

Informatics

**National Register of
Citizens in Assam**

**Secretary (MeitY)'s Visit
to NIC**

**Paperless Court
In Hyderabad**

**MOHSOM App of Manipur:
Enabling better Management**

District Chamba:
Focussing on ICT based Citizen
Centric Services

Combating Ransomware:
Practice, Strategies and
Defences

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EDITORIAL



Information and Communication Technology has opened ample avenues for democratization of the monitoring process of projects and initiatives. Monitoring has generally been viewed as a domain of Government entities aimed at increasing efficiency. It has traditionally been time and effort intensive and only stakeholders with considerable resources had the ability to monitor the status, progress and implementation of a project.

However, with advancements in the field of ICT, monitoring of projects is moving from the real world, which has limitations like distance and sparse resources, to the convenience of your mobile phones and handheld devices. This efficient monitoring not only enables officers to optimize the resources available to them, but also helps the citizens track the progress and status of public services and schemes. NIC plays an important role in bringing about this democratization through the various initiatives it has undertaken and made monitoring of projects much simpler.

The 'eGov Products and Services' section of this issue features a few notable projects that have made monitoring an easier job. The Case Hearing Status mobile App enables lawyers and litigants to track the status of the case progress through their mobile phones. The MOHSOM App utilizes the Geo-tagging technology to allow officers to monitor the various events and projects being undertaken across the state. The MDM ARMS App helps to monitor the workings of the Mid Day Meal program for efficient management. The government of Tamil Nadu has also rolled out an app aimed at assisting Dental Surgeons and Assistants in detecting and managing cases of oral cancer at early stages.

In addition to these, there are several articles about the various initiatives that have been rolled out by NIC and its various District Centres. We feature an exclusive interview with Shri Anand Kishor, IAS, as well as take a closer look at the NRC project in the "Spotlight" section. The "Technology Update" section takes a look at the often under-estimated threat of Ransomware. Our regular features like "In the News", "Accolades" and "International e-Gov Update" are here as always.

We hope that you find the issue engaging and informative.

Happy reading.

Editor

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Aruna Sundararajan, IAS Secretary, MeitY



Government has launched many ambitious initiatives under the Digital India Program to realize the vision of Hon'ble Prime Minister to transform India into a digitally empowered nation. Under this national program, a plethora of e-Governance services were also launched to augment faster and transparent governance harnessing the global advancement of ICT and implementation of latest infrastructure setups. The government has thus taken a proactive approach to encourage innovativeness in which e-Governance services are delivered for improving citizens' life quality continually.

The digital transformation of a nation like ours is a dire necessity. But apart from the Government, the onus lies on every section of the society to bring in the positive change. It is important to note that success of many of the diverse initiatives under the Digital India Program is a result of collective and sustained efforts of its various stakeholders. Digital Locker, Jeevan Pramaan, e-Visitor, MeghRaj and Aadhaar enabled Attendance System are some of such initiatives to prove this. The innovative public participation platform "MyGov" is building a trusty partnership between citizens and Government with the help of technology for enhancing the e-Governance further. We see a remarkable rise in the accountability from various departments and much beyond providing updated government information and quality services online. With the establishment of efficient Infrastructure backbone, broadband is poised to reach every single Panchayat of the country, which will create and translate digital literacy till the grass root level covering and connecting all the citizens of India.

MeitY, with the active support of NIC has been instrumental in successfully deploying many of the ICT projects in the Government, especially under the Digital India Program. Overcoming challenges through dialogues, quality thinking and timely actions can bring in many more successes. Attaining these require tremendous institutional planning at different levels along with having knowledge empowerment programs in place that are focused and sustainable.

Wishing you all the very best.

- Aruna Sundararajan

CONTENTS

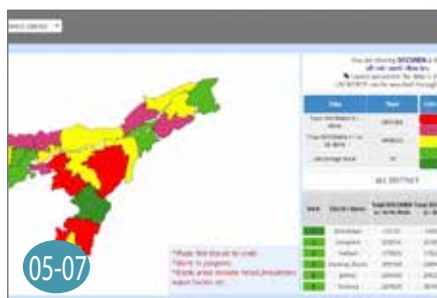
- 01 Cover
- 02 Editorial
- 03 Message by Secretary, MeitY
- 04 Contents

SPOTLIGHT

- 05-07 National Register of Citizens in Assam
- 08-09 Secretary's Visit to NIC
- 10-11 Automation Initiatives & Transparency in eGovernance of Bihar- Interview with Shri Anand Kishor, IAS

E-GOV PRODUCTS & SERVICES

- 12-13 Telangana's RBSK Software
- 14-15 OCMMS of Jharkhand State Pollution Control Board
- 16-17 GPS based Mobile Monitoring System of Jalore
- 18-19 First Ever Paperless Court Established In Hyderabad
- 20-21 Oral Pre-Cancer Detection Mobile App of Tamil Nadu
- 22-23 Revenue Court Case Monitoring System of Odisha



- 24-25 MOHSOM App of Manipur
- 26-27 MDM-ARMS Software of Himachal Pradesh
- 28 CHS Mobile App of Andaman & Nicobar

TECHNOLOGY UPDATE

- 29-31 Combating RANSOMWARE
- 32-33 Power Usage Efficiency in West Bengal SDC



DISTRICT INFORMATICS

- 34-36 Bhojpur: Harnessing ICT in the Successful Path of eGovernance
- 37-39 Namchi: Persevering Towards a SMART CITY
- 40-41 Chamba: The Way Forward using ICT

42-43 ACCOLADES

44 INT'L E-GOV UPDATE

45-48 IN THE NEWS



National Register Of Citizens In Assam: ICT's Role In Implementation

The National Register of Citizens in the State of Assam has been one of its kind exercise in the country and aims to touch the lives of all the citizens in Assam. The task had long been deemed impossible, but the National Informatics Centre (NIC) has risen to the challenge and done commendable work...

writes Shri Prateek Hajela, IAS

Edited by **RUBAIYAT UL ALI**

The issue of illegal immigration in Assam has been a long-standing and extremely emotive issue. It is suspected that Assam hosts a large number of illegal immigrants which makes this issue extremely sensitive as a section of the public perceives a threat of deportation. As a result, updating the National Register of Citizens (NRC) in the state of Assam (as per the directions of the Hon'ble Supreme Court of India) has been the most extensive citizen-engaging exercise undertaken in any Indian state, perhaps the first of its kind even globally. There is no precedent or model for the NRC update process anywhere. The processes of Census, National Population Register (NPR), and Intensive Electoral Roll Revision have some similarities but the dissimilarities are huge. Considering the volatile nature of the issue, the NRC update was considered almost an impossible task.

NRC IN A NUTSHELL

NRC update seeks to determine the citizenship of each resident by tracing linkage of every person up to the cut-off date of 24th March (midnight) 1971, as mandated by the Citizenship Act of India, through submission of any of a prescribed list of documents issued up to that date.

Applications were called from each

household and on receipt, multi-stage verification involving house-to-house visit, back-end verification of documents received with Application Forms, family tree matching etc. started. For the development of transparent and efficient systems to implement the sensitive and challenging job of NRC Update, large scale IT deployment became inevitable. The NRC updating project in Assam has set a new benchmark in residents' data collection, processing and management of the data so collected, document scanning, digitization, etc. Development of over 20 large bespoke software applications, over 2,500 digitization hubs and a state-of-the-art Data Centre, and extensive manpower involvement (involving over 30,000 government officers and 10,000 contractual/ outsourced staff) are amongst the countable milestones of the project.

SOFTWARE APPLICATIONS DEVELOPED FOR NRC

1. Digitized Legacy Data Development (DLDD)
2. Offline Application Form Receipt (e-Form 1)
3. Online Application Form Receipt
4. Offline-Online Application Form Receipt
5. Document Segregation and Metadata Entering (DOCSMEN)
6. Digitization of Field Verification Result (e-Form 2 FVR)



PRATEEK HAJELA, IAS

Commissioner (Home)
Govt. of Assam

7. Map based display of performances at district/ circle/ NSK/ village level
8. Correction of e-Form 1 data (e-Form 2X)
9. Verification Teams' Report Generation
10. Computerized Family Tree-Manual Family Tree Match (e-Form 3)
11. Combined Verification Report (CVR) generation (e-Form 4)
12. Recommendation of Circle/Tehsil Officer on claim of applicants
13. Approval of Deputy Commissioner/ District Collector/ District Magistrate on claim of applicants
14. Software for transliteration of data digitized in English to Bengali and Assamese.

LEGACY DATA- THE GAME CHANGER

As per statutory requirement, the NRC authorities had to publish copies of NRC 1951 and Electoral Rolls of all years up to March 24, 1971 (collectively named as Legacy Data). Easy accessibility of these documents was the key to ensuring effective public engagement in the process. The NRC authority decided to digitize and develop data from 6.26 lakh pages of legacy documents available across the state in poor and illegible condition to make it easily searchable in Assamese, English and Bengali. 2.01 crore records were digitized from such documents, and were assigned a Unique "Legacy Data Code". All 6.26 lakh pages were then converted into images and assigned unique image IDs and linked to each of the 2.01 crore records for preserving the database and establishing a unique identity of records. This data was published in the public domain. Issuing of 77 lakh Legacy Data Codes in 2500 NRC Seva Kendras and 68 lakh through the web in a period of 6 months proved to be the game-changer in NRC update as 95% of the applicants submitted Legacy Data as supporting document to prove their claim for inclusion in NRC. As the arrangement of documents and filling up of Application Forms was to be done by the applicants themselves, various innova-

tive methods were deployed such as the creation of a fictitious family of Chandra Sarma to demonstrate via print/ TV ads, video tutorials, leaflets, etc. on how this family arranges documents and fills up the Application Form. A 24x7 205 seats-based call centre-based helpline was set up which recorded 1 million calls in a span of 7 months from its operation. The result of such concerted efforts was witnessed in an overwhelming response from the public with the receipt of 68.23 lakh Application Forms with 6.6 Crore supporting documents in a span of 3 months starting from June 2015 and ending on August 31, 2015.

OFFICE VERIFICATION- CONQUERING THE UNKNOWN AND HOW!

The toughest part of the project, verification, is a multistage process involving house-to-house verification and document verification that involves comparing documents submitted, with the backend available with issuing authorities of such documents. Each of the 6.6 crore documents such as Electoral rolls, land records, birth certificates, university certificates, passports, etc. belonging to about 3,344 different categories of issuing offices, in addition to over 71,710 schools, had to be sent to its issuing offices to check the authenticity of such documents. A huge

specialized mechanism equipped with the best of IT-based work-flow management system was developed to send the documents to the offices from where the document was issued. The software, named "DOCSMEN – Document Segregation and Meta-Data Entry" was used for feeding information about the documents such as destination, document code, metadata and then slicing as per document details for electronic sending to various destinations inside and outside Assam.

FIELD VERIFICATION- EVERY HEAD COUNTS

The process of field verification through a house-to-house visit of over 68 lakh applicants was also made systematic through computerized generation of a pre-filled single-page report named Verification Teams Report (VTR) using digitized Application Form data. The result of Filed Verification was captured in Yes/ No format in the VTR, and digitized at the NSK. The Family Tree technique, which is the backbone of the NRC process, is used to find out if the Legacy Data published by NRC authority has been misused by any imposter. Imposters often "adopt" a person in whose name legacy document is available and then get linkage documents prepared accordingly to establish this relation. As the Legacy



Activities of NRC in full swing

Data has been digitized and each record is assigned a unique number, it is possible to find out a list of users of one particular Legacy Data and then cross check this computer-generated list with actual family members declared beforehand in a form named "Manual Family Tree".

COMPLEX SYSTEM OF COMPILATION OF RESULT AND REFERRALS

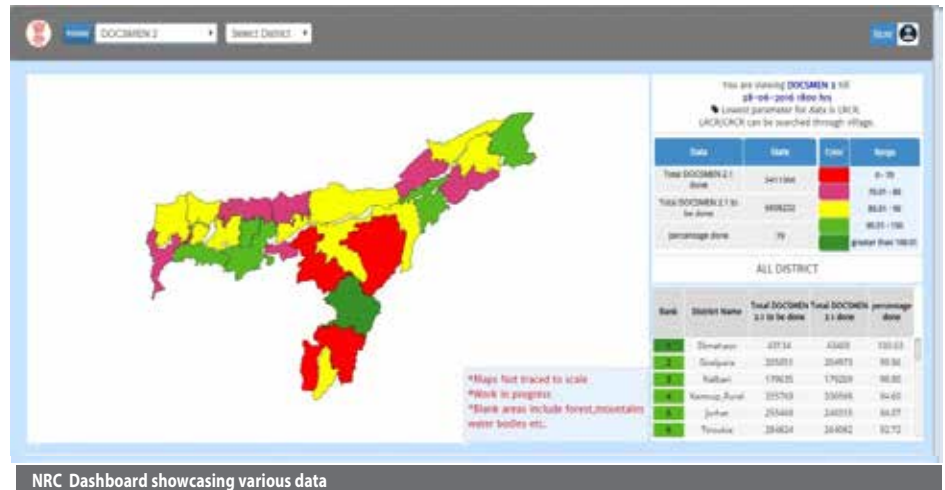
The verification process being multi-stage, poses a requirement for developing a complete performance report card to display the performance of each applicant across parameters such as house-to-house verification, document backend verification, family tree match result, matching of photo submitted in the Form with the actual person etc. to enable taking the final call on his/her eligibility for inclusion. Consequently, software has been developed for generating Combined Verification Report. The Local Verifying Authority shall mark his recommendation against each member based on the combined report, and pass it on to the District Verifying Authority for his final decision. Manual referral of crores of applicants would have taken years and as such sophisticated software has been designed to address this requirement.

DIGITIZATION

NRC project involves digitization of 2.01 crore legacy data, 68 lakh Application Forms covering 3.3 crore residents' data, 31.26 crore metadata of each of the 6.63 cores documents under DOCSMEN software, etc. 2,500 NRC Seva Kendras (NSKs) located across the state, each equipped with 2 operators is the hub of all digitization work. Three (3) Data Entry Centres are also set up in Guwahati equipped with 1,500 operators for undertaking guided data entry and quality checking of data digitized in the field. Around 9,000 data entry operators have been used for digitization work.

DATA TRANSMISSION

A huge volume of data, to the tune of 127.78 TB, has been transmitted, out of which 81.15 TB has been transmitted from the field level to the State Data Centre and 46.63 TB from the State Data Centre to the field using multiple media



such as third party media (pen drive/ hard disk), FTP (File Transfer Protocol), internet/MPLS.

