

# Informatics



## GoI SEARCH as a SERVICE (GoI-SaS)

- ✿ ICT in Local Bodies Elections in Haryana
- ✿ Infrastructure Project Monitoring System of MoSPI
- ✿ CollabDDS
- ✿ Interoperable Criminal Justice System (iCJS)
- ✿ Responsive Design
- ✿ Internet of Things
- ✿ ICT in Districts: Bhilwara, Hamirpur & Muzaffarnagar

# INFORMATICS

Volume 22 No. 2 October 2013

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## INFORMATICS

Is Published by National Informatics Centre, Department of Electronics & Information Technology, Ministry of Communications & Information Technology, Government of India  
A-Block, CGO Complex, Lodhi Road, New Delhi-110003

## PRINTED AT:-

**CIRRUS GRAPHICS PVT. LTD.**

B-62/14, Naraina Industrial Area, Ph-II,  
New Delhi-110028 (INDIA)

# EDITORIAL

Greetings!

GoI Search as a Service (GoI-SaS) is an initiative to foster the efficiency and user experience in the search interface of the Government owned websites. As a joint effort of the National Informatics Centre and CDAC, rendered with open source tools & technologies, this service aims to maneuver the quality and relevance of the search results for the users besides enabling the administrators to monitor and analyze the search traffic on their websites. This issue of Informatics endows with a comprehensive overview of the initiative and explains how the service is useful and can be effectively applied for the government websites.

Under E-Gov Products and Services section, we have underlined various significant ICT initiatives implemented in diverse sectors and geographical spheres of the nation. ICT and ITeS for Local Bodies elections in Haryana, Online Entrepreneur Memorandum System, CollabDDS, Publishing of Exam Results and Online Counselling, CAS-MIS, iCJS, eROR, Infrastructure Project Monitoring System have been elucidated in this section.

The Technology Update section accentuates on the relevance and far-reaching outcome of imminent technologies such as Internet of Things. This section also carries a detailed account on Responsive Design.

This issue also covers updates on the latest ICT developments in the districts of Bhilwara, Hamirpur and Gonda. Our regular sections such as Cyber Governance, International e-Gov Updates and In the News would acquaint you with latest happenings in the e-Governance regime in India as well as the world.

The entire team of Informatics has toiled hard, often beyond the call of duty, to bring this issue to life. Do let us know your feedback, so that we continue to strive for a brighter future ahead for Informatics.

Wishing you all a fabulous festive season ahead.

Happy Reading

## NEETA VERMA

We invite your valuable articles and write-ups for Informatics.

Please send your inputs/contributions to our State Correspondents or else directly to us at the address below:

Editor-in-Chief  
Room No.-375, 3rd Floor, NIC HQ  
A-Block, CGO Complex, Lodhi Road  
New Delhi-110 003  
E-mail: editor.info@nic.in



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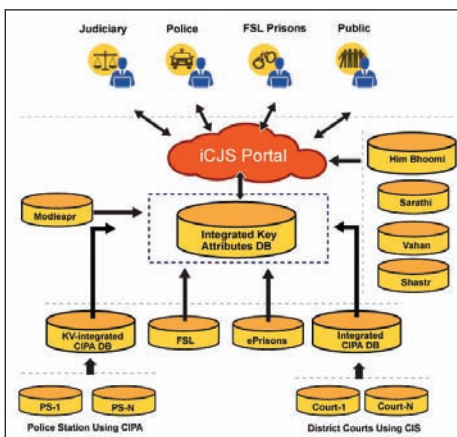
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# GoI SEARCH as a SERVICE (GoI-SaaS)

Government of India (GoI) Search Platform initiative has enabled the citizens and other stakeholders to quickly access the data on Government websites. Under this initiative, Search as a service (GoI-SaaS) facilitates the website owners in the Government to define their own search interface on their websites/portals and it helps then in analysing the user search queries and click behaviours on Search results.



**KAMALAKANNAN M.**  
Technical Director  
kannan@nic.in



**RITU GHAI**  
Senior Systems Analyst  
ritu@nic.in



**NARENDER KUMAR JAIN**  
Systems Analyst  
nk.jain@nic.in

**G**oI Search as a Service (GoI-SaaS) is a managed Search service on the GoI Search Platform that makes it easy to set up and manage search interface on any website/portal or online web application. SaaS enables you to search large collections of data such as web pages (HTML documents) and document files like PDF, Open Office documents(.odt, .ods, .odp) & MS Office documents(.doc, .xls, .ppt) etc. With GoI-SaaS, the website owners can quickly add search capabilities to their website even without becoming a search expert or worry about hardware provisioning, setup, and maintenance. With a few lines of code and few clicks in the GoI-SaaS Admin Console, you can create a search interface, and the GoI-SaaS search service automatically provisions the required technology resources and deploys the highly tuned search index. You can easily change your search parameters, fine

tune search relevance, and watch the user search queries and behaviours on the website.

