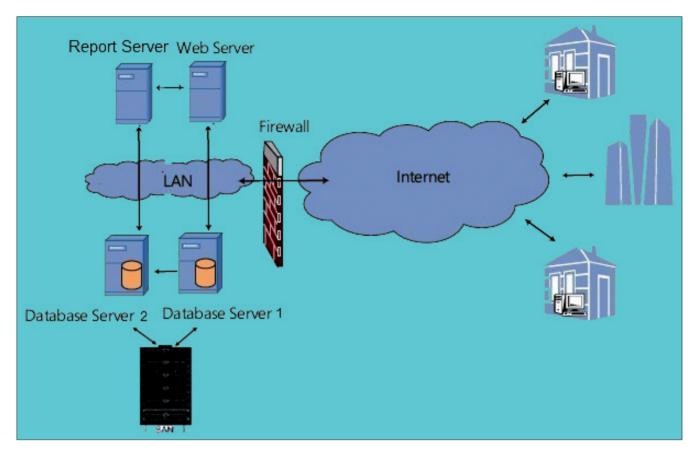
Perhaps the most significant feature of MCTS is that it promotes use of information technology by grass roots level health and family welfare service providers and even by the



Ms. Anuradha Gupta AS & Mission Director (NRHM)

The Mother and Child tracking System (MCTS) is a name based tracking system, launched by the Government of India as an innovative application of information technology directed towards improving the health care service delivery system and strengthening the monitoring mechanism. MCTS is designed to capture and track all pregnant women and children so that they receive 'full' maternal and child health services and thereby contributes to the reduction in maternal, infant and child morbidity and mortality which is one of the goals of National Rural Health Mission.

The Mother and Child Tracking System may therefore be perceived as an important intervention towards the realization of the goals and objectives of the National Population Policy and the National Health Policy and the Millennium Development Goals. It is envisioned that the Mother and Child Tracking System will facilitate reaching each and every pregnant woman and Child in the country so that appropriate action can be taken at the right time for making the pregnancy and delivery safe and for securing the survival of the mother and the new born by preventing premature death of women and children. Ultimately, the Mother and Child Tracking System will contribute towards enhancing the effectiveness of the public health care delivery system in accelerating the pace of decline in maternal, infant and child mortality and thus will facilitate the process of social and economic development of the country.



#### **Application Architecture**

beneficiaries at large. In this way, MCTS also contributes to reduction of the digital divide.

The core of the MCTS is the web-based database application tool which permits real time entry of the information related to pregnant women and children including services provided to them either by the health care services provider or services received by them at any health care facility – public or private. This tool also facilitates generation of the work plan for the grass roots level service providers in terms of the identification of pregnant women and children who are in need of specific maternal and child health services.

MCTS employs, innovatively, the mobile-based SMS technology to communicate with grass roots level health care services providers as well as health and family welfare policy makers, health managers and health administrators at different tiers of the health care delivery system. Mobile-based SMS technology is also used to alert beneficiaries about the services that are due to them or services that have become overdue. This alert provides an impetus to the beneficiaries or parents of children to avail services specific during pregnancy /early childhood.

MCTS has 'pull' features also that makes it a very user friendly. A pregnant woman registered in MCTS can use the MCTS interface to know which of the maternal care services she requires and which of the scheduled services she has received. Similarly, parents of a child can get information about the vaccinations due to their child and the details of vaccinations, the child has already received. On the other hand, a health care services provider can easily generate the work plan or the delivery of services using the information stored

in the MCTS database. In this way MCTS allows effective use of information technology by the common man and the grass roots level service providers. This greatly helps not only in the delivery of services to beneficiaries but also in the utilisation of services by the beneficiaries.

Initiatives taken by Government of India for its effective operationalisation:

- Call Centre established in MoHFW for verification of data entered in MCTS. Another Call Centre is being established at NIFHW, New Delhi.
- Facility of communicating monthly Work Plan to ANMs/ASHAs through SMS in English and Hindi has been operationalised. SMS alerts to beneficiaries about services due have also been started.
- SMS related to mother and child registration status and telephonic verification status are sent daily to

senior officials like State Health Secretary, MD NRHM, Regional Director, State Coordinators, District Collector, District Program Manager etc.

- States/UTs have been asked to constitute State and District e-Mission Teams to regularly monitor the progress of implementation.
- States/UTs have been asked to nominate the District and Block Programme Manager (NRHM) as the Nodal Officer for MCTS at district and block levels.
- Working groups on Technology Options and Business Processes Reengineering constituted to assess field difficulties along with the proposed solutions.

# STATUS OF IMPLEMENTATION

MCTS is currently being implemented throughout the country with active involvement of States/UTs. More than 1.77 crore pregnant women and 1.20 crore children have been registered in the system since its inception. During the current year more than 1.26 crore pregnant women and almost 88 lakh children have been registered in the system so far and there has been an improvement in the registration rate.

Different States/UTs are at different stages of the operationalisation of MCTS. In terms of registration of pregnant women, Tamil Nadu tops the list with a registration rate of 96 per cent followed closely by Lakshadweep, Goa, Chandigarh and Orissa. Similarly, in terms of registration of children, Chandigarh tops the list with a registration rate of very close to 100 per Operationalisation of MCTS is generally lagging in all the north-eastern States/UTs. In Tripura and Mizoram, there appears little progress in the operationalisation of MCTS.

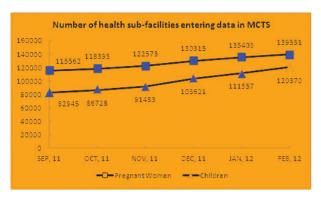
Information related to pregnant women is being entered in MCTS from 139551 (84 %) sub-centers, 22,558 (79 %) health facilities (other

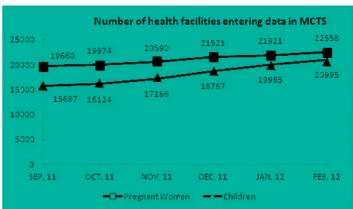


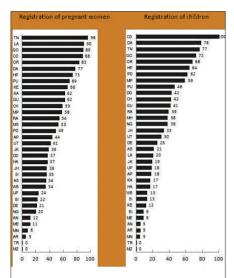
Shri P. K. Pradhan, Secretary, Ministry of Health & Family Welfare

Information Technology has immense potential to transform delivery of healthcare services. Mother and Child Tracking System (MCTS) is an initiative of Ministry of Health & Family Welfare to leverage information technology for ensuring delivery of full spectrum of healthcare and immunization services to pregnant women and children up to 5 years of age. It is an innovative, web-based application to facilitate and monitor service delivery as well as to establish a two way communication between the service providers and beneficiaries. Generation of work plans of ANMs, sending regular alerts to the service providers as well as beneficiaries about the services due and a user-friendly dash board for health managers at various levels to monitor delivery of services will go a long way in ensuring quality service delivery, micro birth planning, ensuring universal immunization and will have positive impact on important health indicators like Infant Mortality Rate and Maternal Mortality Ratio. It will also help in evidence based planning and continuous assessment of service delivery to pregnant women and children.

# **Lead Story**







Number of health sub-facilities entering data in MCTS 160000 139551 135403 130315 140000 122573 118395 115562 120000 100000 120370 111557 103621 80000 91483 82945 86728 60000 40000 20000 SEP, 11 FEB, 12 OCT, 11 NOV, 11 DEC, 11 JAN, 12 --- Pregnant Women ----Children

than SCs), 5597 (92 %) health blocks and 625 (97.5 %) districts of the country. Similarly, information related to children is being entered from 120370 (73%) sub-centers, 20995 (73 %) health facilities (other than SCs), 5380 (88.5 %) health blocks and 624 (97.4 %) districts. Efforts are being made to ensure that MCTS covers all habitations (rural as well as urban) and all health care delivery institutions - public as well as private - in the country. When fully operational, MCTS will cover the entire country.

Number of districts entering data in MCTS 625 625 630 621 619 520 624 622 610 619 600 590 580 588 585 570 560 SEP 11 OCT. 11 NOV. 11 DEC. 11 JAN, 12 FEB. 12 -D-PregnantWomen - Children

Verification of the data entered in MCTS is a major issue in its successful implementation. For validating the data entered in MCTS, SMS based approach has been evolved in addition to establishing Call Centres at the national and State/UT levels. Messages are sent to both beneficiaries and service providers to verify their identity as entered in MCTS.

Registration of pregnant women Registration of children

# OUTCOMES AND EXPECTATIONS

MCTS is expected to contribute significantly towards universal access of all pregnant women and children to maternal and child health services thereby facilitating and accelerating reduction in maternal, infant and child mortality.

MCTS is being implemented all

over the country. Once fully scaled up, MCTS will be accessible throughout the country. It will be accessible to the entire population of the country, irrespective of the region, caste, living status, etc.

## For further information

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# Manipur – Providing e-Services at District Transport Offices

Vahan and Sarathi are standardised software applications developed by NIC Ha. to meet the twin objectives of Ministry of **Road Transport and** Highways (MoRTH) towards adopting standard data formats and software for vehicle registration and driving licences so as to build a national register of vehicles and driving licences and simultaneously provide e-services to citizens through various District **Transport Offices (DTOs)** located across the country.



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Edited by **Prashant Belwariar** 

ituated at the far eastern corner of India and bordering Myanmar, Manipur state provides a major corridor for a booming Indo-Myanmar trade. In the absence of railways and waterways in the state, the road transport system serves as the primary means for movement of people, goods and other essential supplies both within and outside the state. Hence, computerisation to bring about modernization and efficiency in the transport sector was not only important but crucial to the overall progress of the state.

Vahan and Sarathi are standardised software applications developed by NIC Hq. to meet the twin objectives of Ministry of Road Transport and Highways (MoRTH) towards adopting standard data formats and software for vehicle registration and driving licences so as to build a national register of vehicles and driving licences and simultaneously provide e-services to citizens through various District Transport Offices (DTOs) located across the country. Vahan is for processing of all transactions related to vehicles for issuance of Registration Certificate while Sarathi is for driving licence.

# ACHIEVEMENTS AND SERVICES

Since a modest beginning in 2003 when the Vahan software was taken up at Imphal West DTO as a pilot site, the Transport

Computerisation in Manipur has come a long way.

- All the six DTOs. of the state are covered by Vahan and Sarathi
- The Smart Card based Registration Certificates (RC) and Driving Licences (DL) was first introduced at Imphal West DTO and the remaining DTOs were covered by
- The State Registers (SR) of vehicles and driving licences has already been created and Manipur data is incorporated into the National Register (NR) as well. SR and NR are continuously updated over network connections.
- Citizen Centric Services (CSS) are provided through SR and NR at http://vahan.nic.in and http://sarathi.nic.in.
  Important services include Vehicle Search, Driving Licence Search and Online application for Learners' Licence etc. Restricted services meant for authorised users are also provided through NR. Many other services are also in the offing.
- The new National Permit system for inter-state goods vehicles has also been successfully implemented. Payment of permit fee is now strictly through online and e-challans.

# SERVICES THROUGH VAHAN

- Vehicle Registration
- New Vehicle Registration
- Renewal of Registration
- Transfer of Ownership
- Change of Address etc.



Payment of Fees at the Cash Counters

- Permit
- Issue of National & Interstate Permit
- Renewal of Permit
- Taxes
- State-wise tax calculation & Payment
- Fitness
- Issue of Fitness Certificate
- Renewal of Fitness Certificate
- Enforcement
- Issue of Challan
- Settlement of Penalty Amount

# **SERVICES TO CITIZEN**

- Information Query
- Application Status Tracking
- Online Application Submission & Processing
- Tax Payment through Payment Gateway
- Online Permit Renewal

# SERVICES THROUGH SARATHI

- Driving License
- Issuance of Lerner's License

- Issuance of Permanent Driving License
- Renewal of Driving License
- Change of address of Driving License
- Issuance of Duplicate License
- Issuance of International Driving Permit
- Issuance of Driving License for persons holding foreign Driving License
- Conductor's License
- Issuance of Conductor's License
- Renewal of Conductor's License
- Driving School License
- Issuance of License to Driving School
- Fees
- Calculation of fees and Payment

# **SERVICES TO CITIZEN**

- Information Query
- Application Status Tracking
- Online Application Submission & Processing
- Fees Payment through Payment Gateway

# • Online License Renewal

The importance of "ready to access" databases of vehicles and driving licences for law enforcing and investigating agencies is immense. The state also has a sizeable market for used vehicles from other states giving rise to apprehension of stolen vehicles or otherwise involved in other crimes finding their way using forged documents. The services provided by NR will go a long way in mitigating threats by allowing such Registering Authorities to verify the vehicle credentials before granting registration. Likewise, prospective buyers too can verify the details online before deciding to buy such vehicles.