THE TEAM NRC

A unique model of project management structure was developed for Team NRC, which is headed by State Coordinator, NRC who is a Government officer of the rank of Commissioner & Secretary, and to lend him able support a diverse group has been put in place that comprises senior Government officials from Assam Civil Services, retired Government officials, consultants to provide technical and transaction advisory services, contractual project professionals to support statutory officials and supervise day-to-day functioning of the project, outsourced data entry operators, and a systems integrator.

BREAKING NEW GROUNDS IN PROJECT MANAGEMENT

Successful implementation of a multistage, and data and process intensive project such as NRC lies in efficient supervision and micromanagement. A Map-based display of colour coded and easy-to-read data on all parameters such as in form receipt, office/ field verification completion, VTR availability, the status of digitization, etc. was developed for analysis of abnormal occurrences as well as for updated status of performance. Daily dashboards were sent to districts via messaging apps and email, to keep them abreast of their performance.

IN THE MEDIA & ACCOLADES

Apart from stealing the limelight in North

East India, NRC has become a talking point even in the main-stream media, being featured in articles published in The Week Magazine, Economics & Political Weekly, and in dailies such as The Indian Express, The Economic Times and Hindustan Times. The NRC Assam Project bagged First prize (National level) in the "Digitizing India" Awards instituted by CNBC-TV18 and Cisco, and adjudged as the best project in the category "Digital Innovation in Citizen Services (eGovernance)". The project NRC roped the Best Project of Wipro (System Integrator of NRC project) in India and Middle East region in 2015-16 out of over 30,000 other such projects.

THE WAY AHEAD

It was not in the distant past when the whole exercise of NRC Update was laughed off as a sure formula for failure. Doubts on the exercise became stronger after the Barpeta debacle. But things have changed for the NRC. The phenomenon can best be described in the words of French poet Victor Hugo: "Nothing can stop an idea whose time has come". With a positive attitude, systematic process re-engineering and innovative technology deployment, NRC has reached unprecedented levels of success and is set to rise even higher.

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The Secretary (MeitY)'s Visit to NIC



The first visit of Smt. Aruna Sundararajan, IAS, to National Informatics Centre (NIC) Headquarters on 5th of September 2016 after taking charge as the new Secretary to Ministry of Electronics & Information Technology (MeitY), marked a special day in the journey of NIC. On the occasion, the Secretary inaugurated the newly renovated Conference Hall of NIC HQ and later addressed the senior officials of NIC.



Smt. Aruna Sundararajan, IAS, after taking charge as the new Secretary to MeitY, made her first visit to NIC at New Delhi on 5th of September 2016 which marked a significant day in the journey of NIC. Coinciding with Teacher's Day, the occasion was even more special with the inauguration of newly renovated Conference Hall of NIC HQ. Dr. Ajay Kumar, Additional Secretary to MeitY graced the occasion with his esteemed presence.

The Secretary chaired the conference held at the inaugurated hall and was attended by Dr. Ajay Kumar, Smt. Neeta Verma, DG (NIC) and the Group Heads of NIC. Though being a holiday in many of the States, all the State Informatics Officers participated the event through VIDCON, the video conferencing facility of NIC.

The conference kicked off with a presentation by the Director General, NIC, Smt. Neeta Verma, which outlined the organization's vision, mission and major programs for the facilitation of various e-Governance activities of Government. After the presentation, the Secretary addressed NIC officials and highlighted the significance and achievements of NIC in the endeavours of making India a digital super power. She outlined the responsibility of NIC in realizing its vision and determination to face the challenges in order to achieve sustained success. Smt. Aruna Sundararajan spoke in detail on how the country is changing rapidly with the time in terms of its aspirations and highlighted the need to strive for fulfilling those aspirations. Later she invited comments from the participating officers for discussions.

The Secretary's visit was an enriching experience to NIC officials to put their best foot forward for excellence and would forever be a memorable one in the journey of NIC.

by **MOHAN DAS VISWAM**



Automation Initiatives & Transparency In eGovernance Of Bihar:

An Exclusive Interview With Shri Anand Kishor, IAS

*Shri Anand Kishor, IAS, is serving the Government at various key positions in Bihar such as Divisional Commissioner- Patna, IG -Prison, Chairman- Bihar School Examination Board and Director- Khuda Baksh Oriental Public Library. He has been successfully transforming innovative ideas into reality in partnership with NIC in most of his endeavors. Here's the excerpt from an exclusive interview with him by Shri **Rajesh Kumar Singh** and Shri **Rajiv Ranjan** of NIC*

This is your second term as IG (Prison) and you have been instrumental in evolving Prison ERP for Jail Administration in Bihar in the year 2013. Could you please share your experience?

The Prison Manual in Bihar was completely revamped in 2012 with a special emphasis on prison reform initiatives, and advocated for the implementation of an Integrated Prison Management System. It laid special emphasis on transforming the prisons into institutions for corrective and reformatory prison behavior as well as streamlining the administrative structure and processes for better management of prisons. Keeping it in view, innovative solution for institutionalizing and paperless office for different prisons under Inspectorate of Prisons and Correctional Services of the State of Bihar was conceptualized and developed with NIC as a software suite locally from e-Prison Model of Prison Informatics Division, NIC (HQ), New Delhi for implementation initially at Model Beur Central Jail, Patna, which is being subsequently implemented in other 55 Prisons in Bihar.

Why is Prison ERP unique and what technological innovations have been introduced?

Prison ERP has provided real-time availability of information and enabled quick access to prisoner's information and provided effective monitoring system for prisoners' welfare.



There is a mindset change in work-culture with automation and introduction of financial discipline etc.

Visitor Management System (VMS) and other modules (Gate management, Stock management etc) were prepared specifically for the state specific requirements, and key features of the application software includes Biometric based authentication/verification of inmates, storing of inmates' photograph, monitoring of physical location of inmate, their movements and medical histories, management of information about the inmates eligible for release under section 436/ 436A, management of visitors inside/ outside prisons, providing lookup facility to investigative departments for tracking of inmates, SMS based alerts to prisons/ police officials etc.

Key innovative features implemented include use of biometric tools, photo pass for visitors, voice capture, smart card and SMS



alerts incorporated in the application software.

Department has also taken up a number of other IT Set-ups for Jail Administration. Could you brief us on this please?

Besides, Prison ERP, Video-conferencing in each Jail has been established under BSWAN. Recently RF has been put in place. Moreover, CCTV cameras are also being installed in each Jail for surveillance. We are also looking forward for strengthening of ICT infrastructure under e-Prisons scheme of MHA.

What are the implementation challenges for rollout of Prison ERP? What approach is being taken by NIC?

Capacity building of Prisons' Senior Officers to rollout Prison ERP and its optimal usage under e-Prisons is utmost important. Hence, NIC has started organizing a Meeting-cum-Workshop on "Prison ERP – interconnecting Prisons across Bihar under e-Prisons" in the background. As of now, all Prisons are using Prisoner Management System (PMS) online.

The key challenge at-hand is implementation. The department is looking forward to an early roll-out and utilization of Prison ERP in Bihar. Meanwhile, hybrid approach has also been devised for interconnecting Prisons across Bihar under e-Prisons. Hence, capacity building of NIC officers in districts along with Circle level senior officers' participation has been crucial for sensitization and

effective coordination & implementation.

You have taken up a number of ICT initiatives as the Divisional Commissioner of Patna. Will you please tell us about that?

Digitization and transparency have been the core of all the initiatives that have been taken. One of the prominent initiatives has been the Executive Court Information System (ECIS). It facilitates viewing of cause list and case status with SMS messaging facility to inform advocates and respondents. In addition, programs like Mobile App for Case Information System, Online Booking of Sri Krishna Memorial Hall and Gandhi Maidan, randomization technique in assignment of teachers for invigilation for matriculation and 10+2 examination have also been implemented. Moreover, Transfer & Posting software has also been implemented in many departments including Home (Prisons). Using this



application randomized transfer of different cadres of officers and staff was done.

As the Chairman of BSEB, what initiatives you have taken for revamping BSEB through technology?

Besides strengthening of IT set-up in Bihar School Examination Board (BSEB), a number of initiatives are being taken like Aadhaar seeding with student registration. Moreover, scanning, imaging and on-screen evaluation of answer book and use of OMR sheet and Barcode stickers is being introduced for better accountability and transparency as a confidence building measures.

Being the Director of Khuda Baksh Oriental Public Library, Patna, you

have taken some initiatives for the renowned Library as well. Could you please mention them?

Preservation of digitized manuscripts in storage area network (SAN) with 100 Terabyte capacity has been initiated. Moreover, a web based application for reading the digitized manuscripts has been developed with the help of NIC.

You are an engineer and administrator, what policy do you think need to be framed for achieving Digital India goal in Bihar?

Extensive use of information technology and computerization of existing manual processes in government departments are key factors for improving efficiency, transparency and accountability in government offices. Also, delivery of many citizen-centric services can be improved by use of Information Technology for which special planning needs to be done.

How do you visualize the future role of NIC in Bihar?

In the light of its wide reach, role and highly competent technical manpower, NIC can be the main nodal/ focal agency for ensuring full computerization of majority of departments and their work processes. NIC also has the unique advantage of implementing many such successful IT projects across different states of country, which can be easily customized as per needs of other states. With these improvements, if the NIC is augmented with proper resources and adequate technical manpower, it can be really instrumental in a PAN-India digital transformation of the country in future.

Interviewed by:



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Telangana's Rashtriya Bal Swasthya Karyakram Software:

Making Services Simpler For Better Health

This software captures various health conditions of children in the target age group. In cases where diseases are detected, or if medical intervention is required, support is provided free of cost and the parents of the affected children are informed through SMS automatically.

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The Rashtriya Bal Swasthya Karyakram (RBSK) is an innovative and ambitious initiative, envisaging Child Health Screening and Early Intervention Services, a systemic approach of early identification of health issues and linked to care, support and treatment. This programme subsumes the existing school health programme.

Child Health Screening and Early Intervention Services basically refer to

organized in Government & Aided Schools for the children under 5 through Anganwadi and ASHA service providers. It is estimated that about 2.1 million children under age 5 and 10 million children are in Schools, Junior and Intermediate College.

DEVELOPMENT OF THE APPLICATION

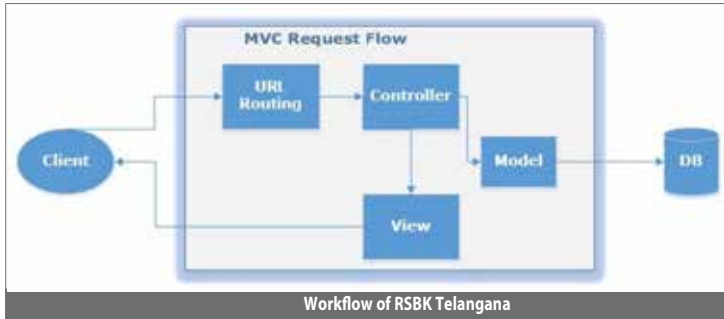
(<http://rbsk.telangana.gov.in>)

A web-based workflow system with role-based privileges to handle the service of Micro-Plan, Sub-Micro Plan, Student Referral and District Early Intervention Centre (DEIC) Management has been

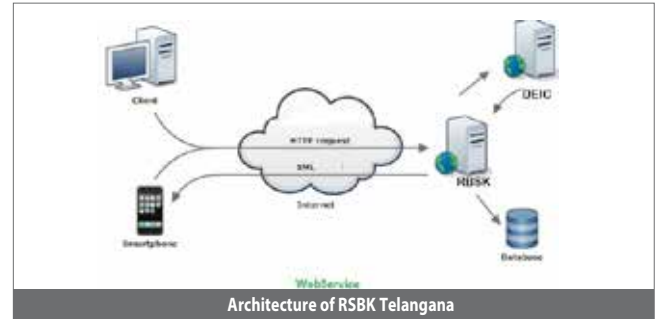


early detection and management of a set of 30 health conditions prevalent in children less than 18 years of age. These conditions are broadly summarized as the 4D's: Defects at birth, Diseases, Deficiency conditions and Developmental delays including Disabilities. Health Screening and Early Intervention Services aim at reducing the extent of disability, improving the quality of life and enabling all persons to achieve their full potential. Twice a year, Health Screenings are

designed and developed in such way to capture age group wise the health conditions of target age group of children. The system has been developed in open source technology and a mobile application in Android. The system has been integrated with Child Info System of Education Department through web services to avoid the duplicity of child info as well as to avoid the data entry at the field. Using this application, quality of life of children has improved in Telangana through early



Workflow of RSBK Telangana



Architecture of RSBK Telangana

detection of health anomalies and treatment of children at the age group of 0-18 years.

TECHNOLOGY

- Application:** Struts Framework, JSON
- Database:** MS SQL Server 2012
- Web Server:** Apache Tomcat 7.0
- Web Services:** SOAP

HIGHLIGHTS

- Workflow based application with online screening of the students
- A generic software that can be customized for any other state
- Increase in the awareness and monitoring capabilities
- Monthly screening reports can be generated with a single click

SALIENT FEATURES & USER INTERFACE

- Menu driven & user friendly interface
- Creation and modification of employee details
- Creation of mobile teams and adding employees to teams

- Creation of Masters like Driver Masters, Vehicle Masters along with edit facility
- Creation of location Master lists such as Village Master, School/ Anganwadi Master & Student Master
- Edit facility provided for Student Master list
- Creation and modification of Micro Plan, screening of students and referral to hospitals

- Dashboard to Commissioner, District Collectors, mobile team members, District RBSK coordinators and State RBSK coordinator

- Different drilldown reports are designed and integrated to dashboard

The user management module under RBSK Application consists of the following major operations:

- User ID Generation
- Generated password for the User ID is sent to concerned officials using NIC SMS Gateway
- User locking mechanism
- Session management
- User roles & privileges

Pre-Deployment Vs Post-Deployment

Prior to the deployment of the software the Department officials used to maintain the data manually after their visit to Schools/ Anganwadis/ Colleges. The entire process has now been digitized. Further, the Department officials need not have complete students' data before they proceed.

After the deployment of this application, mobile teams can plan their schedules online. Teams can enter the screening details of the school/ Anganwadi/ College Students online.

- SMS Alerts to the concerned officials one day before scheduled visit.
- Provision to scan only 150 students for screening per day.
- Capturing the affected area of the scanned students before and after the treatment.
- Referral of the scanned students to District Early Intervention Center (DEIC) for further treatment and monitoring.
- SMS alert to guardians of disease affected students.
- History of disease affected students is easily tracked. The same is made available to Mobile teams during their next visits
- MIS Graphs provided to higher authorities.
- Dynamic and drilldown reports are provided to higher authorities
- SMS notifications to non performing mobile team members.