## GoI-SaaS INTERFACE

Search as a Service (GoI-SaaS) enables web site owners to define their own search interface on their websites/portals. GoI-SaaS provides a deceptively simple form-based interface for building a domain-specific search interface on top of the GoI-SaaS search platform. This means that the builder gets to focus on selecting valuable content and tuning the ranking criteria, while GoI search platform performs the immense task of crawling, indexing, ranking, and display of results.

## HOW IT WORKS?

The main objective of building a GoI-SaaS is to determine which



sites/URLs (including flexible URL patterns) are searched, and to define a set of rules that guide the ranking of results. Once the GoI-SaaS is defined, the site owner places a search box on their site.

The GoI-SaaS users can also include onscreen Virtual Floating Hindi Keyboard along with the search box to help the visitors in submitting the search queries in Hindi language.

When the users perform a search, they are brought to a web page that looks much like the traditional search results page. However, there are two important differences:

1. The site owner can choose to have the search results appear in an iframe on their own site.
2. The site owner can customize the look and feel of the page to make it look more like their existing site.

### REQUEST FLOW IN GoI-SaaS

Initially, the search page is downloaded from the respective website and depicted in the visitor's

browser. Once the search query is submitted on the search form, it is directly sent to the GoI Search Platform, <http://goisearch.gov.in> as Ajax request. The GoI Search platform then returns the search results in JSONP format and finally the visitor's browser renders the search results.

The steps are explained in the sequence diagram. To customize the look and feel of the search results page, the site owners can modify default CSS to suit their respective website design.

### HOW TO REGISTER YOUR WEBSITE WITH GoI-SaaS?

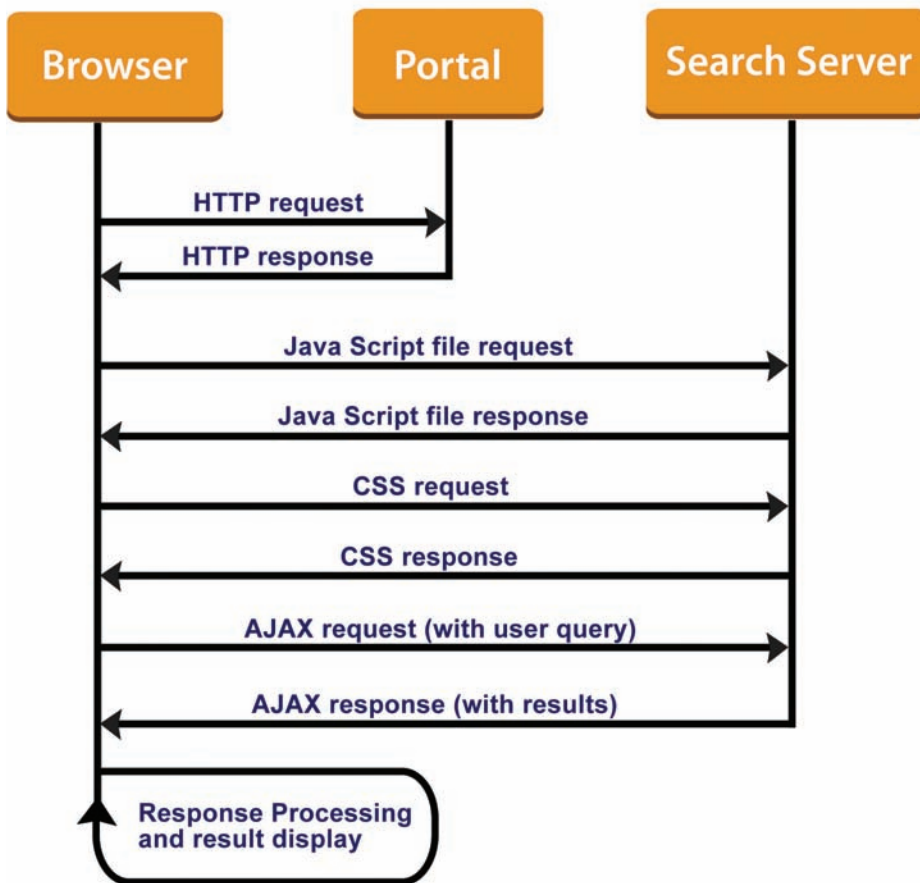
If your organization is functioning under the aegis of Union/State Government, you can contact the respective NIC Web Co-ordinator to register your website with GoI-SaaS. Once the registration process is completed successfully, the website will be further registered with GoI Search Platform for periodical crawling/indexing. The GoI-SaaS