# CAPTURING OF BIOMETRICS FOR DRIVING LICENCE

# **Technologies:**

VAHAN 2.0 is a 32 bit, GUI rich



**Capturing of Biometrics for Driving Licence** 

application written entirely in JAVA. It has three-tier application architecture. The components of the tiers are:

- Database VAHAN 2.0 supports three databases namely DB2 version 7.2 and higher, Oracle 9i and 10G and MSSQL server 2000 and higher.
- Application server This is the middle layer of the application. It uses JAVA RMI framework to establish connection to clients, and the JAVA JDBC framework to establish connection to the database.
- Client This is the GUI layer of the application, which interacts with the client by means of forms.

The application may run as standalone on a single computer or in a client server mode. In the client server mode the database exists on the server machine while on the same machine if being run in the stand alone mode.

SARATHI –Uses VB6 as front end and Oracle 10g database.

Oracle data Integrator (ODI) is used for data replication and consolidation from various DTOs to the central server over secured network connection.

State Key Management Authority (SKMA) & Regional Key Management Authority (RKMA) applications are used for management of authority smart cards and keys with SQL server as backend.

# **CHALLENGES**

The biggest challenge faced were shortage of electricity and manpower at the DTOs. With power availability of at most two third hours a day and that too without certainty the challenges of server crashes, other hardware failures and battery damages were frequent.

Overall, the processes at the DTOs have become efficient, transparent,

systematic and most importantly the provisions of Motor Vehicles Act are better enforced.

#### **LOOKING AHEAD**

- Recently, two Registering and Licensing Authority (RLA) offices have been opened. Necessary H/W for computerisation of these offices has already been approved by MoRTH and is expected to become operational soon.
- Providing facilities for online payment of fees and taxes will enhance the citizen centric services in near future.

# For further information

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# National Consumer Call Preference Registry (NCCPR)

**NCCPR** aims to curb **Unsolicited Commercial** Communications i.e. any message, through voice or SMS, using telecommunications service, which is transmitted for the purpose of informing about, or soliciting or promoting any commercial product or service, which a subscriber opts not to receive, but does not include any transactional message; or any messages transmitted on the directions of central **Government or State Government or agencies** authorized by it.

phones were a boon which came very late to India, but the spam calls and messages came pretty quick. Not a day would pass without getting a message/call selling a credit card, insurance policy or a bank loan. Telemarketing calls are a major cause of worry not only for people in India, but across the globe. Common man life was getting difficult due to Unsolicited Commercial Communications (UCC) mobile/landline phones, when Telecom Regulatory Authority of India (TRAI) step in and decided to set up NCCPR.

The objective of NCCPR is to curb UCC. UCC has been defined as "any message, through voice or SMS, using telecommunications service, which is transmitted for the purpose of informing about, or soliciting or promoting any commercial product

or service, which a subscriber opts not to receive, but does not include any transactional message; or any messages transmitted on the directions of central Government or State Government or agencies authorized by it . The Indian telecom Industry with nearly 900 million subscribers is the second largest wireless market in the world. To holistically curb this growing menace and effectively regulate UCC, TRAI came up with the new regulation "The Telecom Commercial Communications Customer Preference Regulations, 2010" on 1st December 2010. To implement the provisions of the regulation, **NCCPR** has been set up by NIC for TRAI at http://nccptrai.gov.in

# **FEATURES OF NCCPR**

 Telemarketer(TM) Registration: According to the new regulation every TM shall register with the TRAI and obtain a registration number for carrying out telemarketing activities. Single registra-



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Hon'ble Union Minister of Communications and Information Technology Shri Kapil Sibbal during launch of NCCPR



Functional Components of NCCPR

tion required for all the locations pertaining to a TM. The registration fee can be paid online (Net banking/Credit/Debit cards) and offline mode (DD/Cash). : A separate number series 140 is allocated for telemarketing activity by Access Providers (AP) to the TM

- Telecom Customers Registration: A customer can register his/her number by calling or sending SMS at 1909. Registration with NCCPR can be for fully/partially blocking of unsolicited communication which will be effective with in 7 days. Calls are fully blocked, however Subscribers can choose the type of SMS they want from the TMs by setting the preferences
- NCCPR Database: The customer data in NCCPR is updated twice a week by APs and provided online to APs/TMs for downloading so that the calling list could be scrubbed by them before making any call
- Complaint Handling: Provision has been made for Complaint monitoring and blacklisting of TMs. The APs have to upload the complaints received online so that it could be monitored for the violations and blacklist the TMs. The defaulter TMs will face disconnection of telecom service and blacklisting in case of continuous sending of UCC even after being penalized

# FUNCTIONAL COMPONENTS OF NCCPR

Following diagram gives a brief view of the functional components of NCCPR

Customer's request for registration

- on the NCCPR is effected within 7 days from the date of registration with the AP
- Customer can register either in Fully Blocked category or Partially Blocked category Ex: SMS START 0 or START 1, 4, 5 to 1909.
- The categories are
- 1: Banking/ Insurance/ Financial products/credit cards
- 2: Real estate
- 3: Education
- 4: Health
- 5: Consumer goods and automobiles
- 6: Communication / Broadcasting / Entertainment/IT
- 7: Tourism & Leisure
- Customer can change preference after 7 days

# TM REGISTRATION AND RESPONSIBILITY

- Any person or legal entity engaging in the activity of Telemarketing is required to register with TRAI by paying Registration Fee - Rs 1000/and Customer Education Fee of Rs 9000/- which could be be made Online by Debit card, Credit card or Net Banking or Offline by Cash or DD
- Validity of the registration shall be 3 years unless revoked earlier
- TM shall enter into a standard agreement with the AP before applying for any telecom resources.
- TM shall not send any commercial communications to any Customer whose telephone number appears on the NCCPR, except for sending SMS in respect of categories of preference opted by the customer
- The TM shall update their Customer Preference data regularly.
- They should scrub their calling list against the Customer Preference data before sending any SMS or telemarketing call.
- No UCC to be made between 2100 Hrs to 0900 hrs irrespective of customer registration with NCPR.
- The TMs can deregister themselves if they have decided to not to do any telemarketing business

# ROLE OF ACCESS PROVIDERS (AP)

- AP shall provide toll free short code 1909 for Registration of number by customer, De-registration of number, Change of preference, Registration of complaints
- AP shall ensure that no telecom resource is provided unless TM is Registered with TRAI, signed the standard agreement with AP & Not blacklisted
- Resource allocation to TM is made under 140 series
- Maintain and upload Provider Customer Preference Register (PCPR) to NCCPR
- Keep PCPR updated by downloading incremental data from NCPR every Tuesday and Friday
- Upload the TMs who are exempted from sending more than 200 SMS on every Monday

# NCCPR DATA SYNCHRONIZATION

This module provides all functionality required to update NCCP registry. The process followed is:

- System synchronizes NCCP registry on every Tuesday and Friday between 12.00 PM and 6.00 AM when the registry will not be available to the APs to upload new numbers
- The synchronized data will be available for download from 7:00 AM of Tuesday till 11:59 PM of next Thursday and from 7:00AM of Friday till 11:59 PM of next Monday
- System generates CSV files containing NCCP full registry for respective service provider and NCCP incremental data for all service providers

# **UCC VIOLATION**

- Calls/SMS made by the TMs, not complying with the Provisions of Regulations are termed as violations
- TM violating the regulations are

# **E-Gov Products & Services**

penalized between Rs 25000/- for first violation to Rs. 250000/- for sixth violation followed by blacklisting and de-barding the TM for 2 years.

# REGISTRATION OF UCC COMPLAINTS

- Customer should register the UCC complaints within 3 days of receiving any UCC with their respective APs either by dialing or sending an SMS to 1909 as "COMP TEL NO XXXXXXXXXXX; dd/mm/yy; Time in hh:mm; short description of UCC" where XXXXXXXXXX is the telephone number or header of the UCC
- Unique complaint number will be sent by the AP through SMS
- The APs update the status of complaints on the portal
- AP will inform the action taken to the customer within 7 days

#### **PAYMENT RECONCILIATION**

- Banker uploads the file containing the details of the successful transactions(online/offline) in the predefined format and frequency in the NCCPR and initiates the reconciliation process
- NCCPR reconciles the payments made by the TMs for registration and APs for penalty deduction
- Bank would be intimated about unreconciled transactions.

# CUSTOMER QUERIES AND MIS REPORTS

Telecom Customer can view on the portal

- TRAI Regulations
- Registration status of a telephone number
- List of Registered TMs
- Status of Complaint registered
- Guidelines for Customers,
   Telemarketers, Access Providers

TRAI can monitor the functioning of all the TMs and APs by various MIS reports

Number Of	Number
-----------	--------

APs	18
Registered TMs	2354
Locations of TMs all over India	1094
Allocated Resources	1,58,148
Customers Registered	16,17,86,301
Customers in Fully blocked category	15,65,50,343
Customers in Partially blocked category	52, 35,958
UCC complaints registered	85007
Action taken cases for complaints	81640
Penalty deducted from TMS	Rs. 50,60,000
Telemarketers blacklisted	4

NCCPR STATISTICS

- Registration Details
- Resource Allocation
- Compliant Resolution
- Delay in action taken for complaints
- Notice Sent to TMs

affecting the other components.

# **NCCPR INAUGURATION**

National Consumer Call Preference Registry (NCCPR) was launched by, Hon'ble Union Minister of

SI No	Component Type	S/ W Used
1	Load balancer	Apache http server
2	Application Server	JBoss application server
3	Database server	Oracle RAC
4	Reporting	BIRT
5	Browser	Internet Explorer 7.0

- Penalty Deduction
- Payment reconciliation
- Blacklisted TMs
- Resource Disconnection
- TM agreement with Access Provider
- Audit Trial

#### **TECHNICAL ARCHITECTURE**

NCCP uses MVC architecture. Usage of this pattern isolates business logic from user interface considerations, resulting in an application where it is easier to modify either the visual appearance of the application or the underlying business rules without Communications and Information Technology Shri Kapil Sibal and Hon'ble MoS(C&IT) Shri Milind Deora and Shri Sachin Pilot on 27/09/2011.NCCPR is designed and developed by NIC for TRAI.

# For further information

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# **Electronic Transfer of Social Security** Benefits in Haryana

EBT scheme has been implemented for last one year for strengthening of disbursement of benefits reaped under nine major social security schemes into right hands and centralization of database administration aspects. The **Project** is implemented across state in all 21 districts for more than 20 lacs beneficiaries. Pension disbursement under EBT scheme through Bank/ BCs has been implemented in 20 districts. Enrolment and opening of accounts is in progress in Gurgaon district.



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overnment of Haryana is providing financial assistance under nine major social security schemes of Old age Samman, Widows, Disabled people, Destitute children, Non-school going disabled children, Ladli (girl child), Eunuch, Dwarfs and to Kashmiri Migrants in the form of monthly pension/ allowances, who are unable to sustain themselves from their own resources and are in need of financial assistance. There are 20.8 lacs eligible beneficiaries under these schemes. There have been reports of non-disbursement of pension, disbursement to wrong persons, errors in beneficiaries' list and delayed availability of requisite information/ reports as and when required. Therefore, to improve public services delivery system and to have better administrative aspects for handling such a large number of records, a district level software/ database system (HaPPIS) was developed & implemented 8 years back for updation of pensioners data, processing and printing of bulky APRs reports village/ pension scheme wise for monthly disbursement of pension by revenue officials/ PRIs members. Also a website was hosted for publishing of required information about pensioners, forms, procedures & details of welfare schemes. Presently, under Financial Inclusion schemes of RBI, EBT scheme has been implemented for last one year for strengthening of disbursement of benefits into right hands and centralization of database administration aspects.

# **OBJECTIVE**

Remittance of Pension allowances under Social Security Schemes on monthly basis by

Edited by 10th of each month in No-frill bank **Vivek Verma** accounts of beneficiaries across state using EBT under Financial Inclusion scheme of RBI & withdrawal by right beneficiaries using Biometric based Smart Card from the nearest CSP (customer service point) manned by BC (Business Correspondent) of respective bank, and de-duplication of ineligible beneficiaries. Necessary data updation on website by respective district level Social welfare officer using controlled access. Provision of web services for the use of banks for downloading of new beneficiaries for opening of accounts and integration of newly opened bank accounts.