Shri Buddapraksh Jyoti, IAS, Commissioner, Dr.Y.S. Murty, Shri Srinivasa Subba Rao Akella and officials of Medical & Health Department, Govt. of Telangana with the SKOCH Gold Award, 2016 for RBSK

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Online Consent Management And Monitoring System Of JSPCB: Facilitating Ease Of Doing Business

Jharkhand State Pollution Control Board (JSPCB) has taken various initiatives during past year and a half, with the objective of 'Ease of Doing Business' in the State for transparent and expeditious decision making.



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Realizing the power of technology, JSPCB decided to transform its way of working and automate all its processes, allowing industrialists to apply for Consent [Consent to Establish (CTE), Consent to Operate (CTO)], Authorization [Hazardous waste (HWM)/ Municipal solid waste (MSW)/ Bio-medical waste (BMW)etc.] and CESS online without the need for a physical touch point for payment, document submission and verification with effect from April 1, 2015. This facility is available 24x7 through the portal jhkocmms.nic.in, designed and developed by the National Informatics Centre, Ministry of Electronics and Information Technology. Thus, the complete process- from application, to payment, to consent issuance is online. The Board also sends SMS alerts to the applicants related to any clarification, show cause notice or the acceptance or rejection of the application related to consent. All the digitally signed certificates are available in public domain along with the facility for downloading the same from the portal. Sending hard copy of the consent certificates has been discontinued.

OVERVIEW

Online Consent Management & Monitoring System (OCMMS) for State Pollution Control Board is a web based Generic Application Software Package. It has been developed using open source technology for automating the existing workflow associated with Consent Management and Monitoring System, which exists in most SPCBs (State Pollution Control Board) and PCCs (Pollution Control Committee). OCMMS has been developed with support from the Ministry of Environment, Forest and Climate



“Introduction of online system right from the receipt of application till the grant of consent has completely revolutionized the way business is conducted at JSPCB. I convey my appreciation of the dedication of the team of National Informatics Centre for developing and upgrading the “OCMMS” from time to time as per the requirement of the JSPCB and other stakeholders. I would also like to place on record the labour of love put in by officers/officials of the JSPCB in making it a grand success

DR. DEO DUTT SHARMA, IFS
Chairman, JSPCB

Change. OCMMS can be customized for other SPCB/ PCC with minimum time and effort, based on the SPCB/ PCC



Screen Shot of OCMMS Mobile interface

specific requirements.

HIGHLIGHTS

Highly interactive menu driven, user-friendly, dynamic workflow based online application.

JSPCB User Module facilitating online processing of the application, seeking clarifications regarding industry inspection from Regional Officer, tracking approval/ rejection of the application, generation of digitally signed consent, alert notifications, generation of authorization certificates etc.

Administrator Module enables creating/ updating of the Workflow management-User Role, Forwarding Right to JSPCB user, JSPCB Activity Right for various modules of the system.

Online Fee Calculation system to reduce subjectivity and bring in more transparency, which informs the applicant of the required fee for granting the consent.

Centralized Dashboard for JSPCB Member Secretary/ Chairman for CTE/ CTO/ BMW/ MSW/ HWM/ CESS application Monitoring.

Online Application Tracking for Industry/ SPCB officials

Implemented in multi-level hierarchical environment in JSPCB.

Hosted and maintained in NIC web enabled Cloud environment and with regularly scheduled backups by the National Data Centre, NIC.

Integrated all services of JSPCB with Jharkhand's Single Window Portal – www.advantage.jharkhand.gov.in.

Development of on-line inspection module

Online full-fledged inspection module has been developed for the JSPCB. This inter alia includes well-defined inspection procedure, provision for computerized (random) allocation of inspectors and computerized risk assessment for identifying industries that need to be inspected. The JSPCB is the first Board in the country to make use of such inspection module.

Android based mobile application

JSPCB has introduced an android-based mobile application (JH OCMMS) on 5th June 2016 that is available in Google Play Store free of cost. The JSPCB is the first State Pollution Control Board in the country to launch a mobile app to update industrialists about the status of their application as well as download digitally signed certificates on their mobile phones itself.



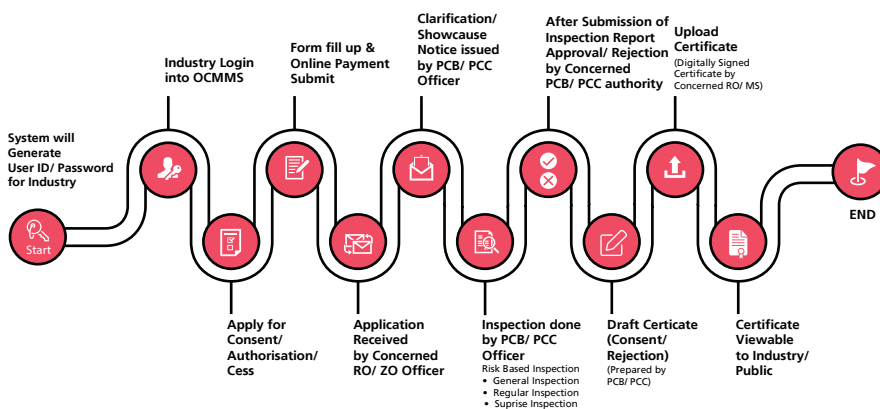
The JSPCB intends to monitor in future the compliance of the conditions mentioned in the Consent Certificate issued by the Board through this portal only and efforts are being made to achieve this.

SANJAY KUMAR SUMAN
Member Secretary, JSPCB



SUMMARY

Introduction of online system has revamped the way business is conducted at JSPCB. Now, delays in issuance of consent have been reduced and the applicants do not need to make frequent visits to the Board office. Not only has it eased the process for the applicant, it has led to an increased application disposal rate by officers and promoted responsibility amongst JSPCB officials since all information is freely available in the public domain. JSPCB is now working towards the concept of a completely paperless office.



RO= Regional Office ZO= Zonal Office MS= Member Secretary PCB= Pollution Control Board PCC= Pollution Control Committee

Schematic Workflow of OCMMS

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GPS Based Mobile Monitoring System Of Jalore For Rural Development Works: Ensuring Improved Efficiency In Monitoring

The system's feature for uploading photos and videos help the inspecting officers and authority to visually observe the progress and quality of the works being carried out at the GPS mapped locations. As this mobile monitoring system is integrated with GPS, duplication of work can also be detected and avoided.



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VIVEK VERMA & CHANDAN SEN

The 'Mobile Monitoring System for Rural Development Works' is a GPS based application developed by NIC to facilitate remote monitoring of various development works under MGN-REGA, TSC Toilets, IAY Awas, ABSK and Backward Region Grant Fund projects. It has been implemented by the District Administration of Jalore, Rajasthan. This system uses the latest advancement in the field of ICT and has user-friendly features. The system facilitates capturing of work details, relevant data, images and videos of work stages along with Geo-tagging the locations of the projects with GPS coordinates at various stages of work. It also generates inspection orders and facilitates emailing of the orders (in .pdf format) automatically to inspection officers and the ordering authority.

It assists administrators in eliminating the delays and errors in inspection and monitoring of various projects & schemes of the Central and State Governments. The system has further been provided with links of the inspection reports. The GPS co-ordinate links are located and shown on map.

Through the system, one can upload photos and videos into the system, which helps the inspection officers and the ordering authority to monitor progress and quality of work being carried out at the GPS mapped locations. Duplication of work is eliminated as the system uses GPS linkage. Using these facilities of the system along with the system generated MIS reports; the authorized officials can view the stage wise and work wise real status of the projects, which would help them to carry out further actions.



“

We have made an attempt to impart benefits of technology up to the last beneficiary of any government scheme. We have tried to fill the gaps to overcome delays in processing of the government sanctions due to administrative procedures. More than 35000 works and 3000 inspections have been registered to this GPS enabled system covering over 3 lac beneficiaries.

DR. JITENDER KUMAR SONI
District Collector, Jalore

”



Workflow of GPS based Mobile Monitoring System of Jalore for Rural Development Works

HIGHLIGHTS

- Use of Mobile Technology for field work monitoring
- Use of GPS & Geo tagging for advanced features
- Data storage and syncing to cloud on connectivity to overcome data connectivity issues
- Use of API and web services for two-way data synchronization
- Generation of map based visualization of reports for reviewing, planning and decision making

SUMMARY

This mobile-based application has been developed for easy and hassle-free operation. It has been made user friendly and simple for the usage at the field by officers of all levels. The application has been hosted on cloud environment and can be accessed through a desktop as well. While facing connectivity issues like no network or GPRS connection, especially in remote areas, the application can also work offline and sync automatically when the connectivity is restored.

The mobile App was given the State Best e-Governance App Award by Hon'ble Chief Minister of Rajasthan, Smt. Vasundhara Raje. The project is likely to be replicated in all the districts of Rajasthan after its success in Jalore district.

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First Paperless Court Of Judicature At Hyderabad:

Transforming The Judicial Process Through ICT

The electronic cause list before the Hon'ble Judge synchronizes with the electronic case records available in the Database. The electronic files open on the Monitor and the Hon'ble Judge can access them to make digital noting. The software can also record the dictation of the judgment into the computer which can be subsequently used by the Stenographer for transcription.



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In a conventional Court scenario, the judicial case records are brought to the court from the different sections of the High Court and the Hon'ble Judge presiding over the Court hears the arguments of the advocates based on the physical records available before the Hon'ble Judge.

However, in a marked improvement over

Acting Chief Justice, Hon'ble Shri Justice Dilip Babasaheb Bhosale has been instrumental in introducing many facilities which are friendly to the litigants, advocates and all other stakeholders connected to the Judiciary.

PROCESS WORK-FLOW

The identified case records for the particular court are scanned in advance with proper book markings of the relevant papers. Generally, the process of scanning is outsourced to private vendors for the sake of convenience. Once the scanning



Hon'ble Judge making his remarks on the Touch Screen Monitor of eCourt

the outdated methodology, the concept of Paperless Court emphasizes on the usage of electronic paper in the Court Hall and focuses on minimizing the movement of case records which needlessly consumes time and manpower. The process itself is a precursor to the e-filing process which has been visualized for implementation in near future.

and book markings are over, the files are saved in a master file server (DMS). An eCause-list is generated and linked to the case data available in the computer of that particular paperless court. As soon as the case number is clicked it automatically fetches the concerned electronic case record from the computer system and displays the contents on the digital moni-

tor placed on dais before the Hon'ble presiding Judge. The electronic cause list is integrated with the digital display boards placed at various places in the High Court premises and SMS alert messages to the learned advocates as regards the case hearing status in the court halls. The software enables the Hon'ble presiding Judge to select the documents of the concerned file through the aid of book markings and to make notes on the record itself or in a separate document.

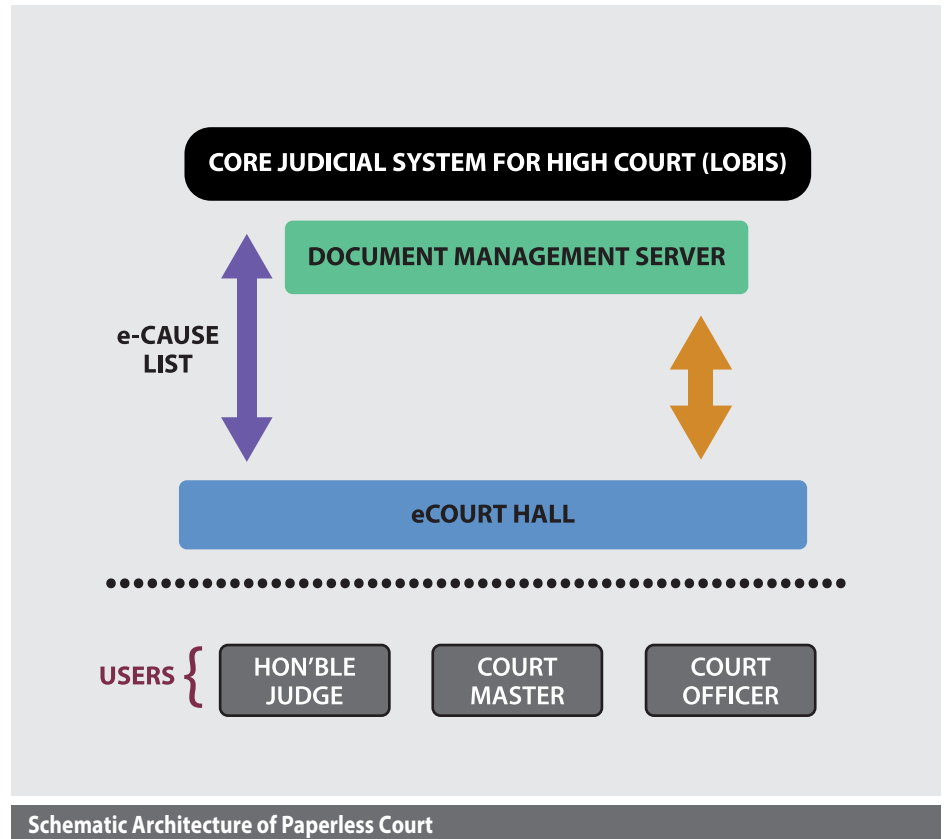
TRAINING

Since the electronic files are in PDF form, necessary training was provided to the Hon'ble Judges in the handling of PDF documents like inserting comments, highlighting the text and other aspects. Training was also imparted on the use of the special monitor placed on the dais.

LEGAL SOFTWARE ACCESS

Online legal software with Acts and Rules was provided in the Court Hall for use of the Hon'ble Judge presiding over the Court Hall so that case laws and the provisions of various laws can be viewed online without having to refer to physical books.

A well coordinated and structured networking system, uninterrupted power supply system and well trained, committed and dedicated staff is provided for the successful implementation of paperless court.



Schematic Architecture of Paperless Court

TECHNOLOGY STACK

- **Open source technology using Java 1.7, Struts 1.3**
- **HTML 5 and CSS 3 with Tomcat 7 web server and Oracle 11g database**

WAY AHEAD

In future, it would be ideal to integrate the paperless courts with digitization of records so that separate scanning process can be avoided. The paperless court will be truly paperless with the digitization of records and e-filing of cases.