**NEETA VERMA**  
Deputy Director General, NIC

With exponential increase in the number of Government sector websites, the need for enhanced accessibility for a better user experience is being increasingly felt. GoI Search as a Service (GoI-SaaS) is envisaged to provide quick, easy and relevant search results to the users, thereby substantially improving the user experience of the website. Website proprietors can use the GoI-SaaS service to enable their site Searchable and also define their very own customized search interface. GoI-SaaS also enables the owner of the website to monitor the incoming traffic on their websites, search queries specific to their reports, relevancy of search results specific to their website through a common dashboard. I am sure that the initiative shall establish in milestone in enhancing the usability of Government websites.

Admin Console will help you in generating the search code and implementing it on your website search page. You can also login to the SaaS Admin console using NIC LDAP NIC/Email account. The GoI-SaaS admin console is available at <http://searchservice.nic.in>.



How many on second? and so on.

### 3. User Navigation Behaviour on Result Pages :

It lists the details of the user navigation in first five pages of search results. It gives page-wise user click behaviours like How many have chosen the first page results?, How many on second page and so on up to first five pages.

### 4. Exceptional User Navigation Behaviour on Result Pages :

It lists the page-wise user click behaviours between the results pages six to ten. i.e. it reports how many results are selected in sixth page, seventh page and so on up to tenth page.

### 5. Result Returned Status:

The search queries by number of results returned are sorted in this report. It helps in finding out the search queries which returned no results, maximum results and so on.

### 6. Target URL Frequency:

It sorts the target URLs of the website by query frequency and also lists the search queries used to reach on the page.

The results of the report can be exported as PDF/CSV files and system has the facility to print the reports. It also has the facility to graphically present the report data either as Bar or Pie Chart for better clarity.

### WEBSITES USING GoI-SaS FACILITY

Currently, more than 100 Union/State Government websites and district administration websites are using the SaS facility. Some of the important sites which are using the SaS are:

Request Flow in GoI-SaS

### GoI-SaS ADMIN CONSOLE

The SaS admin console helps users in generating/customizing the search code for their website/s. It also helps the users in registering a new websites with GoI-SaS. Once the site is registered with GoI-SaS console successfully, the site will be added in the crawl/index list. The crawl/index status of the site will also notified to the concerned official.

### GoI-SaS ADMIN REPORTS

Search Statistics section of the admin console allows the users to monitor search traffic onto their website. It generates a variety of reports which helps the website owners to analyze the user search queries, user click

behaviour, target URL frequency etc. The following are the list of reports available in GoI-SaS Admin console:

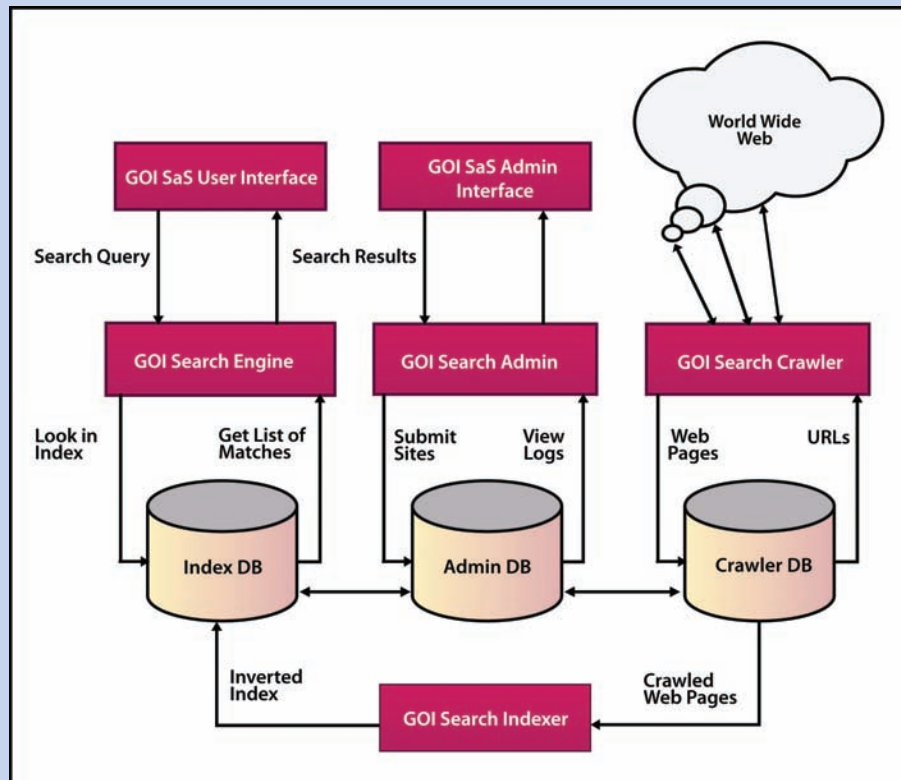
#### 1. Query Frequency:

This report lists the search keywords/queries on the site for the selected period and their frequency. It also gives the details of target URLs selected for the query and the visitor's host IP address.

#### 2. User Click Behaviour on Results:

It helps in getting the details of user click frequency on search results. It gives the number of user clicks on a particular result position for the search queries i.e. How many users have selected the results at first position?

# GoI-SaS Architecture



The GoI-SaS components are deployed above the GoI Search Engine components. The main components of GoI search engine are crawler, Indexer and Search Engine. The Crawlers look at web pages and follow links on those pages. The crawl process begins with a list of web addresses from past crawls and websites submitted by website owners. The crawl configuration determines which sites to crawl, how often, and how many pages to fetch from each site. GoI Search Engine crawls and indexes the sites through the file called "robots.txt". With the robots.txt file, site owners can provide more specific instructions about how to process pages and links on their sites.

URL frequency etc. The SaS Search Interface facilitates the users in submitting the search queries and then it returns the search results as XML file which can be further rendered on the respective websites using the customized XSLT.

In the GoI Search Engine platform, the Search Engine Crawler & Indexer is powered with open source Apache Nutch & Solr. The Search portal as well as Search Admin Interface is developed in Java and deployed on Apache Tomcat server. The search engine infrastructure is housed on the load balanced and highly available environment for better performance and high availability.

- <http://pmindia.gov.in>
- <http://india.gov.in>
- <http://chandigarh.nic.in>
- <http://www.mp.nic.in>
- <http://tnrd.gov.in/>

## WHO CAN AVAIL GoI-SaS ?

If your organization is under any Union/State Government entity or

District Administration or Judiciary/Legislative body, you are eligible for the service. Eligible organizations can contact their respective NIC web coordinator to avail the SaS or login to the SaS Admin console using your NIC LDAP/NICEMAIL user account to register your website for GoI-SaS.

## FOR FURTHER INFORMATION:

Support, GoI Search Engine,  
Data Centre & Web Services Division,  
3rd Floor (A4B4),  
NIC, A – Block, CGO Complex,  
Lodhi Road,  
New Delhi -110 003.  
Phone: 011-24305376, 5373  
Email: [support@goisearch.gov.in](mailto:support@goisearch.gov.in)

# ICT in Local Bodies Elections in Haryana

The local bodies elections conducted by State Election Commission (SEC), evoke huge enthusiasm and interest amongst the public and political parties. Usually the number of candidates taking part in such elections is very large. Due to high percentage of votes polled, the value attached to each vote is very high. All this makes the need for transparency in conducting local bodies' elections a paramount necessity.

At the same time, the State Elections Commissions are the offices, where optimum use of ICT and ITeS is yet to be made. This project aimed to bring in efficiency and transparency in the local elections thereby ensuring the freeness and fairness of the whole process.



**PARDEEP KAUSHAL**  
Technical Director  
p.kaushal@nic.in



**M P KULSHRESHTHA**  
Technical Director  
and DIO Hisar  
hryhsr@nic.in

Edited by  
**VIVEK VERMA**

## BACKGROUND

Almost every process involved in conducting local body elections, right from preparation of electoral rolls to the declaration of results was manual. There was no coordination between Election departments of the state, which manages the electoral rolls for assembly and parliamentary elections and the SEC. Use of computers at SEC was limited to preparation of excel sheets and word documents only.

## BOTTLENECKS

- Lack of IT infrastructure at the SEC
- Lack of IT awareness and training among the staff
- Lack of coordination between SEC and Elections department
- Reluctance to introduce new technology and change
- Over confidence of the old staff in manual procedures being followed
- Data transmission, compilation and reporting were very slow.
- Preparation of final reports took long time
- By the time data was available, it had lost most of its utility.