# PROJECT IMPLEMENTATION **APPROACH**

Different banks were designated to different districts for enrolment and opening of No-frill bank accounts on the basis of given database of respective districts by District Social Welfare Officers (DSWOs). further engaged Correspondents (BCs) for ground level task of enrolment of pensioners under KYC norms and capturing of finger prints (bio-metrics). Permanent Customer Service Points (CSPs) were established at blocks/ villages for enrolment, correction of data and addressing of day to day problems of beneficiaries. Bio-metric based smart card were prepared & delivered to beneficiaries for withdrawal of benefits. Meanwhile, Pensioners database from all 21 districts were uploaded to central server and merged to make single database with a unique state level Pensioner Id to each pensioner. NIC-Haryana designed a dynamic web site with role-based access for data entry, editing & marking of beneficiaries' in-eligible or duplicate by DSWOs. Banks, using web services synchronized beneficiaries' data on website w.r.t. newly opened bank accounts of each individual beneficiary. NIC-Haryana

Brief Statistics -	Implementation
Number of Districts /DSWOs	21
Number of Blocks	118
Number of Municipal Committees	61
Number of social security schemes	9
Number of total beneficiaries	20,98,425
Number of Accounts Integrated	19,18,769
Number of banks designated	8

developed all modules for integration of accounts on web site, generation of Bank wise XML files digitally signed by department for remittance of bank accounts of beneficiaries with benefits.

# PROCESS RE-ENGINEERING

For strengthening of pension processing and disbursement system using EBT scheme through banks under Financial Inclusion (FI) of RBI, following process reengineering & approach has been adopted:

# New Applications receipt/ handling and data updation on website:

- Respective Block offices/ Municipal Committees in the state are authorized to receive new applications, earlier it was directly received by concerned DSWO at district level.
- Online Data entry/ updation/ deletion of pensioner's applications/ records by respective DSWO directly on dynamic website of department, using user-ID/ Passwords and IP based access.

# Enrolment and opening of no-frill saving bank account by Banks: It is covered as per Service Level Performance Standards (SLPS) for EBT through designated banks;

- Downloading of incremental beneficiary data by banks every month from centralized database/ website maintained by department using web services.
- Enrolment of unrolled beneficiaries under FI scheme of RBI through Business Correspondent (BC) Model and opening of no-frill, single saving bank account without ATM/ Debit cards.
- Biometric based de-duplication of bene-

ficiaries & integration of valid accounts on website.

- Issuance of biometrics based smart card to beneficiary.
- Integration of savings bank accounts to Department website for purpose of EBT every month using web services.

# Pension processing and generation of XML files for Banks

- Before 10th of every month, district wise pension is processed along with arrears and interest, if any, using centralized up-to-date database of beneficiaries updated by respective DSWO.
  - XML (digitally signed) files generated and transmitted to respective banks to credit accounts of beneficiaries from saving bank account of department. Credit-debit takes place on the same day.
- Banks further transfer required data to BCs at respective CSP for disbursement to the beneficiaries.

# Pension Disbursement & establishment of CSPs

- Banks/ BCs disbursed pension from CSPs (customer service points) on all working days as per banks.
- Disbursement to beneficiary is done after Biometric Identification using his/ her smart card and POT machine available at every CSP with BC. BCs at concerned CSP address the grievances related with the pension.

Grievance handling & facilitation to the beneficiaries at CSP level.

Marking accounts as 'in-active' where no withdrawal for last 60 days and 'dead accounts' afterwards for stopping remittance of pension into such accounts.

#### **CURRENT STATUS & COVERAGE**

Project is implemented across state in all 21 districts for more than 20 lacs beneficiaries. Pension disbursement under EBT scheme through Bank/ BCs has been implemented in 20 districts. Enrolment and opening of accounts is in progress in Gurgaon district. Major Benefits and Cost Effectiveness

- 1. Timely remittance of pension in bank accounts of beneficiaries as well as earning of interest as applicable to saving bank accounts.
- 2. Beneficiaries can withdraw required amount as per their convenience.
- 3. No cost to beneficiary.
- 4. No cost to department as NIC-Haryana is providing technical support.
- 5. Filtering out duplicates & in-eligible beneficiaries due to biometric based identification and disbursement system, reducing burden on Govt. exchequer.
- 6. Availability of related data/ information online.
- 7. Centralized and secure database with controlled access.

#### **FUTURE PLANS**

- 1. SMS alert to beneficiaries after crediting to their accounts.
- 2. Linking of beneficiary databases with other databases rendering financial assistance.
- 3. Recently, in view of inadequate banking infrastructure in rural areas, Government of Haryana has decided to remit bank accounts of panchayats instead individual beneficiaries for easy and fast delivery of benefits.

# **PROJECT RECOGNITION**

Haryana has been awarded "Skoch Award of the year 2012" for Financial Inclusion on the basis of this project.

# For further information

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Directorate of Estates

# e-Awas - Government Accommodation Management System

EBT scheme has been implemented for last one year for strengthening of disbursement of benefits reaped under nine major social security schemes into right hands and centralization of database administration aspects. The **Project** is implemented across state in all 21 districts for more than 20 lacs beneficiaries. Pension disbursement under EBT scheme through Bank/ BCs has been implemented in 20 districts. Enrolment and opening of accounts is in progress in Gurgaon district.



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esidential accommodation is a basic necessity. Everyone aspires to have an accommodation befitting his / her requirement and status. Central government employees are transferred or deputed on regular intervals. Possessing an accommodation away from home is a difficult job.

Directorate of Estates (DoE) under Ministry of Urban Development, Government of India, is responsible for administration and management of office buildings for various organisations of the Government of India as well as residential accommodation for the Central Government employees in Delhi, Mumbai, Kolkata, Chennai and other cities of the country.

With about 89,768 units of General Pool Residential Accommodation (GPRA), of different



types, across India allotting them and then keeping record of their acceptances / rejections, rent bills, license fee, vacations, etc. is a strenuous job. The whole job was earlier done manually — Refer Fig 1 for Manual Workflow.

The Block Allotment Year was of two years, after which the entire unutilised forms were weeded out.

e-Awas, developed by NIC, provided an automated solution to it.

## **OBJECTIVE OF e-Awas**

- Process Re-engineering for better services.
- Automating all business activities / processes involved in the allotment of houses.
- Facilitating easy maintenance and

# **E-Gov Products & Services**

prompt updating of housing records.

- Making housing records / transactions tamper proof and genuine.
- Allowing applicants easy access to all relevant information through internet.
- Reducing the number of forms and re-designing them.
- Better tracking of data relating allottees, license fee recovery, subletting, litigation etc.
- Applicants can enter preferences for house(s) of their choice(s).
- Each allottee can see his / her license fee recovery details online.

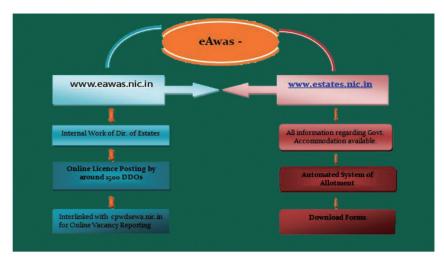
# **ISSUES RESOLVED**

e-Awas reduced the cost, time and mitigated the wastage of resources. Issues resolved in Automated System of Allotment are –

- Participation of stakeholders and transparency in the procedure.
- Online submission of applications by the applicants any time.
- Online submission of preference of houses by the applicant every month.
- Communication of information through website and by SMS / Email.
- Automatic generation of waiting lists by the system.
- Automatic preparation of Vacancy Register based on the online reporting of vacancies by CPWD.
- Automatic Allotment on specified dates of the month.
- Applicant can download the Allotment Letter themselves.
- Automation of Rent Section initiated.

# **FEATURES OF E-AWAS**

- Preparation of waiting lists for initial, change and ad-hoc allotments.
- Preparation of proposal for allotment according to various waiting lists.
   Allotment as per rules.
- Acceptance of allotment by an allottee.
- Printing of Authority Slip for the possession of house.



Major Modules of e-Awas

- Reconsideration for re-allotment to the employee.
- Preparation of First Rent Bill and Revised Rent Bill.
- Allotment of Allottee Account Number (AAN) to all allottees.
- Cancellation of allotment.
- Retention / extension of house after cancellation.
- Regularisation of house allotted to an employee upon death, retirement and transfer as per rules.
- Accounting of License Fee Recovery from allottees.

Subletting and litigation cases. Information dissemination to all applicants through Internet / E-mail / SMS.

## **BENEFITS**

DoE has replaced Block Allotment Year with Rolling Allotment Year in which the applicant can now apply at any time of the year, instead of waiting for the call of applications.

Waiting lists are generated in time, hence faster allotment process.

Applicants can now view waiting lists and allotments through Internet, thus making the allotment process transparent and corruption free.

Vacant houses are quickly and optimally allotted than before resulting in better revenue collection for the Government.

Quality of service in Directorate of

Estates has improved considerably. Saving due to reduction of Manpower. Implementation of online Automatic Allotment System resulted in savings of time and manpower.

The allottees can monitor their license fee recovery position, which facilitates payment of outstanding license fee dues, if any, as well as quick issuance of No Demand Certificate.

# **ACCOLADES**

e-Awas is running successfully in Delhi, Mumbai, Kolkata, Chennai, Faridabad, Ghaziabad, Chandigarh, Shimla and Nagpur. It was awarded National e-Governance award 2011-12 for 'Excellence in Government Process Re-Engineering' on 10th February 2012, during 15th National Conference on e-Governance held at Bhubaneswar, Odisha.

# For further information

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# Infrastructure Setup for Software Testing

The 'Test Bed Setup', an initiative of Software **Development Unit (SDU) at** NIC HQ, New Delhi, comprise of six high end servers in Linux and Windows environment. These servers can be used as staging environment temporarily, for deployment of applications under testing apart from generating virtual users for **Performance Testing.** 

Edited by **Vivek Verma** 

oftware Testing is a process that provides information about the quality of a product or service under test. It is tested to determine how it performs in terms of responsiveness and stability under an expected workload. It also serves to investigate, validate or verify other quality attributes of a system, such as scalability, reliability and resource usage. Some form of testing can be performed at every stage of software development life cycle. Since the cost of defect resolution is inversely proportional to the stage at which it is captured hence the primary aim of software testing is to identify them as early as possible to minimize the expense and time.

Depending upon the methodology, approach and the stage of project execution, various ways of classifying the testing process are -

- 1. White box tester has access to the code and algorithm implemented.
- 2. Black box tester examines the software without any knowledge of the internal implementation.
- a. Performance Testing where the system is checked for the responsiveness and stability under a particular workload b. Functional testing - where the expected functionality is verified against the software specification.
- 3. Unit or component testing when the individual components of software is under test purview,
- 4. Integration testing when the test is being done to check only the interface between different units
- 5. System testing where the completely integrated system is tested for the expected functionality with optimum performance yardsticks.

The scope of this article is to cover

Functional Testing and Performance Testing, usage of various tools and the Test Bed Setup, created at Shastri Park, Data Centre at New Delhi.

#### **FUNCTIONAL TESTING**

The Functional Testing is done to ensure that the system requirements and/or specifications have been implemented in the application. This can either be requirement based testing (also called reliability testing) to match the functionality vis-à-vis the requirements mentioned in the specification testing (as in User Acceptance Testing) or regression based testing wherein the tester ensures that new changes to the application have not impaired existing functionality, thereby minimizing the ripple effects.

Tools like Rational Functional Tester is a software test automation tool used to perform automated regression testing. Testers create scripts by using a test recorder which captures a user's actions against their application under test. The test script is produced as either a Java or Visual Basic.net application and is also represented as a series of screen shots that form a visual storyboard. Testers can edit the script using standard commands and syntax of these languages or by acting against the screen shots in the storyboard. Test scripts can then be executed by Rational Functional Tester to validate application functionality.

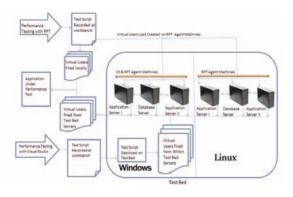
During the recording phase, the user must introduce verification points. Verification points capture an expected system state, such as a specific value in a field, or a given property of an object, such as enabled or disabled. During playback, any discrepancies between the baseline captured during recording and the actual result achieved during playback are noted in the Rational Functional Tester log. The log can then be reviewed to determine if an actual

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Performance Testing using the Test Bed setup

Performance testing illustration

software bug was discovered.

# COMPONENTS IN FUNCTIONAL TESTING

Storyboard Testing enables testers to edit test scripts by acting against screen shots of the application. This is akin to modifying the test script code.