Touch Screen Monitors shall also be provided in the court hall for use by the learned Advocates for e-arguments. Advocates who want to use their own Laptops and Tablet computers should be provided with the case data well in advance so that they can argue their cases with the PDF case files made available to them.



eCourt Team members of NIC at the inauguration venue

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Oral Pre-Cancer Mobile App: Easing Early Cancer Detection And Management

The innovative App is very useful for Doctors and Dental Assistants in the diagnosis process and management of oral cancer in its early stages. ICT thus helps improve the quality of life of the citizens and saving lives using the best that ICT has to offer.



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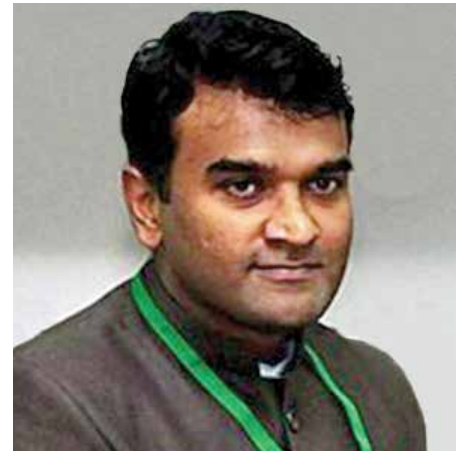
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The State of Tamil Nadu has taken a unique and innovative initiative towards early diagnosis, rehabilitation, and management of cancer including palliative care. In order to carry out oral pre-cancer diagnosis in Tamil Nadu, a survey was planned using a hand held device capable of screening and examining the lesions inside the mouth for possible carcinoma. Relentless work of the expert advisors and officers of State Health Society, State Nodal Officer and NIC Officers has made Tamil Nadu Health Society, to come to the forefront with an innovative new approach to the health programme which offers a therapeutic window of opportunity to intervene and halt progression of the disease to carcinoma.

National Informatics Centre, Tamil Nadu has designed and developed the mobile app using Mobility Platform Services© NIC for oral pre-cancer screening, diagnosis and follow up. The mobile app allows the Medical Officer/ Assistant to register and record the information about patients such as photo of lesions, family details, habit details, symptoms, signs, classification, biopsy details, referrals and follow up.

The State level National Oral Cancer and Pre-Cancer Screening Programme training was organized after distributing a HP tablet to 4 pilot centres namely Anaicut-Vellore, Ammayanaikanur Dindugul, Tharamangalm-Salem and Eral-Thoothukudi during July 2015. After the successful testing of the mobile App at the field level in the pilot programme, the State level rollout was driven by Dr. Darez Ahmed, IAS, Mission Director, National Health Mission, Government of Tamil Nadu. The roll-out was taken up in full swing by Project Officer and HOD, Madras Dental College, Dr. Aswath



“Adopting novel tools such as the use of point-of-care diagnostics (PCD) or hand-held medical devices, integrated Electronic Health Records (EHRs) to monitor and evaluate health worker-patient interactions, and Management Information Systems (MIS) substantially improves the efficiency of delivering primary and preventive care within our communities

DR. DAREZ AHMED, IAS
Mission Director, NHM
Govt. of Tamil Nadu

”

Narayanan and APO Dr. Mohana. A State level training was organized at Chennai and Madurai during June 2016 and a tablet was issued to each PHC covered under the programme.

ACTIVITIES UNDER THE ORAL CANCER PROGRAMME

Identification/ Suspected cases:

The Dental Surgeon/ Assistant is engaged in screening all adults between 20-60 years in the sub-centre villages. The



Dental Surgeon/ Assistant works on the Tablet loaded with the mobile app issued to the PHC. The Dental Surgeon/ Assistant has to authenticate using the user ID and password issued to the PHC. After Successful login, the following menu items are listed.

- Registration Details
- Family Details
- Photograph of lesion
- Habit Detail
- Symptoms
- Oral Hygiene Practices
- Diagnosis and Referral
- Follow up and Review
- Patient History
- Surveyed Village List

Screening in PHC Dental OP:

The Dental Surgeon/ Assistant first registers the family and all the members of the family with details such as name, age, gender, education, occupation, income, oral disorder etc.

Using the Photo capture option the lesions found are captured. The photograph along with latitude and longitude is captured. After taking the photograph of the lesion habit details such as type of

smoking tobacco, type of Non-smoking tobacco, type of alcohol and their frequencies are recorded. After recording the habits, symptoms such as non healing ulcer, painless swelling, difficulty in swallowing, hoarseness of voice, inability to open the mouth and loss of sensation are collected. In addition to the above oral hygiene practices such as cleaning method, cleaning items and their frequencies are captured.

The Dental Surgeon/ Assistant will identify and refer cases to GH/ Medical College after recording the suspected lesion type such as Leukoplakia, Lichen Planus, Erythroplakia, SMF, frank cancer etc. Toluidine blue stain/ Flouroscene staining methods, punch biopsy results are also recorded.

TREATMENT AND FOLLOW UP

At the Government Hospital/ Medical College, necessary treatment is carried out for the cases which were found positive amongst cases that were referred from PHC.

The case thus detected will be referred to higher institution for chemotherapy/ radiotherapy as the case may be. And follow-up will be done at PHC level also for further references as required. Provisions are available in the app to verify the case details and record follow up and references every time. The project officers, health officials, Dental Surgeons and Dental Assistants are part of the channel “NHM-NOHP” in telegram Mobile App with 260+ members and share cases, issues, policies and decisions very effectively.

As of Oct, 2016, the programme has covered 7000+ villages, the populations in 32 districts with the user based on 262



“ The Dental Assistant working at the field level does examination of the Oral cavity, filling the case sheet using the hand held device and Toluidine Blue staining of suspected lesions. The Dental Surgeon at the PHC level verifies details in the hand held device & confirms with punch biopsy. The tertiary care worker takes over management (Chemotherapy, Radiotherapy, Surgical & Palliative care). The cases are followed up by the Dental Surgeon-end to end care”

DR. ASWATH NARAYANAN
Project Officer & HOD
Madras Dental College

Dental surgeons and 262 Dental Assistants. The number of family registrations has exceeded 1.3 lakhs and more than 2.5 lakhs were screened. The programme ensures that every individual of the population gains access to diagnosis, hysto- pathological conformation, treatment and palliative care. The Mobile App is acting as one of the key enablers to quicken the process of screening, diagnosis, follow up and treatment, which otherwise would have gone unnoticed ending up being fatal to citizens who are ignorant.

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State level training at Chennai

Revenue Court- Case Monitoring System of Odisha:

Simplifying The Process With Online Tracking

Petitioners can now register a case online and track its status. Cause list is generated dynamically, which is published on the portal after approval by the competent authority. Hearing Notice is served online to the petitioner/ advocate and opponents by way of SMS, e-mail and physically through the Tahsildar concerned.

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Court Case Monitoring System (www.boardodisha.nic.in) is a unique application developed by NIC and has the capability for managing the complete online Case Management of Board of Revenue and its related courts. Cases related to Land Records, Settlement and Consolidation are taken into consideration through this application. Citizens or their representative advocate can file a case and check the status online. The application enables the Government to automate monitoring of Revenue Court processes and case activities enabling decision-making through the use of ICT.

PRESENT SYSTEM OF FILING OF CASE

The present system for case filing/ instruction of revision case is mostly manual. It is done either in person or through an advocate at the Oath Commissioner or Peskar in the different courts of Board of Revenue.

Cases are accepted or rejected based on the scrutiny of applications and documents by the Oath Commissioner or Peskar. Registration of case is carried out at Oath Commissioner/ Peskar level and a registration number is provided to the applicant. The priority for taking up cases depends on the date of the case or in some cases, instructions from the Hon'ble High Court. Following this, the cause list is prepared and notices are sent to the petitioner/ opponent parties physically. Suo motto party, if any, may appear on the date of hearing and may file their document and written statement.

After hearing from both the parties, court order may be issued by the authority for next hearing till finalization of case.



“

It is indeed a great pleasure in my part to express that the e-Filing of Case Monitoring System for all 17 Courts under Board of Revenue, Odisha, was launched by Shri Ashok Kumar Tripathy, IAS, Member, BOR. This generic eGov product will help the Citizens, Advocates and Administration to manage land related cases across Odisha in a better manner.

NIKUNJA KISHORE SUNDERAY, IAS
Land Reforms Commissioner
Cuttack

”

Interim order issued from higher court, if any, may be taken care of at the time of hearing. The final court order is then communicated to the petitioner/ advocate.

At present, there are seventeen Courts under Board of Revenue.

OBJECTIVE

To monitor the large number of cases, Board of Revenue (BOR) has taken an innovative step to turn the existing manual and time-intensive method into an online IT based Court Case Monitoring System, which is faster, more reliable and convenient to the users and a step

forward in easy monitoring of the pending and disposed cases by the Government and Citizens. Here, petitioners can register a case online and monitor its progress. Cause list is generated dynamically, which is published on the portal after approval by the competent authority. Hearing Notice is served online to the petitioner/ advocate and opponents by way of SMS, e-mail and physically through the Tahsildar concerned. Online acknowledgement

is also received by the courts. Orders of each of the hearing are published which only the petitioner/ advocate can access. Final judgment is served to the petitioner electronically, who can then download and print the final judgments with the signature of the order issuing authority.

MODULES

Member Court: 7 courts at BOR Odisha, Cuttack

Other Courts: 10 courts located at other places across the state of Odisha.

Role Based User Modules-

Oath Commissioner User, Peskar User, Court officer User, Member Court, Tahsildar User, Advocate User & Petitioner User

Other Modules-

Case Processing Module, Case Hearing Module, Case Detail Overview Module, Final/ Judgment Order, Search Module, MIS Module and Cause list Module

BACKEND TECHNOLOGY

Language: Java

RDBMS: Postgres SQL, Enterprise DB

Technology: HTML, DHTML, CSS, JQuery & Ajax

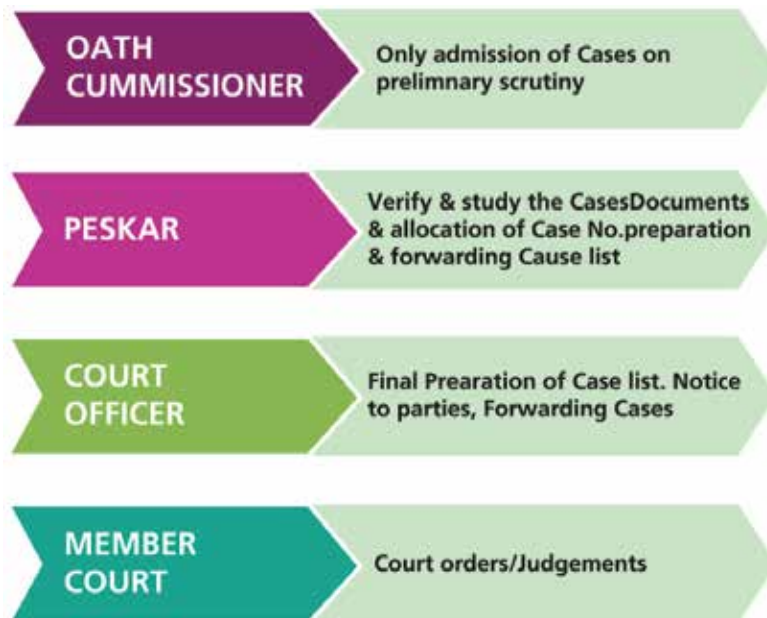
Web Server: APACHE TOMCAT

Frame Work: STRUTS, HYBERNATE

OS: Linux

CONCLUSION

Revenue Court- Case Monitoring System is a generic eGov product yet unique of its kind. It can be rolled out across the Country with minimal customization or modification. SMS integration and online Stamp and Payment Gateway modules are planned for implementation shortly.



Schematic graphic representation of the 4 Tier System Flow of Member Court BOR, Odisha



Schematic graphic representation of the 3 Tier System in other Courts

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Monitoring Of Handloom Schemes Of Manipur Using GIS: Enabling Better Management

GIS based applications are being used widely for analyzing and providing decision support for various activities.

MOHSOM software uses the technology to track the events and activities of the handloom schemes being implemented in a Cluster and thereby provide support in decision-making to the State Department

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The online Monitoring of Handloom Schemes of Manipur (MOHSOM) is a GIS based system developed by NIC Manipur for the Department of Commerce & Industry, Government of Manipur. The system was launched by Shri Gaikhangam, Hon'ble Deputy Chief Minister of Manipur on 19th June 2015 in the Bishnupur District.

ries, training for skill development, construction of work sheds and other miscellaneous events.

GIS based applications are being widely used for making analysis and decision support for various activities. Similarly, MOHSOM software using GIS can track the event and activities of the Handloom schemes being implemented in a Cluster and thereby provide support in decision-making to the State Department. One such scheme being implemented in Manipur is the NERTPS (North East



Launching of MOHSOM by Shri Gaikhangam, Hon'ble Deputy Chief Minister of Manipur

The Handloom Section of the Department uses this online application for monitoring the implementation of the Handloom Schemes and various related activities. Activities included under this scheme are the distribution of looms & accesso-

Regional Textile Promotion Scheme), funded by Government of India since the year 2015. Under this scheme, 51 clusters have been approved and are spread all over the 9 districts in Manipur. It is a challenging task for the department to

inspect the status and progress of implementation of these 51 clusters.

Considering various parameters of the scheme, NIC Manipur has developed the MOHSOM software using GIS for monitoring the progress of construction of work sheds, conducting training of weaving design and skill development at the registered clusters.

DEVELOPMENT OF THE SOFTWARE

This online application has been developed in Open Source Technologies and Standards using PHP 5.4. The back end database is MySQL 2.2 with Apache web server 2.3. The freely available Google Maps is used for rendering the satellite/terrestrial or images by web browsers. A smart phone application (MOHSOM) has been developed for geo tagging and time stamping of each photograph. Any Smartphone or mobile phone with android version 2.3 or higher can be installed with this App.

The application is hosted at NIC Manipur Mini Data Centre, Imphal under the URL <http://ehlmanipur.nic.in>. The software is built with the emerging trends of industry standard technologies and best practices.

Using MOHSOM, the department can easily monitor the work progress of handloom schemes implemented in clusters in all the districts of Manipur without physical inspection at the sites. Assessment of work activities under the handloom schemes implemented by Government of Manipur, funded by the Government of India has been streamlined using MOHSOM.



FEATURES OF THE SYSTEM

Under the NERTPS scheme, Cluster Division Executives (CDE) are appointed in each Cluster to assist the District Project Manager in the implementation of the Handloom Scheme. Using the App (MOHSOM) on a Smartphone, the CDE captures the photographs of the activity or events in a Cluster. Additional information of the type of activities and description are also recorded while saving the photographs. These captured Photographs are then uploaded to the MOHSOM application which is used to display on a GIS map with information of date & time, and description of a particular event. Based on this information, the department can easily monitor the work progress of handloom schemes implemented in clusters in all the districts of Manipur without physical inspection at the sites.