## IDENTIFIED AREAS

The whole idea of introduction of ICT and ITeS at various stages of the local bodies' elections was conceptualized at the initiative of the State Election Commissioner.

Following problem areas were identified for modernization through ICT:

1. Dissemination of information in easy and quick manner
2. Integration of Assembly elections electoral rolls with SEC electoral rolls for local bodies elections
3. Publishing of draft rolls for everyone to see
4. Accepting claims and objections of the voters at field level
5. Identification of duplicate voters and correction of electoral rolls
6. Marking of polling booths and making information about booths available on web
7. Monitoring of polls and counting process
8. Publication of results and reporting at various levels
9. Generation of MIS

## IMPLEMENTATION OF ICT IN IDENTIFIED AREAS

### a. Preparation of electoral rolls

Data processing and final preparation of local bodies, electoral rolls was done at Field units using client server software. Final data, after ward-marking, de-duplication and correction was linked to a web based voter helpline making it available to the voters.

### b. Accepting claims and objections from voters/citizens

A centralized role based web solution was used to accept claims and



objections on a centralized server which were resolved by the designated officers, to whom claims and objections were submitted online.

through SMS using NIC SMPP gateway.

**c. Uploading of candidates' details and documents**

A web based system was developed specifically for the application named "Know Your Candidate" (KYC). The application was hosted on a central server at NIC Haryana State Data Centre, on which data from various field offices was uploaded, including candidate details, scanned documents, elections symbols etc.

**d. Duty assignment and randomization**

Duty assignment of polling staff and randomization of polling parties was done at field offices through NIC District Centres. Information about polling parties was disseminated to the respective Presiding Officers through SMS.

**e. e-Dashboards for poll monitoring and results display**

Web based e-dashboards were developed for monitoring of polling days and displaying counting results on web during counting. The data on these e-dashboards was uploaded from polling booths and counting centres

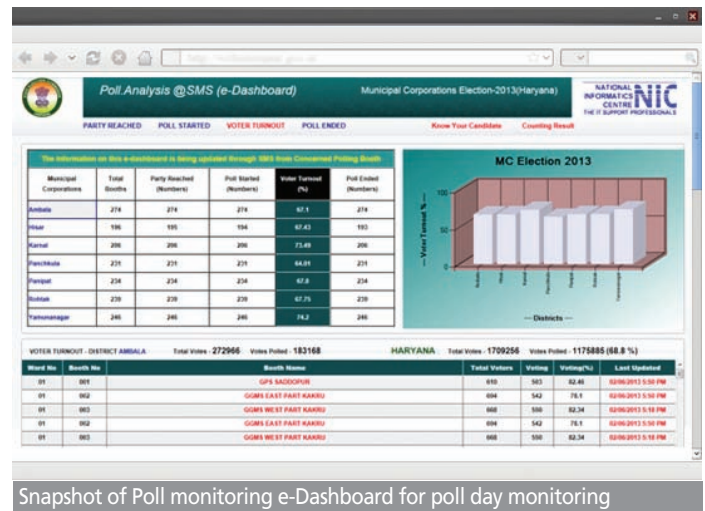
**TECHNOLOGY & ARCHITECTURE**

- .Net framework 4.0/ IIS 7.5
- SQL server 2008 R2
- VB for client/Server tools and other utilities.
- NIC SMPP Gateway for PUSH and PULL SMSs.

**OUTCOMES**

The commission had an overall sense of satisfaction with the implementation of ICT and the whole team of NIC Haryana was honoured in a specially held function on 12th August 2013. The major outcomes of the project are:

1. Maintenance of separate electoral rolls for Local Bodies' elections was discontinued with the use of latest assembly rolls.
2. Marking of wards and generation of rolls was automated.
3. Printing of electoral rolls in Hindi



Snapshot of Poll monitoring e-Dashboard for poll day monitoring

could be used in place of a voter ID Card.

5. Manual procedure of accepting claims and objections was changed to online method. The citizen could track the status of their application online.

6. Another major re-engineering step was to make the candidates' details and affidavits public.

7. Whole process of creating polling parties, deputation of poll staff and randomization of parties was automated.

8. e-dashboards were designed to completely transform the way information was exchanged on poll day and counting Day. Use of SMS technology made a significant contribution in making the whole process highly efficient and quick.

9. Meetings of the commission with District administration were held through the use of Video conferencing to save on time and money.

was facilitated through the use of Unicode Hindi fonts.