The Object Map is automatically created by the test recorder when tests are created and contains a list of properties used to identify objects during playback.

Script Assure technology enables Tester to ignore discrepancies between object definitions captured during recording and playback to ensure that test script execution runs uninterrupted.

Data Driven Testing enables tester to add additional test data cases to the test data pool without having to modify any test code. Object Proxy Mechanism allows users to program in Java or .NET to add functional testing support for Java and .NET custom controls.

#### PERFORMANCE TESTING

Executed before the deployment of the application in production environment, it is a vital sub-component of the software development life cycle as it gives clear idea about sustainability of the application when exposed to concurrent user loads expected in the real time environment.

Tools like IBM Rational Performance Tester, Visual Studio Ultimate 2010 etc are used for examining system behaviour while generating actual load. The functionality to be tested is recorded as test scripts which can be scheduled to be played back by virtual users thus generating the expected user load. This also examines the run time quality aspects of the application in terms of response time, CPU and memory usage.

# TEST CONTROLLER OR TEST WORKBENCH

This can be a local machine where the test script is created, by recording the functionality to be tested using the wizard or guided steps available in the tool. The test script can also be created from scratch in programming languages supported by the testing tool or by using some third party tools like Fiddler.

The Test Controller or Test Workbench is also used to configure the load distribution on local or remote machines. For greater user load, the test is configured to execute on remote machines running the Agent software. The user load can be applied all at once or with appropriate staging intervals with suitable 'Think Time' between test iterations to simulate the actual real time test load scenario.

## Agents

The load test agent machine is a remote machine with high end configuration that runs 'Agent' Constituent of the Testing suite. From the controller or workbench machine, the Virtual User load is distributed to multiple agent machines and thus the test is virtually fired from remote locations. The number of virtual users can also be increased or decreased dynamically while the test is running. Once the test is complete, the Agent machines send their results to the test controller that

collects this data to create a comprehensive performance report.

# iTest Bed Setup

The 'Test Bed Setup', an initiative of Software Development Unit (SDU) at NIC HQ, New Delhi, comprise of six high end servers in Linux and Windows environment. These servers can be used as staging environment temporarily, for deployment of applications under testing apart from generating virtual users for Performance Testing.

For User load up to 1200, the Performance Tests can be carried out in Rational Test Environment

- Test script can be created on the local machine with Rational performance tester
- Performance test can be configured to be executed on RPT agents either locally or from the Test Bed Setup.

For User load of greater than 1200, the Performance Test can be carried out on Visual Studio Ultimate Testing suite, installed on the Test Bed Setup.

- Test script can be created on the local machine with Visual Studio Ultimate 2010.
- Test Script is then deployed on the Visual Studio Controller installed on the Test Bed Setup.

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

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



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Anshu Rohatgi adhya Pradesh, the second largest State of INDIA, lies in the heart of the Country. Its central location makes the State a strategic hub with many logistical advantages. NIC, Madhya Pradesh along with State Government has played catalytic & sig-



nificant role in architecting & implementing several e-Governance projects in the State with an aim to leverage IT for transparency & better governance.

Edited by

# **ICT INFRASTRUCTURE**

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

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

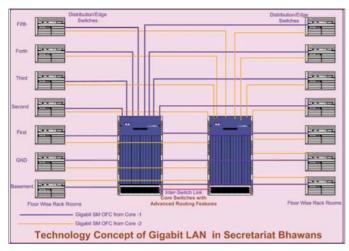
The Data Centre services include technical support for deployment & management of web-enabled applications, 24x7 operation & support for maintenance of over 580 websites to facilitate a greater access to all netizens.

# **NETWORK PROJECTS**

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

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

# From the States/UTs



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

#### **GEOMATICS PROJECTS**

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

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

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

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

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



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



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

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

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

# From the States/UTs



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

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

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

# From the States/UTs



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

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

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

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

#### TRAINING SERVICES

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

## **IMPLEMENTATION OF PROJECT**

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



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

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

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

# **AWARDS**

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

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

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

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

# For further information

#### STATE INFORMATICS OFFICER

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

In addition to the eGovernance applications, AP state centre has developed and implemented **SMS Based Applications** using Open Source technologies. Some of the **SMS** applications include **Complaint & Alert System** for Police Commissionerates of Hyderabad, Cyberabad, Jammu & Kerala, Tracking of Mobiles, Vehicle & Stolen Vehicles. Complaint against PDS and auto forwarding system, Status System for Prajavani, Kadapa and Anantapur and also a **Complaint & Redressal** System for A.P. State Road **Transport Corporation.** 

# Andhra Pradesh: A State in Focus

Edited by R. Gayatri ndhra Pradesh, ranked as the fourth largest in size and the fifth largest in terms of population, is one of the prominent states contributing to the upward economic growth of India. That's why it is one of the most preferred destinations for IT and other sectors. National Informatics Centre in Andhra Pradesh has come a long way, successfully completing vital e-governance projects for Central, State Governments and Public Sector Departments, operationalised in 1986 connecting the entire 23 district Hqs in the state over NIC-NET.

NIC State Centre has the Stateof-the-art Data Centre facility, with a 2.754 GBPS Internet gateway and a Disaster Recovery (DR) Centre for IDC of Delhi & Messaging Services. It has 3 Fiber Links 2.5/10 Gbps from Hyderabad to Delhi and has multi-Site Video Conferencing studio and Video Conference Facility for all districts.

Apart from developing and implementing eGov applications and other customised software, a host of Services are offered at the NIC state centre. They are broadly classified into Data Centre Services, Network & Internet Services, Video Conferencing and Virtual class rooms and Email Services, Registration Authority Services, NKN Services, Supporting various ICT initiatives through NICSI.

# DATA CENTRE SERVICES UNDER THE FOLLOWING CATEGORIES:

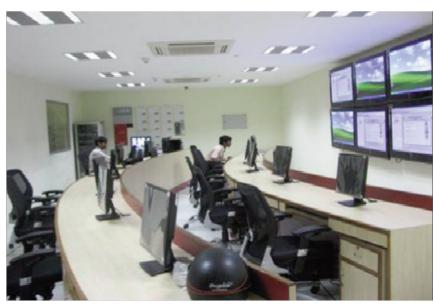
 Primary Data Centre Services at State level (SDC Services)



**DR VV VENKATA**Ramana, Tech. Director v3r@nic.in



SHRI R V RAO
Technical Director
rvrao@nic.in



**Control room at Data Centre** 

# From the States/UTs



Inside the Data Centre

- Primary Data Centre Services at the National level (NDC Services)
- Disaster Recovery Services (DRC Services)
- Certifying Authority Disaster Recovery (CA\_DR Services)
- DR Services for States like Gujarat, Goa, Rajasthan etc.,

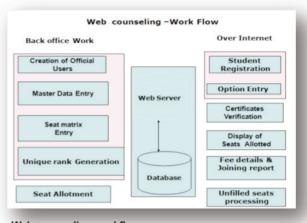
# **NETWORK & INTERNET SERVICES:**

- A host of applications like WEB/ Mail/ connectivity to SDC/ NDC/ DR & BCP are running on the **Network Services**
- All State Capitals in the country are connected to Hyderabad creating a multi homing NICNET
- Core network of 2.5G /10G connectivity is setup on NKN with mesh connectivity for high availability and redundancy
- Network infrastructure to provide 10G connectivity at APSC.
- All District NIC Centers connectivity is being enhanced to 100 Mbps and 1Gbps at bordering districts to neighbouring States
- DR services of NMS, AAA & ASA services are active
- Hi-bandwidth redundant Internet Gateway
- Network services for Dept. of Posts, CGHS, PAO, e-
- 24x7 Helpdesk for Network services

Email Services - Though E-mail services are Centralized Server at Delhi, the DR services for the Email are operational from Hyderabad and as on date 6000 e-mail accounts for AP created under NIC e-mail

Video Conferencing and Virtual class rooms

All 23 Districts of AP on VC Network through ter-



Web counseling workflow

restrial links

- Desktop VC (EVCS) services are enabled at the Offices of Chief Secretary, Chief Post Master General, Director General Police
- Studio Based VC System have been commissioned at **UIDIA, APARD & INCOIS**
- Exclusive Studio based VC commissioned for AP Secretariat
- On an average monthly 100 -120 VC sessions conducted from NIC, Hyderabad Studios
- Virtual class rooms and e-learning framework as a part of NKN services

# **REGISTRATION AUTHORITY**

Digital certificates are the digital equivalent (i.e. electronic format) of physical or paper certificates. Knowing the importance and the need of digital certificates, it has become mandatory for the officials to use the same. At AP state centre, Issuance of digital Signature Certificates for Govt. officials is being carried out on a regular basis. As many as 1948 certificates issued to various state and central govt. and public sector departments.

NKN Services - As a part of the countrywide National Knowledge Network, a State of the art NKN -INOC & Disaster Recovery Centre is being commissioned at NIC, Hyderabad. So far, 55 Universities, Scientific, R & D Institutes (including Health) are brought under the NKN umbrella.

Some of the most successful eGov Applications at the State level that are initiated, implemented and supported at present include :

- Computer Aided Administration for Registration Department (CARD)
- Land Records Management Information System for Revenue Department
- Rural Soft Financial Accounting System for Dept. of RD
- E-Panchayat for Panchayat Raj Dept.

# From the States/UTs

- Water soft web based MIS for Panchayat Raj, RWS
- Integrated Management system of Pay & Accounts Office & Treasuries [IMPACT]
- Pension Settlement & Management Information System
- Prajavani a Public Grievance Monitoring System in Telugu for all District Collectorates
- Online Case Status Information System for Cyberabad Police Commissionerate
- Ambient Air Quality Live for State Pollution control Board
- Online Web based counseling for Engg. MBA, MCA and Polytechnic courses
- Online counseling for Post Graduate courses of NTR Health University
- GIS School mapping For Sarva Siksha Abhiyan
- Karmika Sankshema Nidhi Paryavekshana for Labour Welfare Board
- Stock and Financial Accounting System for Civil Supplies Corporation
- Dept. of Information & Public Relations Official web portal & Centralized Advertisement System
- Girl Child Protection Scheme Portal for Women Dev. and Child Welfare Dept.
- Missing Persons Portal for Women Dev. and Child Welfare Dept.
- Drug procurement system of A.P. Health & Medical Housing Infrastructure Development Corporation
- Blood Bank Information system for Institute of Preventive Medicine
- Online Vaccination Appointment for International travellers
- Online Scholarship Management System for AP Minority Welfare Dept.
- Work Flow System for Dept. of Horticulture
- List of Business Information System LOBIS for AP High Court
- Case Information System for District courts

In addition to the eGovernance applications, AP state centre has developed and implemented SMS Based Applications using Open Source technologies. Some of the SMS applications include Complaint & Alert System for Police Commissionerates of Hyderabad, Cyberabad, Jammu & Kerala, Tracking of Mobiles, Vehicle & Stolen Vehicles, Complaint against PDS and auto forwarding system, Status System for Prajavani, Kadapa and Anantapur and also a Complaint & Redressal System for A.P. State Road Transport Corporation.

# SUPPORT FOR CENTRAL PROJECTS

State Center has been supporting many of the Central projects including Mission mode Projects including



http://www.meeseva.gov.in/

National Animal Disease Reporting System(NADRS), National Employment Portal, Immigration, FISHNET, AGMARKNET, Department of Posts, e-Office, e-Procurement, CGHS, DGFT, eGranthalaya etc.

Training Activities that are being conducted from time to time include training and Technology and Skill updating Programs for Technical staff, and other Project Specific training programs for the users.

# NEW & ONGOING E - GOVERNANCE INITIATIVES

Mee Seva – Revenue Services through APOnline – To provide faster and better citizen services to the public, the State Government launched 'Mee Seva' centres on a pilot basis in Chittoor district and will be available in all districts very soon. This is for the first time in the country that key citizen services were brought under one roof. Mee Seva provides 51 services relating to Registration, Revenue and 15 other departments. Within 15 minutes of application submission, documents electronically signed by the authorities will be handed over to the citizen.

For this Mee Seva, Web services are written to share data from CARD and LAND Record applications. On request, verification of digitally signed student data at the service end Handshake with APOnline for the issue of requested Certificate through the electronic Service delivery system of Mee Seva Counters.