The abstracts of fund flow from the Directorate to the Project Managers in the Districts or to any stakeholders under the scheme are also captured for transparency and accounting purposes. Receipts and payments of money are also monitored using the system.

The portal also provides information on stakeholders, SHG and details of the beneficiaries in cluster-wise and district wise formats.

MANAGEMENT INFORMATION SYSTEM

The system generates reports with satellite image for the various types of activities viz., Infrastructure development, Training, Exhibitions, and other miscellaneous with the description of the activity in the particular Cluster. These kinds of reports are very helpful in verifying the status of the scheme activity for that Cluster and saves time and effort of a physical visit to the remote and difficult to visit hilly areas in the districts.

SUMMARY

MOHSOM software is a boon for monitoring the progress of the implementation of Handloom Schemes under NERTPS project since 2015. Assessment of work activities under the handloom schemes implemented by the Government of Manipur and funded by the Government of India has been streamlined using MOHSOM.

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Mid Day Meal Automated Reporting & Management System (MDM ARMS): Ensuring Quality And Efficient Management

The Mid Day Meal Scheme is one of the most well-known schemes initiated by the Government of India. NIC, Himachal Pradesh has taken the initiative to push the efficiency of the scheme to the next level using ICT by creating the MDM-ARMS software and a related mobile based App to improve the management of the scheme at the State as well as the District level.

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Edited by
VIVEK VERMA



With a view to enhancing enrolment, retention and attendance to schools and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched as a Centrally Sponsored Scheme on 15th August 1995. Since then, the scheme has undergone many changes over the years and is now known as “National Programme of Mid Day Meal in Schools”.

Over 10 crore eligible school children in almost 11 lakh schools benefit from the MDM Scheme. In order to efficiently manage the enrolment and meals being served in the Schools of various States, the MDM-ARMS software has been developed as a product so that any State Education Department can use it. The data collected will be reflected on the National Portal on daily basis.

MDM-ARMS SOFTWARE

The primary objective of MDM - ARMS software is the instant reporting of meals served in various schools of the State/ Country, primarily through SMS from the mobile phones of teachers on the Nationwide Toll-free Number 15544. This toll-free number is available across all mobile service providers for the country and no charges are levied to the registered teachers for sending the mid-day meal data through SMS on this number.

The software has been designed and developed by NIC Himachal Pradesh State Centre in consultation with the Departments of Elementary Education, Himachal Pradesh and Department of School Education and Literacy, MHRD, GoI, NIC teams in MHRD and HQs.



“

We have benefitted extremely from the project as we get the daily meals served information on regular basis through the MDM software at Nil cost and can alert the defaulters to send information during the day time. In addition, we also come to know of the schools where funds or ration are an issue so that they can be provided with funds and rations, on priority. The NIC Himachal Pradesh has done a commendable job in a very short time

MANMOHAN SHARMA, HPAS
Director, Elementary Education
Himachal Pradesh

”

SOFTWARE FEATURES

- Easy onboarding for other States
- Data collection through different modes of SMS, Mobile App, Web
- Multi-lingual, Hindi and English labels already provided
- Checks on the quality of data being reported
- Generation of Auto-alerts to ensure that the data is reported by all schools
- Generalised Web-based software for creation of Master data and its management
- Exception reporting in case of erroneous data reporting
- Inspection reporting for cross checking of reported data
- MIS reports and graphical dashboard
- State Instance available on the direct URL like <http://mdmhp.nic.in/chandigarh>
- Data transfer to National portal in pre-defined formats at regular intervals

STEPS FOR ON-BOARDING

(Information on pre-requisites is available under FAQs section on <http://mdmhp.nic.in>)

- Download and fill the Onboarding form, send through Email
- Work out the SMS (Push-Pull) cost based on the number of schools in the State and generate PI through NICS I for the same, Release payment to NICS I
- Collect and Port master data using pre-defined Excel Sheet available on the website
- In case of any local language, please get the labels/ error messages entered into the software
- Use training videos, user manual to impart training to MDM Coordinators and Respondent teachers.

TECHNOLOGY

- Cloud hosted at <http://mdmhp.nic.in> with State specific URLs
- Developed as a product, multi-lingual,

security audited

- SQL Server 2012 and .NET MVC technology
- NIC SMS Gateway costing through NICS I
- Android based Mobile App (multi-lingual) for monitoring purposes
- Postgres 9.1 database with PostGIS

MOBILE APPLICATION



The web-enabled software is supported with an Android based mobile application which is quite useful for monitoring the daily data submission status and sending alerts to the defaulting respondents. The MDM App also has feature to send daily data of the respondent's mapped schools using the SMS feature of the mobile in place of Internet. The Internet is only required for authentication and then fetching the relevant records in the App as per User role. Other features include:

- Generalized App, not requiring any local customization as it is synchronized with the web application and get labels/ data etc from the data already entered in the software (in any language).
- Multi-lingual app, language can be changed in the App itself
- MDM daily/ monthly data reporting without Internet connection through SMS
- No need to compose SMS
- SMS to respond to defaulting Teachers/ Cluster Heads/ BEOs/ DDs through App
- App available through Google Play Store so user are notified of the updates immediately, whenever a new version of the App is released.

GIS-VISUAL MAPS

- State wise District Boundaries layers to be provided by respective States
- GIS parameter of School Longitude and Latitude - mapping required in master
- District wise MDM meal server maps along with school data
- School wise meal served GIS maps with in a district
- Search nearby school within a given radius of reference school along with its distance.



The backend software comprising of a number of master tables for storing location, school, teachers, MDM data, alerts, monitoring tools, direct entry of meals data, graphical reports, interfacing with the mobile App, GIS reports etc.

IMPLEMENTATION STATUS

Presently, 12 States/ UTs of the country have come on board, out of which 6 States/ UTs of Himachal Pradesh, Rajasthan, Mizoram, Uttarakhand, Daman and Chandigarh have implemented the software. The other states of Haryana, Madhya Pradesh, Nagaland, Meghalaya, Chhattisgarh and Telangana have come on board and shall start using it.

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Case Hearing Status (CHS) Mobile App: Making Real-time Update Of Court Processes Easy

The Android based CHS mobile App developed by NIC's Unit at Andaman & Nicobar is a modern and easy facilitation to access the daily cause list put up for case hearing procedure of the District and Sessions Courts of Port Blair. Now, the real time case progress status can be viewed through mobile phones being at any place, making it extremely convenient to various stakeholders.



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The Case Hearing Status (CHS) App is an Android based mobile application developed and hosted under the E-Courts Mission Mode Project (MMP). Developed by National Informatics Centre's Andaman & Nicobar Unit, Port Blair, the objective was to modernise the process of announcing the daily cause list.

The CHS App has been launched on 19th April 2016 by the Hon'ble Chief Justice Dr. Manjula Chellur, Calcutta High Court at the conference hall of Circuit Bench of Calcutta High Court at Port Blair.

KEY FEATURES

- Court-wise cause list for the day.
- Real time case progress status of each courtroom.



Launch of CHS Mobile App by Hon'ble Chief Justice, Dr. Manjula Chellur, Calcutta High Court

The mobile App facilitates litigants, lawyers and the public at large to access the court wise daily cause list of the current date and monitor case progress status of the courts in District & Sessions Court Complex, Port Blair. It also enables users to stay updated with the daily cause list at the completion of each case hearing or at the end of the day.

- Updated cause list/ Next listening date of the cases heard on the day.

TECHNOLOGY

The backend technology of the App consists of Android as the OS and PHP, JSON, HTML, CSS3, JavaScript as Technology Stack, whereas the Database is MySQL.



Stakeholders and their Scheme-roles

The CHS App can be downloaded free and for easy access, numerous Wi-Fi routers have been installed as a part of LAN in the District & Sessions Court Complex building at Port Blair.

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Combating RANSOMWARE: Practice, Strategies and Defenses

Ransomware is a threat to Netizens, one that has become increasingly popular with criminals in the recent past.

Combating this challenge requires not only the development of new technologies but also good Internet practices on the part of the users.



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Ransomware is a type of malware that can be covertly installed on a computer without the knowledge or intention of the user and restricts access to the infected computer system in some way. True to its name, it then demands that the user pays a ransom to the malware operators to remove the restriction.

User awareness about this type of infection and its ill effects will greatly help in minimizing threat to digital assets. This article deals with the characteristics of Ransomware malware, its effects, propagation methods and measures to be taken to prevent a Ransomware infection.

UNDERSTANDING RANSOMWARE

Ransomware is different from the typical forms of malware. Most malwares work in the background and rarely make their presence felt, even to sophisticated antivirus software. However, Ransomware makes its presence known openly in order to intimidate the users. It prevents or limits users from accessing their system. This type of malware forces its victims to pay the ransom through certain online payment methods in order to grant access to their systems or to get their data back.

Cybercriminals are now using the most modern cryptography to encrypt stolen files and have gotten increasingly better at making their dangerous links and downloads seem perfectly benign.

For example, a hacker might pose as your service company in an email stating that they need you to fill out an attached form or else your service will be cut off/stopped. Or a hacker might even use

social engineering to pose as someone in your contact list to get you to click on a link in an email. Once you click the link or visit the malicious website, the files are installed on your system under the radar, without you being any wiser.

It's worth adding that Ransomware's communication protocols have been upgraded from plain text (HTTP) to Tor and HTTPS, making encrypted calls to C&C servers almost impossible to track through network traffic monitoring. File encryption has also been revamped to use crypto-libraries that perform strong, asymmetric cryptography rather than using



Unwitting users get Ransomware unknowingly downloaded on their system by visiting malicious or compromised websites. It can also arrive as a payload, either dropped or downloaded by other malware. Some Ransomware is delivered as attachments to spammed email.

short-length keys or hard-coded ones. Earlier samples such as Cryptolocker, Cerber3 and Cryptowall first contacted the server and perform encryption afterwards.

Ransomware is a very challenging threat for both users and anti-malware companies, as it boasts of impressive capabilities and an unprecedented success rate in extorting money from its victims.

The ransom prices vary, ranging from \$USD 24 to more than \$USD 600, or its bitcoin equivalent. It is important to note, however, that paying the ransom does not guarantee that users can eventually access the infected system. There is no guarantee that the victim will get their data back, or that the attacker will not leave other forms of malware running on the system. Cyber criminals will return to someone who paid, so payment to recover your files simply confirms that you will be a good target for future attacks and scams.

Users may encounter this threat through a variety of means. Unwitting users get Ransomware unknowingly downloaded on their system by visiting malicious or compromised websites. It can also arrive as a payload, either dropped or downloaded by other malware. Some Ransomware is delivered as attachments to spammed email.

Once executed in the system, a Ransomware can either (a) lock the computer screen or (b) encrypt predetermined files with a password. In the first scenario, a Ransomware shows a full-screen image or notification, which prevents victims from using their system. This also shows the instructions on how users can pay for the ransom. The second type of Ransomware locks files like documents, spreadsheets and other important files.

Most Ransomware campaigns begin with a phishing attack. Over time, they have become more sophisticated, many now specifically and meticulously crafted to the locale of victims that are being targeted.

DEVELOPMENTS IN RASOMWARE TECHNOLOGIES

VIRTUAL CURRENCY:

Virtual currency is anonymous, at least

until it is exchanged for conventional money. Bitcoin has fuelled a surge in the number of cyber attacks where computers and personal data are held hostage in return for ransoms paid in the almost-anonymous virtual currency.

Cyber attackers prefer to demand ransoms in Bitcoin because it is much harder to trace than credit card payments in conventional currencies. Using Bitcoin is the online equivalent of leaving a suitcase full of cash in a park.

TOR NETWORK:

By using the Tor network, attackers can more easily hide the location of their control servers, which store the victims' private keys. Tor makes it possible to maintain the criminal infrastructure for a long time and to even rent the infrastructure to other attackers so they can run affiliate campaigns.

TARGETING MASS-STORAGE DEVICES:

In August 2014, some Ransomware began targeting network attached storage (NAS) disk and rack stations. The malware exploits vulnerabilities in unpatched versions of the NAS servers to remotely encrypt all data on the servers using both RSA 2,048-bit keys and 256-bit keys. Most malware execute with the same privileges as the victim executing the

payload. If the person getting compromised has administrative privileges, the malicious code will have access to the same resources.

Some of the Anti-Virus software gives limited protection from the infection of Ransomware by limiting access to malicious websites hosting Ransomware variants, and blocks IP addresses and C&C servers that Ransomware variants access. Some of the solutions also block mails that carry Ransomware.

PROPAGATION PREVENTIONS

A common vector to introduce these threats into office environments is via spam emails with attachments. They appear from legitimate sources and encourage users to click on them.

The following configurations can help provide another layer of defense:

- **Block double extension attachments:** Configure email service to block mail attachments with double extensions.
- **File Filtering:** Configure mail service to block files with the file extensions like .SCR, .EXE and .CAB files reaching user's desktops.
- **Check the content** of the mail messages you receive and send. The mail attachments have become a very common





Tips to prevent Ransomware infections

- Backup your files regularly.
- Apply software patches as soon as they become available. Some Ransomware arrives via vulnerability exploits.
- Bookmark trusted websites and access these websites via bookmarks.
- Download email attachments only from trusted sources. Do not open emails or attachments from unverified or unknown senders.
- Many system vulnerabilities commonly abused by Ransomware can be patched. To minimize the Ransomware infection, it is utmost necessary to patch Operating Systems, and most commonly used applications like browsers, Java, Adobe Reader, Flash and other applications.
- Enable pop-up blockers on browsers.
- Scan your system regularly with anti-malware.

The only method which saves you after infection from the loss of data is Backup. Maintaining regular backup minimizes the loss of files and documents.

method for propagating malware. For this reason, practices like checking the sender of a message, taking care with offers that sound just too tempting to resist, checking that it is really an email that has been sent,

and not clicking on suspicious links are basic measures to take in order to avoid falling victim to tricks that might result in infection.

- **The antivirus solution** will prevent the malicious code from executing itself to infect your system—provided it's updated regularly and configured with the correct settings.
- **Updating your software** is essential for preventing more infections. If you have antivirus software, it's important for the virus signatures to be up to date and for its settings to be configured correctly, so that this type of threat is detected and blocked—and in a timely manner so they can't take advantage of security flaws.