4. A new step of distributing official Voter Slips from the commission to the voters was introduced. It provided an identity to the voters, and



Snapshot of e-Dashboard for showing counting progress and poll results

**FOR FURTHER INFORMATION:**  
 State Informatics Officer  
 NIC Haryana State Centre,  
 Room No G02, Ground Floor,  
 Haryana New Secretariat,  
 Sector - 17, Chandigarh - 160017  
 E-mail: sio@hry.nic.in

# Online Entrepreneur Memorandum System

## – A step towards MSME development in Odisha

The Micro, Small & Medium Enterprises (MSMEs) contribute significantly to value addition, employment generation, exports and overall growth and development of the country's economy. In Odisha, a separate Department of Micro, Small & Medium Enterprises was created in 2012 with an objective to facilitate, promote and enhance competitiveness among MSMEs in the state. Online Entrepreneur Memorandum System is a state government initiative to rejuvenate and facilitate the growth and development of the MSME sector in Odisha.



**SUSHANT KUMAR BHOL**  
Technical Director  
sk.bhol@nic.in



**MALAYA KUMAR DAS**  
Technical Director  
mk.das@nic.in

Edited by  
**PRASHANT BELAWARIAR**

**M**SMED Act, 2006, states that any person who intends to establish a micro or small enterprise or a medium enterprise engaged in providing or rendering of services, or engaged in the manufacture or production of goods shall file the memorandum with District Industries Centre (DIC) of its area. Hon'ble CM, Orissa, while inaugurating the web portal of MSME Department on 1st January 2013 announced that EM-I will be made online at the earliest. Accordingly NIC, Odisha developed the web enabled "Online Entrepreneur Memorandum (EM) System" which became fully operational on 1st April, 2013.

The objectives of Online EM-I are as follows -

- Encourage higher rates of EM-I registration to enable more MSMEs to become organized and eligible for benefits under various Government schemes
- Make the process of filing of EM-I form easier for the applicant through anytime-anywhere registration
- Real-time status tracking to make it more transparent for the applicant
- Track the conversion of EM-I to EM-II

### ACHIEVEMENTS

- Manual procedure discontinued by the department
- A total 4199 applications have been filed online till date out of which 3750 have been approved and 191 rejected.

### STAKEHOLDERS

- Micro, Small and Medium Entrepreneurs
- 31 GM, DICs of Odisha
- Directorate, MSME
- Secretariat, Bhubaneswar

### PROCESSES AUTOMATED

Once the online form is submitted, the District Industries Centre fills all the codes in the form of the "memorandum" and issues the acknowledgement after allotting an EM Number, date and category of the unit. Before issuing the acknowledgement, the District Industries Centers ensures that the form is complete in all aspects and is signed along with an



undertaking, which is a part of the form of Entrepreneurs Memorandum. This is issued on the same day, if the form of Memorandum is submitted online or in person. In case of receipt of the form of memorandum by post, an acknowledgement is issued within five days.

District Industries Centers forward a copy of the EM with EM number allotted to the Small Industries Service Institutes of their jurisdiction and to the Joint Development Commissioner (MSME Pol.) in the Office of the Development Commissioner (Small Scale Industries).

Steps have been initiated to make EM-II online from 1st July, 2013, and the status will indicate how many EM-I have been converted to EM-II.

**MAJOR MODULES**

**Registration:** Entrepreneur who desires to apply EM-I has to visit <http://msmeodisha.gov.in> and register online. During the process, an identity proof (Voter ID/Passport/PAN Card etc.) has to be uploaded. The user id and initial password will be created and sent through the e-mail as well as SMS.

**EM-I Filing:** The user has to fill up the form online and upload the relevant documents i.e partnership affidavit, signature of applicant etc. Once he fills up the application, a reference number is generated. The entrepreneur can take a final printout of the application submitted.

**Approval of EM-I:** This module is meant for GM, DICs, where they can view the applications submitted and verify the documents. If any of the documents found to be incorrect then they can send it back to the entrepreneur. Once all the documents are submitted correctly, EM-I is approved by GM, DIC online.

**FEATURES**

- The application is role-based thus when one officer proceeds on leave he can delegate the role to other officer so that he can use the system for approving EM-I.
- Digital Signature Certificate (DSC) is integrated for authentication. DSC has



been issued to all the 31 DIC officials to enable them approve EM-I with Digital Signature.

- The holiday module captures the government holidays and local holidays so that during approval of EM-I, it checks for the same.