Centralised Computer Aided Administration for Registration Department (CARD), centralised Land Records for Revenue Dept., Work flow automation of Pollution Control Board, Prisons Management System for major Prisons of the state, Work flow automation of Octopus of Police are some of the ongoing initiatives.



http://hortnet.gov.in

## **E - GOVERNANCE AWARDS**

NIC AP state centre has won many e-Governance awards in the recent past, the latest being as follows: The Online Scholarship Management System (OSMS) developed for Andhra Pradesh State Minority Finance Corporation bagged the Bronze Award for "Excellence in Government Process Re-Engineering" National eGovernance Awards 2009-10.

Mobile based food supply chain management system (mFoods, URL: http://apagrisnet.gov.in/ mfoods) for AP Foods Department has won the 8th South Asia Manthan Award 2011. It is developed with an objective for timely supply of food supplies to serve poor, undernourished group of women & children of the state, in an efficient and transparent way. Mobile technology has been built into the system to facilitate the department capture indents, monitor food supply status and track the supply status geographically through mobiles. The other salient features of the system include -Spatial Analysis with Google Maps, Dashboards for moni-

HORTNET - a Vortal to render one-stop-nonstop integrated services(URL http://hortnet.gov.in) to farmers and other stake holders of Horticulture. Agriculture and allied sectors(fisheries, animal husbandry, social forestry, dairy has won the eIndia 2011 Award. It was also a finalist in 8th South Asia Manthan Award 2011. HORTNET help promote holistic growth of the horticulture sector through an area based regionally differentiated strategies viz. research, technology promotion, extension, processing and marketing. Successfully implemented in AP and fulfilling the computerization requirements of State Horticulture Mission, Govt. of AP. Online Scholarship Management System and e-Medlabs (Vaccination appointments online for International Travellers) have also have won the eIndia 2011 Award.

# For further information

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# Agile development model for E-Governance Software

Agile methods typically involve a test driven approach to development, and more and early testing leads to greater quality. Amongst a few well established agile development models are Agile modeling, Agile unified Process (AUP), Extreme Programming, Scrum, and Feature Driven Development.

Edited by Vivek Verma

# What is Agile Software Development Methodology?

Agile software development is an interactive process that allows small development teams to build software functionality in a collaborative environment that is responsive to business change. Development is done in short iterations (typically weeks to months) ending with working increment of software. Salient features of this methodology are that it is quick to reacting to changes in the environment, has a greater customer commitment and a greater focus on the working product.

# Why Agile SDM?

The requirements of various projects in the E-governance sector keep frequently changing and therefore the software development model should factor in this constant element of change. Projects might include various stakeholders and multiple parallel activities overlapping in space and time. Agile methods actively involve the users in establishing, prioritizing and verifying requirements. This close collaboration, supported by feedback from frequent delivery of software is what makes this model suited to development of this genre of software.

## **Advantages of Agile SDM**

Agile methods typically involve a test driven approach to development, and more and early testing leads to greater quality. Agile teams now achieve measurably higher success rates (72%) than traditional application development teams (62.8%) and data warehousing

projects (62.6%).

An agile project incrementally delivers value to the business at regular short intervals of time which helps to provide visibility on a real scale. Even if an agile project is cut short at any point of time an agile project will delivers parts of project that works successfully while a traditional project model will not be able to deliver anything workable.

Also Agile Projects are more modular and being iterative in its approach they are more responsive to the customer needs and keep undergoing refinement. The model brings in the customer as an active participant in the software development and thereby delivering in line with the priorities of the customer. Should the business need change or new technological solutions become apparent the prioritization of the requirements on the list can be easily amended and project adjusted to the new requirements.

# **Manageability of Agile Projects**

Agile project can be managed by applying various portfolio management tools to the project which will minimize the risks and maximize profits. Project metrics can be made available for the manager to have good project governance.

# Factoring the change in requirements

Changes in the requirements of the product can happen due to numerous reasons and a successful solution provider is one who anticipates change and is able to accommodate it into the development of the product. As computing people responsible for catering to the need of government departments, we have faced numerous situa-



MAYANK PRATIK Scientific Officer mayank.pratik@nic.in

# **Technology Update**



tions where changes have been introduced into the products requirement at a later stage. Accommodating a change while following the traditional development model is difficult but agile development model is just the solution to take care of this problem. Agile Development practices are ideal for allowing a high degree of flexibility, evolving a project during its lifetime particularly in the early stages of the product when there is less certainty about business needs.

# **Agile Methods**

Amongst a few well established agile development models are Agile modeling, Agile unified Process (AUP), Extreme Programming, Scrum, and Feature Driven Development. Extreme Programming: Extreme Programming is a lightweight discipline of software development based on values of simplicity, communication, feedback, and courage. It works by bringing the whole team together in the presence of simple practices, with enough feedback after every release allowing the project to be progressively refined aligned with the larger goals.

Scrum: Scrum is a simple framework for effective team collaboration on complex projects. Scrum provides a small set of rules that create just enough structure for teams to be able to focus their innovation on solving what might otherwise be an insurmountable challenge. Scrum is a way for teams to work together to develop a product. Product development, using Scrum, occurs in small pieces, with each piece building upon previously created pieces. Building products one small piece at a time encourages creativity and enables teams to respond to feedback and change, to build exactly and only what is needed.

# Scrum at its Core is governed by three major roles

- 1. Product Owners determine what needs to be built
- 2. Development Teams build what is needed
- 3. Scrum Masters ensure this process happens as smoothly as possible

Agile development strategy is not suited for mission critical systems such as those used for surgical procedures. It is also not very advisable to be followed by large teams that are not co located because an interaction amongst the team is one of the key elements of an agile project.

# **Activity Management**

Activity management comprises of daily scrum review, incorporating any changes as suggested by the review and

some kind of burn down analysis (which actually helps to track progress and completion). After the process is completed an activity review is conducted to check whether the developed product conforms to the user requirements.

# **Agile Vs Waterfall Model**

One of the advantages of waterfall development model is that budget for each activity can be easily defined. This traditional methodology assumes requirements can be predicted upfront. As a result it fails to adequately respond to changing conditions and forces agencies to incur costs disproportionate to project returns. It assumes that requirements are fully understood by both user and implementing agency and that the requirements are unlikely to change. Yet due to the often-unique nature of government systems, software contractors typically face challenges to which they have never been exposed, rendering predicting of future needs an inherently futile task.

# Agile and E Governance

Agile Software Development mitigates the Risk Inherent in uncertainty by approaching a Project as Multiple Independent Tasks. The requirements on which an e-Governance software is likely to be built would change over time to reflect shifting technological and organizational priorities. As a practice widely used in the private sector, empirically agile development delivers better performing projects on time and under budget. Growing budget deficits in recent decades have rendered the Government anxious to deliver smarter, more cost-effective services to its citizens. Agile SDM is one of the best suited methodologies for development of e-governance software as developers would be able to respond well to the changing priorities and to feedback provided by the users.

Agile's flexible and iterative nature makes it one of the most suited methodologies to work in the context of e governance. Dividing government computing between 'agile' and 'platform' work could achieve cost and time savings while delivering more effective and flexible services. Mind tree one of the vendors implementing the Unique ID project is reportedly doing so based on Agile Software development model.

Though Agile has been adopted as a preferred development model for various projects in US and UK it remains to be seen when India adopts it as a model for development of E- Governance Software.

## For further information

# **MAYANK PRATIK**

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# E-Governance initiatives - Kupwara (J&K)

ICT was introduced in 1996 with the setting up of NIC Centre. In 2004, Community Information Centres were established in each block of Kupwara, thus extending the reach of ICT to the remotest areas to serve the rural masses.

Edited by Vivek Verma

ituated at a distance of 90 kms from Srinagar, Kupwara, frontier district of Kashmir Valley, is full of scenic beauty, dense forests and rich wild life. This makes it significant from tourism and wildlife point of view.

ICT was introduced in 1996 with the setting up of NIC Centre. In 2004 Video Conferencing facility was established which served as a major mode of communication during devastating earthquake in October 2005. VC services are currently being used extensively by district administration and other government offices.

In 2004, Community Information Centres were established in each block of Kupwara, thus extending the reach of ICT to the remotest areas to serve the rural masses.

Website - http://kupwara.gov.in The official website of the District provides information of interest to general public like Who's Who, Telephone Directory, Tourist Places, Tenders, Elections & Recruitments etc. links to many important websites are also available.

#### **PROJECTS**

# Computerization of Urban Local Bodies:-

Birth and Death Registration: Citizens can download the birth certificate from the website http://jkhudd.gov.in by providing parent's name, date of birth, Email id and mobile number.

Building Permission: Without visiting the NOC departments, citizens are able to know the status of their building permission through SMS, Email and website.

Public Grievances Monitoring System: Anyone can register their grievances online (http://jkhudd.gov.in) and attach along with supporting documents. Concerned officials can update the status using their logins and applicants can check the status.

Establishment: Employees of ULB



ERCMS Cell

MUHAMMAD ROUF WANI Scientist-D rouf.wani@nic.in

# **District Informatics**



SECC Charge centre at NIC Kupwara

can check their pay, accounts, promotions and other administrative details.

#### e-Court:-

District Court has been computerised where E-filing of cases is done and Cause Lists generated. Future plans include Web cause lists, status of pending cases, production of undertrials through VC and starting of subordinate courts.

#### **Elections:-**

Electoral Roll Management System developed and implemented by NIC, the data entry is done in Urdu and the electoral rolls are generated in Urdu and English. Summary revisions, special summary revisions and continuous update of electoral data and generation of final electoral Rolls/ supplements are being carried out as and when asked for by the commission. Electoral rolls are available on the department's website as well.

In addition to it, Generation of Electoral Photo Identity Cards and Comprehensive support during Parliament/ Assembly/ Panchayat/ Municipal elections are some of the activities undertaken for election department.

# Transport:-

Services such as, payment GR generation and issue of learner license are in practice for the last three months. The issuance of Permanent Driving License will start soon. The data is being uploaded to the State Register.

# Health:-

Integrated Disease Surveillance Programme, a web based software to help in collecting important statistical data to check the spread of diseases by early warning signals and Mother and Child Tracking System, recognized as a priority area for providing effective maternal and child healthcare services, have been implemented.

National Animal Disease Reporting System covering 11 Block Animal Husbandry Offices and connected to national network for rapid flow and analysis of animal disease data is under implementation.

# Online Public Grievance Monitoring System:-

can lodge their grievances http://jkgrievance.nic.in, which is monitored by CM office. The complaints are forwarded to the concerned department for redressal. Complainant can track the status of their complaint online. It has resulted in effectiveness and transparency.

# **Centralised Personal Information System:-**

A Web based application maintains the personal information of all the employees. So far the information of all the employees of finance department has been uploaded.

# **National Land Record Modernization Programme:**

It has been launched with an aim to modernize management of land records, minimize scope of land/property disputes, enhance transparency in the land records maintenance system, and facilitate moving eventually towards guaranteed conclusive titles to immovable properties. Accordingly, an action plan has been prepared and submitted for approval.



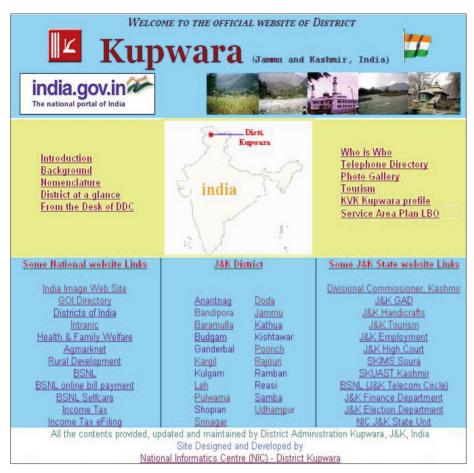
**Training Session in Progress** 

Mahatma Gandhi National Rural Employment Guarantee Act has been implemented and services such as updation of job cards, job slips, muster roll, job registration, payment transaction, funds utilization, reconciliation, etc are being done.

Planplus has been implemented to demystify and strengthen the decentralized planning process and the District Plan is being prepared using it since 2007-08.

# Social and Economic Caste Census 2011:-

At charge centre space, equipment, internet connectivity, manpower and overall supervision to the project is being



provided. Cataloguing is complete. Field survey is complete in almost 25% of EBs. Data verification is being done for the completed EBs.

# National e-Governance Plan:-

Under SWAN, District POP is functional and District Offices and Block POPs are under implementation. 2Mbps Leased Line connectivity has been provided to SSP Kupwara, SP Handwara, Post Office and District Court. KeGA (Kupwara e-Governance Agency), with NIC being its active member, has been formed to monitor all ICT activities in the district.