So, by combining the use of good security practices and a security solution to protect you from malware, as well as staying aware of these risks and the ways to protect yourself, it is possible to minimize security events involving information and new threats. These attacks, despite becoming increasingly sophisticated, continue to use known methods of propagation.

The best way to keep your files protected from Ransomware is through strong endpoint security. One should create backups of all important data, and ensure that those backups are blocked off by a partition, so they can't be encrypted by malware. You should also take an extra step and encrypt the backup files themselves. Continuous endpoint monitoring can also help to spot Ransomware before it can do any damage. Also, an application control that allows only the known application to run plays a major role to protect your valuable data.

SUMMARY

Ransomware can be a devastating attack on your system, locking you out of your files and data. The easiest way to protect yourself from such malicious attacks is to not allow the files to get to your system in the first place. Observing safe practices while surfing the Internet and downloading files and maintaining a baseline of security measures can ward off such attacks without much effort.

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Power Usage Efficiency In West Bengal State Data Centre:

Analysing Power Consumption Efficiency Improvement

Data Centres consume a considerable amount of power for their smooth functioning and can cause significant loss of money and energy with lack of proper infrastructure management. Findings and strategies contextual to West Bengal State Data Centre for optimizing the utilization of power energy resources discussed here.

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West Bengal State Data Centre (WBSDC), envisioned as the shared, reliable and secure infrastructure services centre for hosting and managing the e-Governance Applications of State and its constituent departments has been developed as a part of Mission Mode Project under the National e-Governance Plan (NeGP). WBSDC strives to ensure following of common principles and policies towards the realization of this vision.

As one of the pivotal constituents of National e-Governance Plan (NeGP), a series of various Government Departments applications are being hosted at WBSDC. The WBSDC is a key supporting element of e-Government Initiatives & businesses for delivering services to the citizens with greater reliability, availability and serviceability of the Government Departments. SDC facilitates consolidation of services, applications and infrastructure, Central data repository, Secure Data Storage and Online Delivery of Services. The goal of SDC is to provide the most efficient state-of-the-art facilities for application hosting in all fields of WBSDC infrastructure such as Power Supply, Building Management System, Server Hosting, Network System (both passive and active), Security Infrastructure, Monitoring System etc. In the article, we will discuss the Power Supply system & Energy Management Plan in WBSDC and the way it is used to create an energy efficient solution.

PUE & DCiE

The benefits of determining data centre infrastructure efficiency as part of an effective energy management plan are widely recognized. The standard metrics

of Power Usage Effectiveness (PUE) and its reciprocal Data Centre Infrastructure Efficiency (DCiE) have emerged as recognized standards.

Power Usage Efficiency (PUE)

The PUE metric is the most popular method of calculating energy efficiency. Although it is the most effective in comparison to other metrics, the PUE comes with its share of flaws. One real problem is PUE does not account for the climate or weather conditions within the cities the data Centres are built. In particular, it does not account for different normal temperatures outside the data Centre. For example, a data Centre located in Kashmir cannot be effectively compared to a data Centre in Kolkata. A colder climate results in a lesser need for a massive cooling system. Cooling systems account for roughly 30 percent of consumed energy in a facility, while the data Centre equipment accounts for nearly 50 percent. Due to this, the Kashmir data Centre may have a final Power Usage Effectiveness of 1.8 and the data Centre in Kolkata may have a ratio of 2.7, but the Kolkata data Centre may be running overall more efficiently.

Having a facility that uses 1,00,000 kW of total power of which 80,000 kW is used to power your IT equipment, would generate a PUE of 1.25. The 100,000 kW of total facility power divided by the 80,000 kW of IT power.

Data Centre Infrastructure Efficiency- (DCiE)

DCiE is a performance improvement metric used to calculate the energy efficiency of a data Centre. DCiE is the reciprocal of PUE. It is calculated as a percentage by taking the total power of the IT equipment and dividing it by the total power into the data Centre multiplied by 100.

Example: Having that same facility that

uses 1,00,000 kW of total power of which 80,000 kW is used to power your IT equipment, would generate a DCiE of 80%. The 80,000 kW of IT power divided by the 100,000 kW of total facility power Multiplied by 100 to derive percentage. PUE / DCiE are efficiency benchmarks comparing your data Centre's infrastructure to your existing IT load. The initial benchmarking of PUE / DCiE yields an efficiency score and sets a testing framework for the facility to repeat. Comparing initial and subsequent scores, data Centre managers can gauge the impact of what should be ongoing efficiency efforts. At any given time, they are comparing the power currently used for the IT equipment a company needs with the power used by the infrastructure which keeps that IT equipment cooled, powered, backed-up, and protected. Finally, the purpose of PUE and DCiE is to provide easy to be interpreted values which can help to determine:

- Opportunities to improve a data centre's operational efficiency.
- Opportunities to re-purpose energy for additional IT equipment.

PUE	DCiE	Level of Efficiency
3.0	33%	Very Inefficient
2.5	40%	Inefficient
2.0	50%	Average
1.5	67%	Efficient
1.2	83%	Very Efficient

PUE AND DCiE AT WBSDC

In line with the PUE & DCiE requirement for power analysis, following measurements were taken at WBSDC for its IT equipments from all three phases of power supply from UPS:

Power Consumption Details			
	Supply Phase 1	Supply Phase 2	Supply Phase 3
UPS-1 (128KW)			
POWER (KW)	7	6	7
Total Power	20KW		
UPS-2 (128KW)			
POWER (KW)	8	12	11
Total Power	31KW		
UPS-3 (128KW)			
POWER (KW)	8	7	7
Total Power	22KW		

From the above table, the total load from

IT equipments is 73 KW for the WBSDC, whereas the supply power is 360 KW. With this we arrive at the following calculation for PUC & DCiE:

Sl. No.	PUC/ DCiE	Calculation
1	PUC	4.93
2	DCiE	20.18%

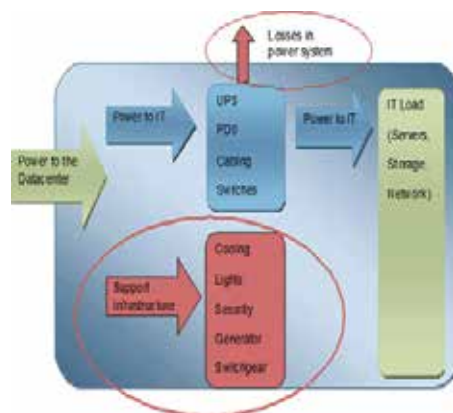
With the above calculation, WBSDC falls under highly inefficient data Centre category, as the power consumption by the IT equipments is very less than the actual power provisioning.

HOW TO INCREASE POWER USAGE EFFICIENCY IN WBSDC?

A PUE value of 4.93 is quite unusual for a data Centre. It means that for every watt required to power a server, 4.93 watts of power is consumed. Since we pay for every watt of power entering the data Centre, every watt of overhead represents an additional cost. Reducing this overhead will reduce the overall operating costs for the data Centre.

The three ways in which we can bring about a change and improve data Centre energy efficiency include:

- Reducing the power going to the support infrastructure
- Reducing losses in the power system.
- Providing supply to more IT equipments to create balance between supply and utilization.



- This way we can ensure that more of the power entering the data Centre should make it to the IT load; consequently, improving data Centre energy efficiency and reducing the PUE.

Elaboration of Total power consumption in WBSDC

Even considering the total consumed load

Sl. Equipments	Load
1 Total Load Consumption for server/ IT equipments	73KW
2 Total Load Consumption for PAC	66KW
3 Total Load Consumption for Utilities & BMS	16KW
Total	155KW

at WBSDC of 155 KW vis-à-vis total supplied load of 360 KW, there is a huge gap of almost 200 KW+ identified.

Prevention measures:

To have more efficient data centre power utilization, following two points may be considered:

- The stated load can be used for additional IT resources which will be provisioned at WBSDC in future and effectively, this will bring in a more energy efficient system in terms of power utilization.
- The Supply load may be reduced considerably to have a more energy efficient system.

WAY FORWARD

As per the above calculations and observations, it was concluded that WBSDC was inefficient in terms of energy and to overcome the problem, remedies must be taken upfront. There are future requirements for hosting applications and IT equipments at WBSDC. As there is ample room for power supply at WBSDC, the future provisioning of power supply must be done using existing supply instead of provisioning additional supply. Vis-à-vis, supply control may also be incorporated by initially reducing the total supply to a considerable capacity for serving the existing requirements and further, as and when the infrastructure grows, the requirements would be increased on an on-demand basis.

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District Bhojpur, Bihar:

Harnessing ICT In The Successful Path Of E-Governance

District Bhojpur has been striding ahead in a progressive path of e-Governance since 1988 with the establishment of NIC Unit in the district. NIC continues to be instrumental in successfully implementing several ICT based initiatives. The achievements story continues.



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In 1972, Bhojpur District was carved out of the erstwhile Shahabad District. Situated on the bank of river Sone, Bhojpur has been witness to many historical, political and religious events. The First e-Governance initiative was started in the District on 2nd October 1988 with the establishment of the NIC District Centre at Bhojpur. Since then, Bhojpur has witnessed a continuous progress in the field of ICT due to the tireless efforts of the NIC.

KEY ICT INITIATIVES

- **District Website**

NIC has developed the official website of the district <http://bhojpur.bih.nic.in> to provide valuable information to the citizens. All important information like circulars, notices, tenders is uploaded to this website.

- **RCMS (Ration Card Management System)**

All consumers have been provided with a Ration card on the basis of data entered from the SECC (Socio-Economic Caste Census). Chances of scams or mismanagement have been minimized as neither the dealers nor the State can raise the allotment arbitrarily.

- **IVFRT (Immigration, Visa and Foreigners Registration & Tracking)**

Any foreigner can be located using this online software. Each hotelier, institution and university will have to enrol each foreigner approaching them for a stay. Any illegal activity by foreigners will be detected quickly so that the necessary steps can be taken.



“NIC's contributions towards the e-Governance initiatives are noteworthy. We need to focus on latest technological advancements and enable citizens with more m-Governance services to bring Government services closer to them.”

DR. BIRENDRA PRASAD YADAV, IAS
District Magistrate, Bhojpur

- **NADAL (National Database of Arms License)**

Using this online software the status of the licensed arms in the district can be monitored from anywhere in the country. Arms license and Arms shop's data has



Jail and prisoners are being presented through it for trial. For meetings between the prisoner and their relatives, a system is being developed in the prison so that relatives and prisoners may be kept easily under watch.

• e-Labharthi

Using this software, the amount of the pension will now be sent to the account of pensioner directly. Through this, the practice of fake pensioners will be eliminated.

• Mobile Apps

The PACCS Mobile App has been developed for better management and tracking of all type of activities related to PACCS.

Other mobile apps have been developed for the Elections, Vehicle management (Sugam) and the Mobile app for DPRO office (Media App) which provides election news, Poll day monitoring, Counting results Trend, search in E-roll, etc.

• POINTS (Police Officer Information and Tracking System)

Through this software, police personnel may be tracked. With the help of this software, the police personnel can be contacted immediately in case of an emergency.

• Video Conferencing

Many important meeting across all levels or discussions are now held through the aid of video-conferencing which save both time and money.

been entered through the NADAL onto the National portal for better management of arms holders and suppliers.

• IDRN (India Disaster Resource Network)

In the case of a disaster, precious time is often wasted in looking for the resources, leading to avoidable loss of life and property. All the data related to disaster relief resources has been entered into a National portal. In the unfortunate event of a disaster, the resources can now be easily located and mobilized to prevent unnecessary loss and suffering.

• Track the missing child

This is a nationwide effort to locate missing children from all across the country. This online software (hosted at www.trackthemissingchild.gov.in) developed by NIC involves various stakeholders and institutions like NGOs and the Police to locate missing children. For this, the details of the missing child are uploaded to the website along with photographs. NIC provides training to various

NGO workers as well police personnel to use this software effectively.

• e-Court and e-Prison

The District Court is being computerized and computer facility is being provided to the Hon'ble Judges and Peshkars etc. Video conferencing facilities are also provided for speedy trial from Court and



Training on e-Prison in progress



Training in progress for Block Development Officers and Circle Officers

• **Election**

The election process is now fully computerized. Deployment of polling personnel, Police personnel, EVM, VVPAT – all is done automatically using computerization.

• **VMS (Vehicle Management System)**

This software has been developed for the management of vehicles, especially during the election season for timely payment of rental vehicles.

• **Land Record Computerization**

Land records computerization is now heading towards completion. All khatiyans are now digitized. Khatiyans can be viewed online at the website <http://lrc.bih.nic.in>.

• **Land Registry computerization**

Registry office has now been fully computerized. Online deed acceptance has been started. Buyer has to apply directly to the registrar in the prescribed format using the download-able form from the website

<http://www.biharregd.gov.in:8000/> for free. After registration they can download their deed from the web site www.bhumijankari.gov.in.

• **DM Court Computerization**

DM court has been computerized and now online. Any judgments can be now seen any time on the website. Other courts like the SDO court, DCLR courts etc. are also under the process of computerization.

• **Posting**

Postings of teachers, invigilators, assistant clerks etc. are all done using specialized software to ensure impartiality.

SUMMARY

The NIC District Centre of Bhojpur has come a long way from its humble beginnings and has been taking various steps to ensure efficient and effective e-Governance in the past few years.

However, the journey is far from over. The District Centre will continue to take further steps to make the lives of the citizens even easier by making the process of e-Governance simpler and more intuitive.



Computerised District Registry Office



Computerised District Transport Office

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District Namchi, Sikkim: Persevering Towards A SMART CITY

NIC South District Unit of Namchi was established in the year 1993 and since then had a key role in promoting e-Governance in the District using Information and Communication Technology. Many software applications, websites and mobile apps have been developed and implemented with an objective to bring about good governance and transparency in the administration.



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Namchi (meaning 'Sky High') is a small beautiful picturesque town, nestled among the hills of the young Himalayas. It is the district head quarter of South Sikkim and an epitome of culture, diversity, religion and benevolence, all signifying the munificence of Sikkim. It is also the only town of Sikkim among the 100 shortlisted cities to participate in the Smart City Challenge initiated by Ministry of Urban Development, Government of India.

KEY ICT INITIATIVES

Over the years, many important and beneficial ICT initiatives have been implemented by the NIC, South District Unit. All these projects have gone a long way in making the State and District administration activities at the grass-root level more efficient using IT. The latest ICT developments at the district can be categorically mentioned as under.