**CAPACITY BUILDING INITIATIVES**

- Sensitization workshops were conducted twice for 31 GM, DIC at NIC, Bhubaneswar.
- Training sessions were organized for all DIOs / ADIOs, NIC through VC.
- Workshops at Balasore, Bhubaneswar, Sonepur, Sambalpur, Rourkela, Dhenkanal, Cuttack, Ganjam and Koraput were conducted to create awareness among entrepreneurs, GM, DIC and NIC officials about the online application.
- A help desk has been established to handle entrepreneurs queries directed towards GM, DIC/NIC or Directorate. If a query is not relevant to the concerned officials then it is forwarded to the competent authority. Selected queries have been posted as FAQ by the Directorate.

RIC/DIC WISE EM-I APPLICANT'S DETAILS						
Sl. No	Name of the Applicant	Apply Date	Status	Application Number	Acknowledgement	
1	GAYATREE MOHAPATRA	01/05/2013	Approved	0151300028	210151102005	
2	TILOTAMA SAHOO	01/05/2013	Approved	0151300029	210151102007	
3	ASHISA KUMAR MOHAPATRA	01/05/2013	Approved	0151300027	210151102006	
4	SURYAMANI SAHOO	03/04/2013	Approved	0151300003	210151101986	
5	ANANTA CHARANA MEHER	03/04/2013	Approved	0151300002	210151200047	
6	PURABI DWIBEDI	06/04/2013	Approved	0151300005	210152101988	
7	BALJIT SINGH	06/04/2013	Approved	0151300004	210151101987	
8	AJIT KUMAR PATNAIK	06/05/2013	Approved	0151300030	210151102008	
9	TAPAN BEHERA	06/05/2013	Approved	0151300031	210151200050	
10	RANJAN KUMAR SAHOO	06/05/2013	Approved	0151300032	210151102009	
11	BABITA SAHOO	09/04/2013	Approved	0151300006	210151101989	
12	ISWAR CHANDRA PRADHAN	16/04/2013	Approved	0151300007	210151101991	
13	TAPAN BEHERA	16/04/2013	Approved	0151300009	210151200048	
14	ANNADA PRAVAT PRADHAN	17/04/2013	Approved	0151300011	210151101990	
15	SUBAL PRADHAN	17/04/2013	Approved	0151300010	210152101992	
16	JYOTIRMAYI PARIDA	17/04/2013	Approved	0151300013	210151101994	
17	BASUDEV BISWAL	17/04/2013	Approved	0151300015	210151101995	
18	A NAGESWARA RAO	22/04/2013	Approved	0151300017	210151200049	
19	DHRUBA CHARAN SAHU	26/04/2013	Approved	0151300021	210151101998	
20	ATHANI NAHAK	26/04/2013	Approved	0151300020	210151101999	
21	CHANDRA SEKHAR PRADHAN	27/04/2013	Approved	0151300023	210151102001	
22	MANAS RANJAN PRADHAN	27/04/2013	Approved	0151300022	210152102000	

**FOR FURTHER INFORMATION:**  
**Sushant Kumar Bhol**  
 Technical Director,  
 NIC Odisha State Centre, Bhubaneswar  
 E-mail: [sk.bhol@nic.in](mailto:sk.bhol@nic.in)

# CAS :

## MIS on Central Assistance to the States

With altering paradigms of Information and Communication Technology, NIC Cell at Planning Commission is on a constant endeavour to cater to the diverse requirements of various divisions of the Planning Commission of India. The e-Governance movement in country today has witnessed a complete facelift with each department within the government landscape, striving hard to augment its efficiency in delivering services. Adhering to its role of an ICT based technological solution and service provider, NIC Cell at Planning Commission is expending all the necessary assistance required for designing, development and implementation of various web-based Management Information System (MIS) needs of the Planning Commission.



**CHANANA A.K.**  
Senior Technical Director &  
HoD, NIC – Planning  
Commission Unit  
chanana.ak@nic.in



**MADHUCHANDA  
SAMANTARAY**  
Technical Director, NIC –  
Planning Commission Unit  
madhu@nic.in

Edited by  
**MOHAN DAS VISWAM**

### INTRODUCTION

The CAS-MIS on Central Assistance to the states intends to bridge the gap between Planning Commission, Ministry of Finance and the prerequisites of various states. It facilitates recommendation to the release of funds as per the scheme of financing for Additional Central Assistance (ACA) and Special Plan Assistance (SPA) projects. The scheme was launched during the meeting of Deputy/Vice-persons of all State Planning Commission/Boards on 6th February, 2013 by Dr. Montek Singh Ahluwalia, Deputy Chairman, Planning Commission, in 2nd conference of Planning Commission and State Planning Boards on “Improving Planning Processes of States” held at India Habitat Centre, New Delhi. It was decided to implement the project from the current financial year 2013-14 i.e. from 1st April, 2013. The software

application was created and executed by Regional NIC Cell at Planning Commission.