#### Police:-

CCTNS facilitates the duty officer in registering cases by capturing details and records the events of case progress by Investigating Officer. An Electronic Surveillance Unit is functional to monitor the infiltration, exfiltration and mobile calls of militants and by assist-

ing the investigating agencies in sensational cases.

#### **Education:-**

Two Computer Aided Learning centres in each of the educational zones and two touch-screen based Hole in Wall centres have been established for teaching purposes.

District Information System for Education for all government and private schools and Secondary Education Management Information System for use in government and private; secondary and higher secondary schools is in place.

# **Training:-**

Training programme is regularly conducted for the officials of various departments, on Computer basics, Internet and the application software. ICT training schedules for tribal students under TSP scheme is also prepared.



Mohammad Shafi Rather IAS
Deputy Commissioner

In this era, Information technology holds the key for overall development. It gives me immense pleasure to present the e-Governance initiatives that we have taken with the help of NIC. The initiatives will bring the people of the district closer and at par with the people in the rest of the state/ country/ world. This is a step forward towards improving public interface of the administration for bringing about transparency. I appreciate the staff engaged with NIC and **District Informatics** Officer in particular for their active and dedicated efforts in bringing the egovernance in the district to this stage.

# For further information

#### DISTRICT INFORMATICS OFFICER

District Informatics Officer NIC District Centre Kupwara Jammu & Kashmir

Kupwara@nic.In Phone: 01955-252427 Mobile: 9906569041

# Palakkad - A step ahead in e-governance with digital files and e-services

NIC, Palakkad District Centre was established in 1988 and ever since the centre has developed and implemented at various IT projects in the district to improve the functioning of district administration and delivery of government services to the citizens.



Renovated Collectorate DC\*Suite Services site

Edited by

**SRILATHA** District Informatics Officer NIC Palakkad srilathal@nic.in





R. Gayatri alakkad, the land of paddy fields palmyras, is cynosure among Kerala's most picturesque districts. It is the gateway to Kerala from the north and is often referred to as the rice granary of Kerala. Located at the foot of Western Ghats, it is known for its rich flora and fauna. Being one of the larger districts of Kerala, Palakkad has a topography that is a blend of forest, rivers, valleys, hills etc. It is situated at almost middle of Kerala and shares border with Coimbatore District of Tamil

Nadu. The Silent Valley National

Park is an everlasting marvel to

the tourists. The abundant for-

est wealth, dams, wild life sanctuaries, rivers, rare birds and animals, historical monuments, traditional ayurvedic treatment centres have given Palakkad an exquisite and outstanding touch.

NIC, Palakkad District Centre was established in 1988 and ever since the centre has developed and implemented at various IT projects in the district to improve the functioning of district administration and delivery of government services to the citizens.

# **VARIOUS ICT INITIATIVES** OF THE DISTRICT

DC\*Suite- The Project named DC\*Suite for Mordenisation and computerization of Collectorate started in 2004 as a pilot project in Palakkad District



Sri. K S Srinivas IAS, Secretary (IT), Kerala

"Palakkad District has achieved greater dimensions in ICT implementations and online delivery of citizen services through CSCs, Panchayats and Village Offices by implementing projects like e-District, DC Suite-TalukSuite-VillageSuite, e-Manal etc."



Sri. K.V Mohankumar IAS. **District Colletor, Palakkad** 

"The DC\*Suite was started in the district Collectorate in 2004 as a pilot project with an aim to introduce e-governanace in administration. Subsequently we introduced Taluk\*Suite and Village\*Suite. To be frank, the e-file flow enabled us to improve service delivery mechanism of district administration to a great extent."

Collectorate aiming to introduce e-governance in administration and to enable to improve service delivery mechanism of the district administration. Implementation of this project has changed the face of the Collectorate with better working ambiance and paperless digital file system.

## Renovated Collectorate DC\*Suite Services site

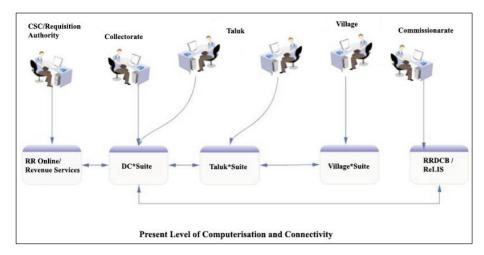
DC\*Suite is an integrated suite of applications covering 26 functional areas for the Collectorate. It is a web enabled solution developed using Open Source LAMP technology. E-Fileflow system is the backbone of the DC\*Suite and all sectoral applications modules are tightly coupled with the file movement system to generate the file and its content. All approved documents are prepared with bar code and timestamps which can be verified at any point of time. Scanning of all tapals(dak) received by post and usage of e-tapal(dak) ,e-dispatch and online tapal(dak) for inter office communication between District, Taluk and Village and other departments

realised paperless office. Seamless data sharing across applications is made possible and Unicode local language support is also available. The project has been successfully implemented in the pilot District where a paperless e-Collectorate is functioning. Over 6500 file transactions takes place daily and more than 350 letters and online requests being received and processed. Service deliveries to the citizen takes place through multichannel access points like Counters, KIOSK, Internet and SMS. Services are available 24\*7 with disaster recovery centre at Collector's camp office.

It is replicated in all other 13 districts of Kerala. The same application is replicated in the State of Goa with our support.

Taluk\*Suite - After the successful implementation of DC\*Suite project, an extension of this project to the Taluk - named Taluk\*Suite is implemented. The pilot project is implemented in all 5 Taluks and 2 Special Taluks of Palakkad District. Now Taluk\*Suite is replicated in all other 13 Districts of

### **District Informatics**



Kerala. Village\*Suite - Now the District is implementing the Village\*Suite at the lowest point of Revenue Administration, the Village Offices. By this Palakkad district becomes the first e-Revenue District in the country. The Village\*Suite works in integration with DC\*Suite & Taluk\*Suite.

**ReLIS** – Revenue Land Information System is a web based open source application for online mutation and its processing in Registration, Village and Taluk Offices. Pilot implementation in 17 Villages in the district is completed and it is being replicated to villages in other Districts.

**e-Manal** A web based Software for issuing River Sand Passes online from different counters on first come first basis. This is purely a Self sustainable Citizen centric project which makes Customer to get the Sand on Government fixed rate. The service is delivered through all Panchayats.

**RR On-line** RR On-line is a software to enable the Requisitioning Authorities to submit their Revenue Recovery Cases from their office through Internet. The data will be available in the DC\*Suite, Taluk\*Suite and Village\*Suite for further action. This makes the RR activities very fast and avoids postal delays

## SUCCESSFULLY IMPLEMENTED PROJECTS

### e-District

e-District as a concept proposes; integrated, seamless, and online delivery of citizen services at the district level through automation of workflow, backend digitization, integration and process redesign. Palakkad district is one of the pilot districts to implement e-District. The major service categories include G2C services like issue of Certificates, Filing of RTI & Public Grievance and Request for new ration card etc. More than 1 Lakh digitally signed certificates have been issued in our district. www.edistrict.kerala.gov.in

**SPARK** Service and Payroll Administrative Repository for Kerala (SPARK) is an Integrated Personnel, Payroll and Accounts information system, through which all state Govt. Employees are getting their Payroll, Income Tax details and related services. The district has implemented this project successfully.

## STATE LEVEL POJECTES IMPLEMENTED

SMART MOVE- RTO Computerisation in all 6 offices,

PEARL in all 22 Sub Registrar Offices, TetraPDS for Civil Supplies department in all 5 offices, AHEAD for Animal Husbandry Departments, Treasury Information System in all Sub Treasuries and District Treasuries.

The District Centre was Involved in the Local Bodies Election and General Elections

#### **CENTRAL PROJECTS**

AGMARKNET, NADRS (National Animal Disease Reporting System), Confonet project for Consumer Court, e-Court in all Courts, PlanPlus(Pilot implementation) for BRGF Plans monitoring, MGNRE-GA(Pilot implementation), Forest Rights Act 2005 were successfully implemented in the District

#### RECOGNITIONS

DC\*Suite project received CSI-Nihilent Best Project award in 2006-2007 for its successful implementation in Palakkad District.

Palakkad District received CSI-Nihilent e-District Winner Award for the year 2007-2008 for the various e-Governance initiatives in the District. This is the first time this kind of an award was constituted for a District and became the first single winner in this category. The maiden Kerala State e-Goverance Award 2008 was received by Palakkad Collectorate in the Digital File Flow category.

### For further information

#### **DISTRICT INFORMATICS OFFICER**

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# **CHITTORGARH** ICT: Majesty, Grandeur and Height

CHITTORGARH in Rajasthan, evokes memories of great heroism, courage and sacrifice by Rajput men and women in the intermittent battles that they had to fight against invaders. Chittorgarh is regarded as one of the most outstanding hilltop forts of the country and is indeed the "Pride of Rajasthan State". The Vijay Sthamb is also an important attraction. Sanwariyaji Temple (Lord Krishna Temple), Bassi and Sitamata wildlife sanctuaries (famous for its flying squirrel) also attract tourists towards Chittorgarh.



ARUN KUMAR BANGER District Informatics Officer (Prinicipal System Analyst) NIC Chittorgarh ak.banger@nic.in

**RAJNI GUPTA** District Informatics Associate NIC Chittorgarh gupta.rajni@nic.in



ince 1988, when NIC District Centre started, Chittorgarh has been spearheading in close association with the district administration to promote multi faceted ICT based initiatives for the betterment of service delivery to the citizens living in far and remote areas.

Edited by

**Vivek Verma** 

### **DISTRICT WEBSITE:**

http://chittorgarh.nic.in is verv informative for citizens to get informed about district administration. Apart from , It also includes the information about absentee employees, Ratri chopal taken by District Collector ,essential Phone nos. as well as various initiatives undertaken by district administration for the benefit of citizens.

### **KEY ICT INITIATIVES:**

Apna Khata Implementation (Land Record Computerisation): The application makes easy access to the computerized land records and facilitating easy maintenance and updation of change due to irrigation, natural calamities, on account of legal changes, transfer of ownership, land acquisition lease etc.It has established in all 10 Tehsils where Nakal of Khata is being generated and issued to citizens on demand. A touch screen kiosk has been installed at District Centre though which citizens can get latest information of his land record.

Integrated Financial Management System (IFMS): It is an e-Governance initiative for effective, accountable and transparent Public



Chittorgarh Website

Finance Management. The main objective of IFMS is to achieve computerization of state wide financial transactions and efficient monitoring and facilitate a Single Window interface across various functions. It includes budget planning, allocation, distribution and fund management. It makes the allocation and distribution of budget more transparent .NIC District Centre technically supports the concerning department for budget allocation and distribution.

Redressal Sugam Public Grievance: It is web based solution http://sugamrpg.raj.nic.in for the removal of public grievances. District administration regularly monitor the website and instruct the concerning department for action to get rid the public from grievances.

Sugam Single Window: It is a system for facilitating the citizens to get many services (various types of certificates) at one place. Many types of certificates are being generated throughout the whole District viz. SC OBC Special OBC, Bonafide, Income, Birth & Death , Minority etc .NIC District centre technically supports for the application and instruct all tehsils to upload the data regularly so as to maintain the sugam single window



Information Technology holds the potential in providing the critical information and delivery of public services in fast, more effective and efficient manner.

NIC District Centre, Chittorgarh is playing a pivotal role in providing and promoting the ICT culture by delegating accurate, transparent and responsive information and services to the district,

which has radically changed the way, the District Administration establishment functions for the betterment of citizen centric services. I also appreciate the efforts made by Mr. Arun Banger, DIO-NIC Chittorgarh for his active participation and regular contribution to the promotion of ICT culture in district administration in all the peripherals of whole district and in making egovernance a true success in the district chittorgarh.

### SH. RAVI JAIN (IAS) **District Collector & Magistrate Chittorgarh**

records up to date.

Social Security Pension System: This is an initiative for efficient and timely payout of pension and in turn speeds up the entire procedure from approval to disbursement of the pension under a variety of schemes. The web-based solution eases the maintenance of concerning request, authentication, approval and payout of pension under a variety of social security pension schemes. It will be utilized by all SDOs, BDOs, Tehsildars, Treasury Officers and Sub Treasury Officers.

Online Pay manager System: This is a web based system to generate the paybills. Training has completed with approx. 600 Persons for all the DDOs. Now the technical support is being given to the officials for the generation of pay-bills through existing data as well as with fresh details.

Transport Computerization System: This software is for vehicle registration and driving license generation respectively and implemented in the district. Registration and license processed information is transmitted regularly to state centre through VPN.