SOFTWARE APPLICATIONS

- **Certificate of Identification Management Software**

Certificate of Identification, issued to the citizens of Sikkim as a proof of being domicile of the state, is a mandatory document for availing any kind of service from the government in the state. This software totally automates the process of applying, processing, approval, delivery of the certificate and report handling. Computerized certificates have been issued successfully since 2011 from the DM office.

- **Residential Certificate Management Software**

The residential certificate is given to people who do not possess COI but were



The IT initiatives in the district have received a boost by the ingenuity and determination of Shri Raj Kumar Yadav (IAS), District Collector, South Sikkim, who is an avid lover of technology himself. Under his guidance, there have been a number of successful initiatives implemented by the district administration with the technical support of NIC in the past few years.

residents or descendant of the residents of Sikkim on or before 26th April 1975. The Residential Certificate Management

Software is also similar to the COI Management Software with complete process automation and has been implemented in all the DM offices of the state.

MOBILE APPs

• Sikkim Disaster Management Android App

The android app provides current information on natural disasters in the State of Sikkim and helps in generating awareness. It is updated regularly by the administration with current road status and weather warnings. It also provides information on recent natural calamities, crop, livestock and property damages, casualties, ex-gratia norms and do's & don't during and after a disaster.

WEBSITE DEVELOPMENT & SOCIAL MEDIA

• Samdruptse Website

A website www.samdruptse.nic.in has been developed and hosted by NIC for the administration with the purpose of providing complete information on Samdruptse as well as about Guru Padmasambhava. The world's largest statue (at 118 feet) of the Buddhist Guru Padmasambhava is located on the Samdruptse hill in the district.

• Siddheshwar Dham Website

A website www.chardham.nic.in has been developed for the unique pilgrimage tourism venture of the Sikkim Govern-



Inauguration of Siddheshwar Dham website(www.chardham.nic.in) by the Hon'ble Governor of Sikkim Shri Srinivas Patil



Sikkim Disaster Management App

ment. Developed as the “Pilgrim cum Cultural Centre”, it has an 87ft statue of Lord Shiva and replicas of the four Dhams of the country at one place at Solophok hilltop in Namchi.

• FB Page of District Administration, Namchi

The Facebook page of ‘DAC Namchi South Sikkim’ showcases important official activities and development works in the district to promote communication between citizens and the administration.

NETWORKING, VIDEO SURVEILLANCE & MESSAGING

• Local Area Network

NIC has connected most Government offices at Namchi via LAN and WiMAX.



District Namchi's Social Media Page



Homepage of Samdruptse website (www.samdruptse.nic.in)

Offices which are not feasible for wired LAN connectivity have been connected via long range Wi-Fi point-to-point connectivity.

• Wi-Fi hotspots

Hotspots have been set up with the technical support of NIC at District Administrative Centre, Samdruptse, Siddheshwar

Dham, and Namchi Government College. This has been done as an additional service to the visitors at the office and tourist sites, and to help the students in their studies & research work.

• Video Surveillance

CCTV cameras have been installed at District Administrative Centre,

Samdruptse and Siddheshwar Dham keeping security and law & order in mind. This video surveillance system discourages criminal elements and promotes a sense of security in the tourists

• Messaging

The contact numbers of all the officers and panchayat members of the district have been collected and all types of group instruction are sent via bulk SMS using the 'Quick SMS' portal of NIC for faster communication.

SUMMARY

The software applications have made a major impact in promoting efficient and quick governance. The apps have also been met with great enthusiasm by the people. The NIC District Centre's efforts have brought the citizens closer to the administrators and opened up new channels of communications between the various stakeholders.

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Screen shot of Certificate of Identification Management System Application

District Chamba, Himachal Pradesh: Focussing on ICT based Citizen Centric Services

The IT revolution in Chamba kick started with the establishment of NIC District Centre in the year 1988 aiming at providing IT Support and Services to various Government and Public sector Departments. Since then, ICT has played a pivotal role in improving e-Governance and delivery of citizen centric services.



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Edited by
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Chamba is one of the oldest Districts of Himachal Pradesh, which is situated on the banks of river Ravi. This district is bounded by Jammu & Kashmir in the north-west and Lahaul & Bara-Bangal area of Himachal Pradesh in the east. The History of Chamba is associated with Chambial, rulers of Chamba dynasty. Chamba town hosts popular Minjar Mela which commence on the second sunday of holy month of Sravana. The Holy place of Manimahesh is also situated in the Bharmour Sub Division of Chamba.

The IT revolution in Chamba started with the establishment of NIC District Centre in 1988 with the aim of providing IT Support and Services to various Government and Public Sector departments. Since then, ICT has played a pivotal role in improving governance and delivery of citizen centric services

NATIONAL ICT INITIATIVES

AEBAS: Aadhaar Enabled Biometric Attendance System has been implemented at various Central and State Government offices.

JEEVAN PRAMAAN: Digital Life Certificate for Central and State Government pensioners has been implemented at various levels of the Treasury.

SARATHI VER. 4.0: Web-based System for issuance of Learner Licenses and Permanent Driving Licenses.

IVFRT: Immigration, Visa and Foreigner's Registration and Tracking system has been implemented at the FRO-cum-SP Office.

NDAL: National Database of Arms Licenses has been implemented for generation of Unique Identification



“

ICT is playing a pivotal role in improving governance and delivery of citizen centric services. The NIC Chamba is doing an appreciable task of implementing various e-Governance projects successfully.

SUDESH MOKHTA, IAS
Deputy Commissioner, Chamba

”

Number for the Arms Licenses and old data of Shastr has been ported to NDAL.

MGNREGA: Online software is implemented in DRDA, Blocks and all the Gram Panchayats for job cards, master roll generation and online transfer of Aadhaar enabled payments.

NATIONAL POPULATION REGISTER (NPR): Revenue officials have been provided hands-on training for Data Entry and updating the data available on the National Database.

E-PROCUREMENT: Online system for computerization of the tendering and bidding process including evaluation till

the award of the contract.

Over the years, many important and beneficial ICT initiatives have been implemented by the NIC, District Unit. All these projects have gone a long way in making the State and District administration activities at the grass-root level more efficient using IT. The latest ICT developments at the district can be categorically mentioned as under.

MAJOR PROJECTS IMPLEMENTED

DISTRICT WEBSITE:

The official website of District Chamba (<http://hpchamba.nic.in>), has been designed and developed as a one-point-source of information about the history, culture and other facts related to the district.



Website of Chamba District

HIMBHOOMI: Implemented at all tehsils, this system computerizes Land Records and generates various registers and related MIS reports

HIMRIS: Software used for the registration of land deeds in integration with the HimBhoomi software where mutation data is transferred automatically

HIMKOSH: Integrated Financial Management System at District Treasury and all the sub-treasuries. The key modules include eSalary, ePension, eChallan, HPNPS, eKosh, eStamp and eVitrans.

ELECTION: Implemented the DISE (District Information System for Elections) system for entry and random



Pilgrim at the Minjar Mela receiving assistance from an NIC operative

deployment of polling staff, counting staff and EVMs.

e-KALYAN: Software for entry of applications for the disbursement of Social Justice and Welfare pensions through Bank Accounts, MOs and Post Office Accounts

MANAV SAMPADA: A web based human resource management system for management of service books, transfers, APRs and promotions.

OTHER PROJECTS:

eRojgar- Employment Exchange Management System including Job Portal.

e-Pehchan- Online System for the issuance of Disability and Senior Citizen Identity Cards.

DEAS- Used for the maintenance of accounts on Double Entry Accounting System at blocks.

ePRI- Implemented a complete suite for the management of three tier structure of the PRI activities.

HotDak- For monitoring important Dak generated from DC Office.

SchemesMIS- System for sanctioning of funds, monitoring of physical/ financial progress of various developmental schemes.

Manimahesh Yatra- System for Data entry of pilgrims and website for information of pilgrims.

NICNET AND VIDEO CONFERENCING

The NIC district centre is connected with NIC HP State Centre with 34 Mbps leased line and LL links to Pollution Control Board, District Court, Dalhousie and Bakloh Cantonment Board have been provided. The PAMA Link to Pangi tribal valley and on-demand DAMA link to Bharmour tribal valley is being supported by NIC District Centre, which are among the most difficult areas of the State.

SUMMARY

NIC District Centre, Chamba is committed to provide necessary technical support for implementing IT initiatives of the Government. During the General Election 2014, the Centre has conducted the live web cast of the highest number of Polling Booths in Himachal Pradesh. In the Manimahesh Yatra 2015, more than 70,000 pilgrims were registered on the locally developed software. During the Digital India Week 2015, various initiatives were taken up which include the webcast of Digital India Week inaugural function. The District Administration has appreciated the successful ICT activities undertaken by the NIC District Centre.

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Haryana State Resident Data Base, Mhari Panchayat Mobile App, eTDS for Drawing & Disbursing Officers, e-Registration HARIS with e-Appointment System, eGRAS Haryana integrated with e-Payments, Online Drug Inventory & Supply Chain Management System, CeFMATIS and AEBAS for Employees of Haryana receives SKOCH Order of Merit Award

Award: SKOCH 2016 Award- Oder of Merit
Categ.: Multiple categories
State: Haryana

Haryana State has won a number of awards during the 45th Skoch Summit held at HICC, Hyderabad on 8th September 2016. Along with senior officials of State Government, Shri Ghan Shyam Bansal (DDG & SIO, NIC-Haryana), Shri MP Kulshreshtha (DIO), Shri Pankaj Aggarwal (PSA), Shri Deepak Bansal ASIO-Haryana), Shri Yashpal (SSA), Shri Deepak Sawant (SSA), Deepak Bhardwaj (SA) and Shri Jagdish LL (SSA) were the NIC- Haryana team members who participated the event to receive the awards.



Haryana Social Security Pension Schemes through Direct Benefits Transfer (DBT) and ERP System of Public Health Engineering Department, Haryana receives SKOCH Award

Award: SKOCH 2016 Gold Award
Categ.: Smart Governance
State: Haryana

Haryana State has won two Smart Governance Gold Awards during the 45th Skoch Summit held at HICC, Hyderabad on 9th September 2016. Along with the Hon'ble Minister of State for Social Justice and Empowerment, Haryana and senior officials of State Government, Shri Ghan Shyam Bansal (Deputy Director General & SIO, NIC Haryana), Shri Susheel Kumar (ASIO, NIC-Haryana) and Shri Neeraj Singal (SSA, NIC Haryana) received the awards.



eShramik, the online Application for registering the building and other construction workers of Odisha wins SKOCH Award

Award: SKOCH 2016 Award
Categ.: Best Portal
State: Odisha

eShramik facilitates the various stakeholders for making benefits available to building and other construction workers for education, marriage, unfortunate accidents & deaths and other benefits. The Application also facilitates collection of cess. The system quite useful for Labour Commission Office, District Labour Offices and Establishments who employ labourers. The award was received by Dr R N Behera, Sr. Technical Director and Sri S.K.Sahoo, Scientist-D (NIC, Odisha) at the International Convention Hall, HICC, Hyderabad.



ELBSoft for Electrical Licensing Board, Energy Department, Govt. of Odisha and Computerization of Odisha State Beverages Corporation Online Process receives SKOCH Award

Award: SKOCH 2016 Award- Order of Merit
Categ.: Multiple Categories
State: Odisha

Odisha State has won two Order of Merit Awards during the 45th Skoch Summit held at HICC, Hyderabad on 9th September 2016. The computerization of Odisha State Beverages Corporation Online Process facilitates an effective control over the liquor distribution processes over the internet which eliminates the need for manual intervention in the supply chain of OSBCL. This tool enables quicker approval process for suppliers and hassle free purchase experience for retailers. ELBSoft for Electrical Licensing Board, Energy Department, Govt. of Odisha is an online system for issuance of Licenses, Certificates of competency & permits to electrical contractors, supervisors and electrical workmen in Odisha. The software enables preparation of database of Contractors, Supervisors and Electrical workmen in order to issue, renew or cancel licenses. The system also facilitates e-payment and enables various organizations to cross check and validate licenses.



Shri Parameswaran Iyer, IAS, on behalf of Ministry of Drinking Water and Sanitation, receives INDIATODAY Safaigiri Award 2016 for the SwachhApp of Rural India

Award: IndiaToday Safaigiri Award 2016
Categ.: Best Sanitation App
Min.: Drinking Water and Sanitation

Safaigiri Award 2016 felicitates the pioneering efforts in the fight for cleanliness. Swachh App provides a holistic view of sanitation in rural India. Downloadable on smartphones, this App facilitates viewing details of household-toilets built under the Swachh Bharat Mission, Gramin. Swachh App is connected to Swachh Bharat Mission MIS and thus every time the Information System is updated, the latest information is automatically synced to the App. The App was developed by NIC was under the leadership of Shri DC Misra (DDG) and headed by Smt. Seemantani Sengupta (Sr.TD). The other team members are Shri Om Prakash (PSA), Shri Pramod Kumar (SA), Shri Surya Mohan Srivastava (SA), Shri Shiv Kumar (SA) and Ms. Anu Talwar (SA).



National Informatics Centre has been awarded the 7th NCPEDP-Mphasis Universal Design Award 2016 for formulating "GIGW"

Award: INCPEDP-Mphasis Universal Design Award 2016
Categ.: Organizations
Org.: National Informatics centre

National Informatics Centre has received the 7th NCPEDP-Mphasis Universal Design Awards 2016 for excellence in formulating Guidelines for Indian Government Websites (GIGW). The award was given away by Hon'ble Minister of State for Social Justice and Empowerment, GoI, Shri Krishan Pal Gurjar at India International Centre, New Delhi on August 14, 2016. GIGW team members of National Informatics Centre, Smt. Alka Misra (Senior Technical Director), Shri Lokesh Joshi (Scientist-D) and Shri Shashi Kant Pandey (Scientist-C) received the award from the Hon'ble Minister.



Skoch Award 2016 winning projects from Himachal Pradesh- GOLD: Sarathi, the online driving license issuance system and eDistrict. ORDER OF MERIT: Red Cross Management Information System (MIS), Small Savings MIS, Document Management System for Record Room, Web enabled Sarathi implementation, Forms Repository, Examination Processing System, Himachal Pradesh Teletstroke Android App, eSamiksha, e-Bills, Chief Minister Office References Management Information System by NIC (CM-REFNIC), NGT Rohtang Permits, Single Window System, Circle Rates and e-SRT (Special Road Tax) received Order of Merit.

Award: SKOCH 2016 Award - Gold, Order of Merit
Categ: Various categories
State: Himachal Pradesh

NIC Himachal Pradesh won Gold, Order of Merit for 14 projects under various categories. These include awards for 4 District level projects and 10 State level projects.

State level awards were received by Shri Sanjay Sharma, Shri Sanjay Kumar and Shri Ashish Sharma on behalf of NIC Himachal Pradesh whereas the District level awards were received by Shri Bhupinder Pathak, DIO Kangra, Shri Sanjeev Kumar, DIO Una and Shri Akshay Kumar, ADIO Kangra.



The Project of Himachal Pradesh also received the Gold Award. The Project has been integrated with the HimBhoomi software of NIC Himachal Pradesh for online issuance of certificates. Presently, the services being provided through LokPramaan Patra software, developed by NIC Himachal Pradesh, are shown in the eDistrict dashboard.

Seen on the left picture: Shri Ritesh Chauhan, DC Kangra, Shri Bhupinder Pathak, DIO Kangra, Shri Akshay Kumar, ADIO Kangra, Shri Ashish Sharma and Shri Sanjay Sharma receiving the Award. Seen on the right picture: NIC Himachal Pradesh and HP DIT Officers with the Awards.

Mexico City crowd-sourcing new Constitution in a Democratic Experiment

Mexico City recently launched a massive experiment in citizen participation and digital democracy. It has asked its more than 9 million citizens to contribute to the process of drafting of a new constitution with the help of social media.

The crowd-sourcing exercise is the first of its kind anywhere in the World. The local citizens can put up their suggestions for review and inclusion in the Constitution. In case their suggestion is met with popular support (more than 10000 people signing their agreement with the proposal), the person gets to personally make his or her case in front of the review committee of the Constitution. Citizens can also annotate proposals by the Constitution's drafters via an online editing software similar to Google Docs.

The idea, in the words of the Mayor of the city, is to "Bestow the constitution project, with a democratic, progressive, inclusive, civic and plural character."

There are various levels of participation on offer, from ranking the city's biggest problems in an online survey to making detailed comments on draft proposals. For people without internet access, 300 computer kiosks have been set up through-



Website screenshot

out the city with staff to guide them through the process.

In three weeks, Change.org collected more than 200 petitions, which have been signed by more than 10,000 people. The exercise is an ongoing process and is poised to inspire inclusion and participation from the citizens in a big way.

Source: <http://qz.com/>

U.S. allocates funds to strengthen ICT service provider

A sum of US\$1.4 million has been allocated to eGov Jamaica Limited for institutional strengthening, in becoming the implementer of Information and Communications Technology (ICT) solutions for the Government.

The money has been drawn from the US\$37.6-million Strategic Public Sector Transformation Project, which seeks to strengthen public resource management and support selected



Minister of Finance and the Public Service, Audley Shaw, Minister of Science, Energy and Technology, Dr Andrew Wheatley and Chief Executive Officer, eGov Jamaica, Herman Athias. (L-R)

public-sector institutions in facilitating a more enabling environment for private-sector growth.

The initiative was formalised during a signing ceremony at the Ministry of Finance and the Public Service, Heroes Circle office, in Kingston yesterday.

The Memorandum of Understanding was signed by Minister of Finance and the Public Service, Audley Shaw; Minister of Science, Energy and Technology, Dr Andrew Wheatley; and Chief Executive Officer, eGov Jamaica, Herman Athias.

Shaw informed that the components and estimated costs are strategic positioning and operational strengthening, US\$610,000; governance and management, US\$140,000; training, US\$434,000; and tooling, US\$216,000. He said the institutional strengthening of eGov Jamaica Limited will be undertaken to provide medium to long-term support of the Public Financial Management systems under Component Three of the Strategic Public Sector Transformation Project.

It also aims to proliferate and promote the delivery of first-class, easily accessible and secure e-Government services.

Source: <http://www.jamaicaobserver.com/>

Launch of the website of 350th Prakash Parv celebration by Hon'ble Chief Minister of Bihar

Hon'ble Chief Minister of Bihar, Shri Nitish Kumar inaugurated the website of 350th Prakash Parv celebration on 15th September 2016 in a grand ceremony at Patna. Smt. Anita Devi, Hon'ble Minister of Tourism and other dignitaries graced the occasion.

Year 2017 commemorates 350th birth anniversary of the 10th Sikh Guru, Shri Guru Gobind Singh. In Patna, this will be celebrated with grandeur from 30th December 2016 to 8th January 2017. Lakhs of Sikh devotees from around the world are expected to be participating in the celebration. Various information pertaining to this week-long celebration are accessible at the website (URL: <http://350thprakashparv.bih.nic.in/>) such as modes of transportation for reaching Patna, Hotel accommodation and other facilities. There are also informative and dedicated pages on the history of Takhat Saheb and life philosophy of Shri Guru Gobind Singh.



Hon'ble Chief Minister and other dignitaries on the dais while Smt. Anita Devi, Hon'ble Minister of Tourism delivers her speech

The website was designed, hosted and technically supported by NIC-Bihar based on the request of Department of Tourism, Government of Bihar. Under the guidance of Shri Rabindra Kumar Singh, ASIO (Bihar), the activities of the event were coordinated by Shri Shailesh Kumar Shrivastava (TD) and Shri Niraj Tiwari (Scientist-B) of NIC. Shri Rajesh Kumar Singh, SIO (Bihar) applauded the efforts of the NIC team and congratulated them for the site's successful launch.

- RAJIV RANJAN, BIHAR

Visit of Delegation from UK Government Digital Services to NIC

Under the India-UK MoU on Public Administration and Governance Reforms, a team of 4 senior Government Digital Service Officers led by Mr. Andy Beale, Chief Technology Officer, HMG (Her Majesty's Government) was in India on a 3-day 'scoping' visit from 26th to 28th September 2016. The visit was to fine-tune the joint action plan on e-Governance.

On September 28th, the UK team had a brief meeting



DG, NIC in conversation with the UK delegation team



The UK delegation team interacting with NIC senior officials at NIC HQ.

with DG (NIC), Smt. Neeta Verma in her office at NIC Headquarters. This was followed by presentations on National Cloud Policy, Open Data Policy, Public Finance Management System and e-Sign to familiarize the UK team on these initiatives by respective NIC officers at the Conference Hall of NIC HQ. The UK Team had detailed interactions with the senior officers of NIC and appreciated the role of NIC on data management and linking up of services through digital identity. They shared their excitement hearing the NIC's technical expertise and services to implement IT solutions for the Central and State Governments. Later, the UK team had informal discussions with NIC officers over a lunch at India International Centre, New Delhi.

- DR. MEENAKSHI MAHAJAN, NEW DELHI HQ

Meghalaya-eSamikSha Online system for monitoring and compliance mechanism launched

Chief Secretary Shri K. S. Kropha, Govt. of Meghalaya, launched the Meghalaya eSamikSha Portal on 31st August, 2016 at State Secretariat, Shillong in the presence of Dr. Shreerajan and H. Marwein, Additional Chief Secretaries, R.M Mishra and R.V. Suchiang, Principal Secretaries, and other senior officials along with Dr. Shubhag Chand, HoD, Cabinet Secretariat Informatics Division, Rashtrapati Bhawan.

eSamikSha, a real time online Monitoring and Compliance Mechanism, has been developed by Cabinet Secretariat Informatics Division, to fast track the compliance of pending action points, proposal, targets, etc. of various Ministries/ Departments/ Organizations/ Agencies of Government of India and Government of States and UTs. The Portal has been designed to enhance efficiency, bring transparency, reduce the need of protracted correspondence and improve the communication between Government to Government (G2G) and Government to Business (G2B) and vice-versa.

A training workshop had been conducted by Shri Yogesh Kumar Agarwal, Scientist-B of the Cabinet Secretariat Informatics



Snapshots of the inaugural event at State Secretariat, Shillong

Division on 30th August, 2016. During the training session all the modules of Meghalaya-eSamikSha were explained in detail. Dr. Shubhag Chand made the vote of thanks and concluding remarks ending the launch session.

- DR. SHUBHAG CHAND, NEW DELHI

Launch of PSP (Punjab Sewa Portal) for Sewa Kendras

In order to ensure better and timely delivery of various government services through different departmental systems under one roof, Govt of Punjab has undertaken the initiative of setting up 2147 Sewa Kendras as single points of contact in different parts of urban as well as rural areas of the state. Punjab Sewa Porta(PSP) has been developed by NIC Punjab as an umbrella platform to enable the delivery of citizen-centric services of all the departments covered under Right to Service (RTS) act under one roof by integrating the applications used for providing the services.

On 12th August 2016, in a state-wide launch, in the first phase 322 urban Sewa Kendras and PSPs (Punjab Sewa Portal) were inaugurated by the Chief minister of Punjab Shri Prakash Singh Badal in Lambi district Muktsar and by Deputy Chief Minister, Punjab Shri Sukhbir Singh Badal in Pathankot and Mansa districts. Sewa Kendras and PSPs at other locations were also inaugurated on the same day by dignitaries including State Ministers.



Shri Sukhbir Singh Badal, Deputy Chief Minister at the launch of Sewa Kendra portal

PSP, been developed as a centralized application by NIC Punjab has been integrated with token machines as well as back-end modules of WebSUWIDHA and eDistrict to deliver 62 services and 118 sub services. Other departmental applications shall also be integrated with PSP in due course of time.

- VIKRAM JEET GROVER, PUNJAB

Government of Odisha launches website on Odisha Knowledge Hub Lecture Series (OKH)

The Odisha Knowledge Hub Lecture Series (OKH) website was launched by Smt. Usha Devi, Hon'ble Minister, W&CD, P&C, SS&EPD, Odisha at the Conference Hall of Planning & Convergence Department. Shri R. Balakrishnan, IAS, Development Commissioner-cum- Addl. Chief Secretary, Shri G.B. Reddy, OSD and Member Secretary, PHDMA, P&C Department, Shri P.K. Biwal, IAS, Addl. Secretary, P&C Department and other Officers of P&C Department were present at the function.

Government of Odisha has initiated OKH Lecture Series with an objective of promoting new ideas in various fields of governance in the State. It is poised to invite eminent persons having expertise in different fields to deliver lectures and participate in discussion with senior functionaries of the State Government. The objective to promote communication between scholars and other eminent personalities with the system in order to update the collective knowledge and experience.

The website on OKH Lecture Series has been developed by National Informatics Centre and is hosted at NIC Server,



Inauguration of OKH Lecture Series website

Bhubaneswar. The site is dynamic in nature and contains information related to the events of OKH as well as the Video Lectures, Photo Gallery, Feedback, Profiles of Speakers and Search facilities. The website is enabled with mobile-first technology enabling access of the site easily using mobile devices.

Under the guidance of Shri R. Balakrishnan, IAS, Development Commissioner-cum-Additional Chief Secretary, the website was developed by NIC's technical team consisting of Ms. Nirupama Mohapatra, Technical Director and Ms. Binodini Sahu, Scientist-D.

- A.K HOTA, ODISHA

e-Filing Training Session organized by NIC Haryana for members of the High Court Bar

The Punjab and Haryana High Court Bar Association in collaboration with the Computer Committee of the High Court administration organized a training session on e-Filing on 26th August, 2016 for the members of Bar by professional trainers from National Informatics Centre (NIC).

Over 200 lawyers, including the Association President, Shri Harpreet Singh Brar, Secretary, Shri Surinder Pal Singh Tinna and Registrar (Computerization), Shri Parmod Goyal attended the session.

Shri Surinder Pal Singh Tinna praised this important step towards overcoming the challenges faced by lawyers and a significant move for technical upgradation and modernization. The initiative would be beneficial to advocates, litigants as well as the judicial system of Punjab and Haryana.



Training session in progress at High Court

ana. These steps would go a long way benefitting High Court digitization. Shri Brar has announced to open four e-filing counters at the Association premises.

- DEEPAK SAWANT, HARYANA

National Conference-cum-Workshop on implementation of new Transport Applications

A one-day National Conference-cum-Workshop on the implementation of new transport applications was held for transport commissioners of States and UTs on September 01, 2016 at the Media Hall of Ministry of Road Transport and Highways (MoRTH), Parivahan Bhawan, New Delhi. The conference-cum-workshop was also attended by senior officials of MoRTH and National Informatics Centre (NIC).

The participants were exposed to the new transport applications: Vahan 4.0, Sarathi 4.0, eChallan and mParivahan, which are rolled out country-wide. Vahan 4.0 and Sarathi 4.0 are web-based centralized applications for vehicle registration and driving licensing respectively, while eChallan and mParivahan are mobile applications relating to enforcement, digital documents and services delivery through mobile devices.

In the inaugural session, Shri Priyank Bharti (Director, MoRTH) gave the welcome speech. The keynote address by Smt. Neeta Verma (DG, NIC) dwelt on the availability and adoption of latest technologies in Government projects. Shri Abhay Damle (JS, MoRTH) gave an introduction on National Transport Project and outlined the objectives of the conference. Shri Sanjay Singh Gahlout (DDG, NIC), the national head of the Transport Computerization Project, gave an overview of the achievements of National Transport project and the future roadmap for implementation of Vahan 4.0 and



Shri Sanjay Singh Gahlout (DDG, NIC) addressing the participants. Seen on the dais are (R-L) Smt. Neeta Verma (DG, NIC), Shri Abhay Damle (JS, MoRTH) and Shri Priyank Bharti (Director, MoRTH). Photo below shows the audience and participants

Sarathi 4.0 across the country.

The two sessions of the workshop included presentations by NIC on the status, achievements, roadmaps and implementation challenges of the new applications of Transport Projects and were reviewed for each State and UT.

State transport officials participated in the interactive discussions and gave their valuable views and suggestions. They also raised pertinent queries and urged MoRTH for necessary actions on the issues. Two sub committees were formed to examine the issues and submit recommendations to MoRTH..

- JOYDEEP SHOME, NEW DELHI HQ

eTaal portal receives STQC Certification for GIGW compliance

eTaal portal received the STQC certification for complying with the Guidelines for Indian Government Websites (GIGW). GIGW aims at making Indian Government websites usable, user centric and accessible.

It forms the basis for obtaining Website Quality Certification from STQC (Standardisation Testing Quality Certification).

eTaal has been implemented for providing e-Transactions count of e-Services delivered to citizens across the country. For providing this count, data is captured with respect to 3070 e-Services (approx.) from 21 Central Ministries, 36 States/ UTs and 20 Mission Mode Projects (MMPs).



Smt. Neeta Verma, DG, NIC, along with Shri IPS Sethi (Sr. TD, NIC) and Shri O.P. Gupta (Scientist-B, NIC) with the STQC Certificate awarded to eTaal

Around 1723 crore transactions have been recorded so far since the inception of the project in 2013.

- IPS SETHI, NEW DELHI HQ