General Elections: District Centre supports for successful conduction of election for Lok Sabha, Assembly, NagarPalika , Panchayati Raj with involvement in various polling activities, result transmission.

Video Conferencing: It is being conducted regularly as per the schedule received by the e-mail with the concerning departments in District Administration.

**District Network : LAN via 100** mbps is used to connect the district centre with state HQ. LAN connectivity is extended to District Collector office, SP Office, Post office and VC

IT awareness Trainings: Regular training is conducted for the govt. officials so as to build them knowledgeable about the basics of ICT tools and culture. So they can efficiently use this knowledge in doing their routine work.

### **DISTRICT LEVEL PROJECTS:**

Paper Under Consideration and File Monitoring System (PUCMS) : As the name suggests, the software

maintains the record of the documents posted for the district collector and district officials .These docuare then forwarded to the concerning departments/sections for their action. Consequently, the respective department takes the action and reply of it, which are then maintained in the application. For the overall process a meeting is organized at first week of month under the chairmanship of District Collector who keeps track the status regarding the pendency with District Officials regularly. Apart from this star rating is also allotted to the documents according to their importance, so as to set the priority of documents for their disposal.

Legal Section Application: Application maintains the records of the documents received by District collector for legal advice, note sheet is prepared for the concerning document with its status and a software generated document is given to concerning department for action.

Hardware Management System: Application is used to maintain the records of hardware in the District Centre with its essential information viz. serial no., installation date, received date, Project name etc. as well as its working status, so as to keep track it easily.

Arms License Monitoring System: This application is to keep up-to-date record of Arms Licenses registered at the District Administration.

Village Database Management System: This application maintains the records of ILR, Patwar and their respective villages.

### For further information

### ARUN KUMAR BANGER

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## Dubai e-Government **Department launches** online Direct Debit for Govt. Payments

**E-government** initiatives of Dubai have been cynosure in the world panorama of cyber governance. This time Dubai e-Government Department has launched a virtual account for making government payments online, in collaboration with Commercial Bank of Dubai (CBD). The government aims to ease the life of citizens and to provide innovative electronic channels of easy access anywhere and at any time.

The service, called "Cash Online" is a new CBD product designed and developed for individual and corporate non-CBD account holders to open a free virtual account within minutes without the need to have a minimum balance following the submission of the required official documents.

By virtue of this account, customers can now pay online for the fees of all Dubai government entities in a quick and hassle-free manner. To execute the same, CBD has opened up a gateway to let users create a free virtual account, allowing Corporate and individual users to be an account holder following the submission of required official documents.



This hassle free virtual account would require no minimum balance. The account is linked to Dubai e-Government's e-Pay portal such that payments for government services could be directly made from customer's account with five of the major banks in United Arab Emirates.

Last year, the government e-Pay portal collected a total amount of AED3.3 billion (US\$898 million) through credit card payments, and usage of direct debit services rose by 10 fold, from 54,538 transactions in 2010 to 522,815 transactions in 2011.

For information: http://www.dubaided.gov.ae



National ICT Australia (NICTA), the apex ICT research body of Australia has launched a "Digital Productivity Showcase" facility that displays new applications for digital communications, paving way for a low-risk environment to create and test new technologies.

The initiative being Australia's first Living Lab, provides a platform for industry and research to work together, investigate real-world problems and demonstrate innovative technology that will provide logistics solutions for the future. The lab is driven by a group of logistics companies, research organisations, universities, and IT providers. They work together to exchange experience, discuss

## Australia launches living laboratory for digital apps

trends, innovate and research to jointly shape the future of logistics.

A special facility zone has been set up at NICTA's Sydney head office in order to demonstrate how digital tools can be used to improve productivity, access information and streamline digital services. This "futuristic space "will serve as a "living laboratory" to help build digital applications and tools for Broadband, Communications and the Digital Economy.

For instance, one of the displays demonstrates how a non-English speaking patient in a remote area can file a Medicare claim form using the National Broadband Network (NBN) and video interpreting services. Other displays show how end-users can understand and get value from massive data stores, back-up and recovery systems using a public cloud, as well as social TV apps, and mobile communications.

For information:

http://www.futurelogisticslivinglab.com.au/

# Bangkok launches mobile application for real-time traffic updates

**Metropolitan Police** Bureau of Thailand has launched a newly created application using which drivers in the capital of Thailand can now avoid traffic jams by checking the real-time traffic status on their mobile devices. Thanks to the new application that has brought a sigh of relief for daily commuters and office goers.

Citizens can access the city's real-time CCTV on the go via 3G, and be updated with the latest traffic news feeds and accidents. Apart from real-time CCTV pictures, the Traffic Police app also provide 'Emergency Call' function in which citizens can call for necessary emergency helps without dialing any phone number.

This traffic app will facilitate Bangkok road commuters, expand Traffic Police's services to wider channel as a value-add to the original Traffic Police's website, and provide effective

and up-to-date e-services to citizen. The picture transmission from the street and highway's CCTVs, operated by National Electronics and Computer Technology Center (NECTEC) will be delayed for five minutes, but it is enough



for users to see the traffic conditions and plan their route. The Application can be downloaded free of charge from App Store and Android Market.

For information: http://thailand.prd.go.th/

# Chinese province develops monitoring network to secure g-goverment portals

The Government of Yangzhou, a city in China's eastern Jiangsu province is all set to develop an information security platform which will monitor its online portal as well as major IT systems. As the security implications have become more apparent during this decade, it prompts governments at different levels to invest heavily in upgrading their security systems.

The project was undertaken in 2010, where the Government of Jiangsu Province started deploying a security platform in each of the 13 cities in the province including Yangzhou. Digital China, the country's largest system integrator, has been commissioned to design and implement the project, which would cre-

ate a monitoring network covering and linking all the municipal governments in the province.

The project is considered to be the largest and most intensive regional government information security platform in China, passed the preliminary test in November 2011, seven months ahead of its launch in April 2011. It is deployed to protect 271 e-government portals in the province, guarding them against a variety of information security problems including service disruption, site defacement, Trojan, domain theft and leakage of sensitive information.

For information: http://english.gov.cn/

## **CollabLand: Software for Digitization** and Mosaicing of Land Survey Maps

(http://www.collabland.gov.in)

ollabLand is software for digitization and mosaicing of survey maps for computerization of Land Records. It is currently being implemented in states like Tamilnadu, Kerala and Puducherry under the National Land Records Modernization Programme (NLRMP). The official website of CollabLand software provides detailed information about the product and its features. The site facilitates download of the software by users from various States and Union Territories after due authentication. The user manual in .pdf format is also available for free download. Besides, the site provides an overview of the implementation status, contact information, and the training activities in various



states. Further it throws light into the latest enhancements and the roadmap of the software. A brief introduction to various surveying techniques, a gallery of maps created using the software and a detailed FAQ are the other salient features of this website. Facility has been provided for the users to enter their feedback through a form.

## Commercial Taxes Department, Andhra Pradesh

(http://www.apct.gov.in)



ommercial Taxes Department of Government of Andhra Pradesh contributes more than 65% to the State Revenues. It is the biggest and main bread earner for the State and main function of the department is administration of Value Added Tax (VAT), Entertainment Tax and Profession Tax. As part of this vision, department is providing Tax Payers Services through Online System in addition to other channels to give choice to dealers to opt for a service channel which is more convenient to him and also to reduce avoidable physical interface between citizen and tax office. The website delivers comprehensive information with quick navigation. It is highly user friendly and

requires SSL authorization to access, where IP is recorded for a session.

The major ICT initiatives of the Department, available online are: eRegistration: Dealers can file their application Online through Internet and they can send documents to Tax Office through Post. Registration Certificate is dispatched to dealer place through post. Prospective dealers have choice as per their convenience to choose Tax Office or Central Registration Unit (CRU) or Online System. eReturn: Dealers can file their Tax Return through Internet from any place on 24X7 basis even on holidays and make payment Online through Internet Banking account. ePayment: Dealers make payment online without visiting Tax office and the tax is realized by the Government next day itself. Computer Dealer Service Centre (CDSC) & eWaybill: The dealers can fill up goods transaction details for which they desire Waybill online and selfprint the Waybill on 24X7 basis.

## E-Mamta, Mother and Child Tracking System, Gujarat

(http://e-mamta.gujarat.gov.in)

eduction of Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR) are the important public health challenges for India. As a major initiative in this regard, the Health and Family Welfare Department of the Government of Gujarat, has introduced a 'Mother & Child' name based tracking Information management system called "E-Mamta" in collaboration with National Rural Health Mission (NRHM) and National Informatics Centre (NIC).

The system aims at registering individual pregnant women, individual children in the age group 0 to 6 and adolescents along with their full details to ensure complete service delivery of Ante Natal Care(ANC), Child birth, Post Natal Care(PNC), Immunization, nutrition and adolescent services and to track the left outs of these services.



The bilingual website, with English and Gujarati interface is quick, easy to navigate and well presented. Health details of about 85 lakh families in the entire State comprising about 4.30 crore individuals covering more than 80 percent of the population have thus been entered so far in the software's database and system generated unique Health IDs have been provided to all.



## **Deptt.** of Libraries and Research, Govt. of J&K

(http://jkpubliclibraries.nic.in)

The launch of the website by the Department of Libraries and Research as part of the Automation & Networking of Public Libraries Project is a welcome step to showcase the rich heritage of knowledge and Information of/about Jammu and Kashmir. Beside a quick and easy navigation menu, the website comprises two portions -informative and interactive. The informative content relates to non-interactive portion like information on organizational set-up, library locations, contact details, collection, procedures, citizen charter, RTI, library committees and archives. The

interactive content comprises Online Public Access Catalogue (OPAC). Digitized manuscripts and rare books are being added to this content. Even as the data entry is in progress, they have started uploading OPAC information about the four major public libraries covered in the Pilot Phase.

About 13 manuscripts, including Arabic, Bakha, Balti, Dogri, Kashmiri, Punjabi and Sanskrit have been digitized so far. The copies of the digitized manuscripts are available on the payment of Rs. 10 per folio (2 pages). The material is instructed to be used for academic reference only and for publication, the user is required to obtain proper permission from the Competent Authority (Director of Libraries & Research, J&K). As the data entry is carried forward the dynamic content will keep on updating periodically. Contributed by: Lokesh Joshi

## In the **NE**

### **Meghalaya Launches its Public Grievance Redressal System**

The Chief Minister of Meghalaya, Dr Mukul ■ Sangma launched the online Meghalaya Public Grievance Redressal and Monitoring System on 1 March, 2012 in Shillong. The system - designed and developed by National Informatics Centre (NIC) - enables citizens of the state to register their grievances against various government departments online and to keep track of the status of their complaints.

Speaking on the occasion, Dr Sangma said that the implementation of this system would help the Government to identify the lacunae in the functioning of government departments and to take remedial measures. "We have a major challenge at hand as now the people would expect the Government to respond to their grievances," the Chief Minister said.

Each department has notified nodal officers who would respond to the complaints of the public. Shri W M S Pariat, Chief Secretary to the Government of Meghalaya said that the success of the system would hinge on how the nodal officers respond to the grievances. Shri P. K Jha, Joint Secretary to the Government of India, Department of Personnel and Training, said the system would



Chief Minister, Dr. Mukul Sangma during Launch of the Public **Grievance System** 

enable the government to dispose of public grievances speedily.

An in-depth presentation on the system was made by Shri Alfred Kirubakaran, Technical Director, National Informatics Centre, New Delhi and the vote of thanks was given by Shri Timothy Dkhar, State Informatics Officer, National Informatics Centre, Meghalaya.

Sabyasachi Choudhury, MEGHALAYA

### Taxation Department of Meghalaya launches e-services for VAT

The Hon'ble Chief Minister of Meghalaya, Dr. Mukul f L Sangma officially launched E-Services (VAT) of the Taxation Department at the State Central Library Auditorium on Meghalaya Day, 21st January 2012. The Deputy Chief Ministers Shri B.M. Lanong and Shri R. Lyngdoh, Chief Secretary Shri W.M.S. Pariat, other Ministers and senior officers of the Central and State Governments were present. A large number of members of the trading community also attended the function. Addressing the gathering, the Chief Minister said, "E-services are aimed at bringing about trans-



The Chief Minister launching e-services

parency and in eliminating manipulation in the Taxation department." E-Registration, e-Payment, e-Waybill and e-Returns are the e-services that have been designed and developed by National Informatics Centre (NIC) Meghalaya for the Taxation Department of the Government of Meghalaya. With the implementation of E-Services, government dealers would be able to apply for road permits, deposit and pay taxes, file their returns and apply for new registrations online. Earlier, the Taxation Department in collaboration with NIC had conducted a number of workshops and sensitization programmes at Shillong, Tura and Jowai to educate the citizens especially those from the trading community about the benefits of using online services.

Sabyasachi Choudhury, MEGHALAYA

## CSI-Nihilent eGovernance Award of Excellence under District Category to Nanded

Nanded District (Maharashtra) has been selected for CSI-Nihilent eGovernance Award 2010-11, the Award of Excellence under District Category. The Award was presented to the District during the 46th Annual National Convention of Computer Society of India at Ahmedabad on 2nd December 2011. The Award was received by Dr. Shrikar Pardeshi IAS, District Collector, Dr. Nishikant Deshpande, RDC, Shri Rajesh D. Bhusari, DIO, NIC and Shri Sunil D. Potekar, DIA, NIC, Nanded. The award was presented by the eminent scientist Dr. V. Rajaraman, Shri Surendra Kapoor, Convener, Shri. M.D. Agrawal, President, CSI and Shri L.C.Singh, President and CEO,

Nihilent Technology at a glittering function. Credit goes to NIC, Dr Shrikar Paradeshi IAS DM, Nanded NIC has developed web based application software called PARADISE for online application filing and certificate generation. This software was basic element to bring all 310 CSCs on single platform. The prepaid accounting feature of this software has proved a helping hand in accounting process. All the services are stan-



Mr. Sunil D. Potekar, Mr. Rajesh D. Bhusari, Dr. Nishikant Deshpande, RDC, Dr. Shrikar Pardeshi, District Collector receiving the Award

dardized and the GOM has issued a GR to implement this software at all Districts in Maharashtra. Till date 12 Districts have started the implementation. Shri Moiz Hussain, SIO, Maharashtra, has provided precious guidance to DIO and DIA NIC Nanded in development of this software. The credit of this award goes to NIC and Collectorate Team.

Sh.Rajesh D.Bhusari, MAHARASHTRA



Dr. Rakesh Gupta, DC Faridabad, Sh. Vipin Mittal, DIO Faridabad, Smt. Seema Gupta, Chairperson, Red Cross society examining the website

## NIC Rajasthan Officers Visit NIC HQ

team from NIC Rajasthan State Centre, Jaipur including all District Informatics Officers, IFMS Team along with some NIC State Centre Officers visited National Data Centre, Shastri Park, New Delhi on the 16/02/2012 under the leadership of SIO Rajasthan. It was for the first time that such visit was organized. DG NIC and DDG (Dr Y.K. Sharma) addressed all the team members and expressed their happiness on such efforts. The site tour organized by NDC Officers was preceded by a presentation about working of NDC. Later on, all the team members were taken to data centre for site visit. The coordination from the NDC team headed by DDG (Mr. Mohan), STD (Mr. Rajput) was commendable. The efforts put in by Mr Rammohan Sangal NICSI coordinator for Rajasthan and Mr. Vipin Kumar Mittal made it possible to organize such a visit. It was a great memorable experience for all NIC Officers and left the officers amazed at the quality of infrastructure that NIC has created.

Chandan Sen, RAJASTHAN

## Second NIC VC Studio at **Jodhpur Inaugurated**

M Rajasthan, Shri Ashok Gehlot interacted with Kanpura GP of Aimer after inaugurating the 2nd ■VC studio at NIC Jodhpur on the 4th March 2012. Honourable Energy Minister Dr. Jitendra Singh, State Agriculture Minister, Shri Gurmeet Singh Kunner and other dignitaries were also present. SIO NIC Rajasthan, Mrs. Indu Gupta presented the brief introductory demonstration on GPNIC, National Pilot on Rural Connectivity. The CM interacted with Ms. Manju Rajpal, District Collector, Ajmer, Shri Jagdish Bairwa, Sarpanch Kanpura and other villagers and took the feedback of various government schemes and inquired about the popular demand of the area from the sarpanch. An amount of Rs.40 Lac has been sanctioned for the solar power panel in the 20 Pilot Schools under the project.

The NIC team was led by Mrs. Indu Gupta, SIO NIC Rajasthan, DIO Jodhpur H S Gehlot, DIA Ravi Mathur, PSA Amit Agarwal, DIO Ajmer Ankur Goel, and DIA Teja Singh Rawat. Jodhpur is the first district of Rajasthan where the second VC studio has been established at NIC. The VC studio has a capacity of 50 persons, with modern



CM Raiasthan Interacts with Kanpura GP during inauguration of 2nd VC studio at NIC Jodhpur

facilities like Projector, Motorized Display Screen, Interactive Panel, Visual Presenter, LCD T.V., Internet and power points on each seat. The Kanpura Panchayat is one of the 10 pilots Gram Panchayat selected in the Rural Connectivity programme initiated by GoI with the support of NIC at the Srinagar Block of Aimer District. BSNL has provided fiber connectivity to the 10 pilot panchayats and NIC has developed portal to provide citizen centric services for the residents. Honble US President, Shri Barack Obama also held VC from Mumbai to Kanpura Panchayat to know about the impact of e-governance services during his visit to India in November 2010 last.

Chandan Sen, RAJASTHAN

## **Shri Munda inaugurates Online Pension** Disbursement at NIC Hazaribagh and Koderma



Shri Arjun Munda inaugurating the Online System at Hazaribagh

I housands of pensioners of the districts of Hazaribagh and Koderma covered under four schemes namely Indira Gandhi Old Age Pension, Indira Gandhi Widow Pension, Indira Gandhi Disabled Pension and State Old Age Pension had a pleasant surprise on 26th & 27th February 2012 when Shri Arjun Munda, Hon'ble Chief minister, Jharkhand inaugurated

the "Online pension Disbursement System" under NSAP-MIS at both the NIC District centres respectively. The online system developed by NIC Hq. supports online pension disbursement and generation of pension scroll for banks and post offices. The system facilitates timely payment of pension to pensioners directly from banks into their account in a transparent manner. Speaking in front of a large gathering at both the centres the Chief Minister congratulated Mr. Manish Ranjan and Mr. Shiv Narayan Tiwari both the Deputy Commissioners of Hazaribagh and Koderma respectively and NIC for their achievement. The system covered all 16 blocks of Hazaribagh and Chandwara block of

Koderma for pension disbursement. Shri Brijest Srivastava, Sr. Systems Analyst explained that the new system will provide the pension details in electronic format every month to the pensioner's bank from the district itself. Mr S K Deo and Mr Subash Yadav both DIOs of NIC Hazaribagh and Koderma respectively provided the necessary technical support.

Prashant Belawariar, JHARKHAND

### **NIC Rajasthan Bags Two Silver Awards**



The team of NIC Rajasthan receiving the award

t was laurels again for NIC Rajasthan as  $oldsymbol{1}$ (PCTS) Pregnancy Child Tracking and Health Services Management System, (for Medical Health & Family Welfare Department GoR) by NIC won the National e-Governance award 2011 (Silver) in category Outstanding Performance in Citizen-centric Service Delivery . Online Answering Information System "OASYS" (for Legislative Assembly Rajasthan) by NIC won another silver under the category of Innovative Use of Technology in eGovernance. The awards were presented by Hon'ble Governor of Odisha, Shri M. C. Bhandare on 10th February 2012 during the valedictory session of 15th National Conference on e-Governance, held at KIIT Convention Centre, Bhubaneswar and was received by SIO Rajasthan Indu Gupta, Tarun Toshniwal STD and S.L. Kumawat SSA.

PCTS is a web based system developed by NIC for improving its medical, health and family welfare services at grass root level by monitoring functioning of all health institutions across the state. The system is extremely useful in ensuring better health for women, minimizing maternal mortality, neo natal mortality and in tracing areas with decreasing sex ratio at birth. Similarly OASYS was initiated for Rajasthan Legislative Assembly and all the departments of Rajasthan Government to facilitate faster & secure communication pertaining to Assembly Questions. It is first such application ever deployed by any legislative assembly. A selected paper titled: Rural Connectivity (GPNIC) Service Delivery to the Last Mile by SIO Rajasthan Indu Gupta and Amit Aggarwal PSA was also published in the e-Governance compendium on the occasion.

Chandan Sen, RAJASTHAN

## **Sensitisation Workshop on GePNIC** at Neelachal Ispat Nigam Limited, Bhubaneswar

 $\mathbf{N}$  eelachal Ispat Nigam Limited (NINL) is a joint venture Government Company under the Ministry of Commerce promoted by MMTC, Govt of India & IPICOL, Govt of Odisha. NINL have expressed their willingness to adopt GePNIC through Central Public Procurement Portal. Their team had visited NIC Bhubaneswar for preliminary discussions. On their request NIC team visited NINL plant site at Duburi, Jajpur on 29th February and conducted the workshop on GePNIC.

The general features of GepNIC was demonstrated followed by the complete flow of the software which was well appreciated by NINL management. The meeting was chaired by Shri S. P. Patnaik, Jt. Managing Director, NINL, and attended by senior management of NINL.

From NIC Odisha the presentations were carried out by Shri Tapan Prakash Ray, TD & Shri Nihar Ranjan Biswal, PSA.



NINL, impowering India with Steel Power

A.K. Hota, ORISSA



POLICIES, PROCESSES AND TECHNOLOGIES

Jaijit Bhattacharya

Book Title: e-Gov 2.0: Policies, Processes and Technologies Authors: Bhattacharya, Jaijit Publisher: Tata McGraw Hill Education Private Limited, New Delhi

The book e-Gov 2.0: Policies, Processes and Technologies, comes with latest concepts in e-Government at right time as nations across the world are at a point of inflexion with respect to adoption of e-Governance. Governments across world are in pressure to deliver more with less funds, leading to greater adoption of IT. This book delves into not just how to change traditional governance but also to leverage the power of IT to come out with intuitive governance solutions.



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e-Gov 2.0:

# Policies, Processes & Technologies

THIS LATEST BOOK on e-Governance is written by an IT practitioner and academician Mr. Jaijit Bhattacharya currently an Adjunct Professor with IIT Delhi and Director, South Asia, Global Government Affairs with Hewlett Packard. There are several books available from different publishers but this publication makes this area enlightened on issues of policies, processes and technologies. The book discusses e-Governance architectural framework as well as people-related issues in detail and from an on-the-ground perspective.

E-Government or e-gov or digital government or online government or connected government describes the use of technologies to facilitate the operation of government and the disbursement of government information and services. It utilizes the principles and practices of several disciplines like computer science, organizational behaviour, political science, process re-engineering and law.

This book defines the unique requirements and specialized considerations of IT adoption in governance that leads to a nation-wide improvement in the efficiency and effectiveness of governance and increased security and improved quality of citizen's lives.

Gartner defines e-Government 2.0 as "Term widely used today in government and the IT industry to describe the use of Web 2.0 technologies, both internally and externally, to increase collaboration and transparency and potentially transforms the way government agencies relate to citizens and operate. A synonym that is also gaining popularity is "open government," which stresses data openness and citizen engagement." Several definitions associate Government 2.0 with the use of social media, both inside and outside government. This book defines e-Gov 2.0 as an evolutionary step towards a more efficient, inclusive and participative government through the adoption of a set of new trends in business, operational, financial and technological models. This means that use of latest tools and technologies in Government activities will usher in greater participation and will have tremendous impact on the economy, whereas e-Gov 1.0 was characterized by a very limited use of Internet technology.

This book comes with latest concepts in e-Government at right time as nations across the world are at a point of inflexion with respect to adoption of e-Governance. Governments across world are in pressure to deliver more with less funds, leading to greater adoption of IT. This book delves into not just how to change traditional governance but also to leverage the power of IT to come out with new governance solutions that would not have been possible.

Although it is very difficult to capture and confine the scope and extent of ICT development unlike other technologies, this book tries to cover in present context on processes of key departments and some of the common solutions that such Government departments can implement. It provides insights into the working of e-Government. For example, worldwide police departments have been switching to various computerized applications covering their functions, rural development of emerging economy, education, health, agriculture, town planning, woman and child development, so on so forth are the areas whose functioning has direct impact on the population of a country. These areas are being strengthened by Governments world over using Information and communication technologies. These issues are well laid in this book. There are sufficient references at end of each chapter for further reading including URLs. There are 26 chapters in total spread over 604 pages including chapters on Roadmap to e-Government, PPP for e-Government, Multiple Standards in ICTs, Government Data Centres, Utility Based Government Computing, Secured Information Systems Architecture, GIS, Land Records, e-Agriculture, Procurement, e-Police, etc.