### OBJECTIVE

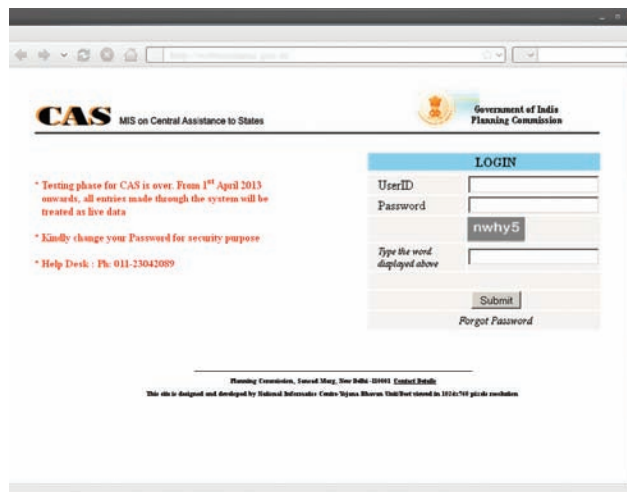
The project is aimed at empowerment of web-based mechanization that necessarily includes multifarious methods of advancement at State level, Planning Commission level and Ministry of Finance level in terms of expenditure for Additional Central Assistance and Special Plan Assistance from Ministry of Finance to all the states of India.

### STRUCTURE OF THE APPLICATION

CAS has a three tier structure consisting of State level, Planning Commission level and Ministry of Finance level -

#### A. State Level Processes

- Registration of projects, which includes generation of unique Project Code, updation of project details, addition of multiple project locations with longitude and latitude, uploading of project document
- Submission of projects to Planning Commission for project approval
- Submission of request for release of funds for new and old projects to Planning Commission every year
- Reply to queries made by states on project details



- Updation of physical and financial performance details
- Uploading project photographs, if any
- Generation and submission of Utilization Certificates (UCs)

**B. Planning Commission Level Processes**

- Project Approval
- Project Recommendation
- Generation of Sanction Letter
- Project Query
- Grant/Revoke permission to the states to change the project details
- Monitoring of physical and financial performance details of the projects

**C. Ministry of Finance Level Processes**

- Monitoring of all the projects approved by Planning Commission
- Monitoring sanction details made by Planning Commission
- Monitoring of physical and financial performance details of the projects

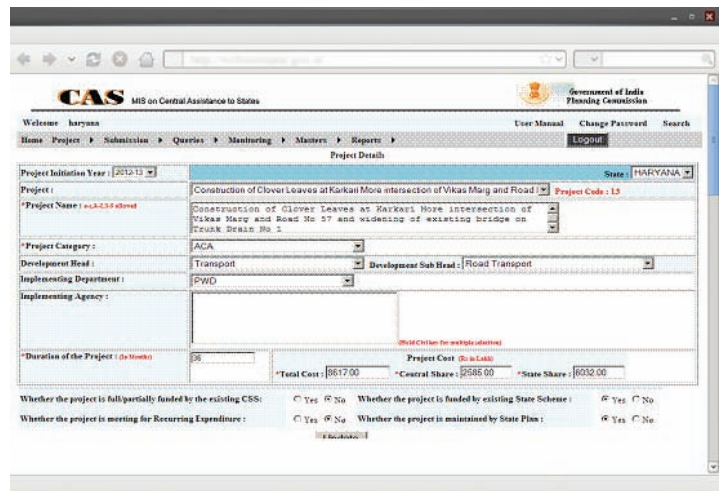
**IMPLEMENTATION & UTILIZATION**

The system has been designed, developed and implemented by NIC Unit of Planning Commission under full guidance and coordinated support at each step by Shri Tuhin Kanta Pandey, IAS and Jt. Secretary (State

Plan & Financial Resources), Planning Commission. The software application has been developed in .NET environment at front-end and SQL 2005 at back-end. The application after security audit by the Cyber Security Division, NIC Hqs. has been shared-hosted onto NIC server and has been successfully tested from all the states and Planning Commission.

**PROJECT RECOGNITION**

The significance of CAS-MIS, whether it is in terms of easy and quick accessibility or it is about status check in real time mode, has been acknowledged by the Deputy Chairman and the Secretary, Planning Commission and other higher officials. It has been announced that from Annual Plan 2013-14 onwards, Planning Commission would consider only those projects under ACA/SPA for sanctioning and recommendation of

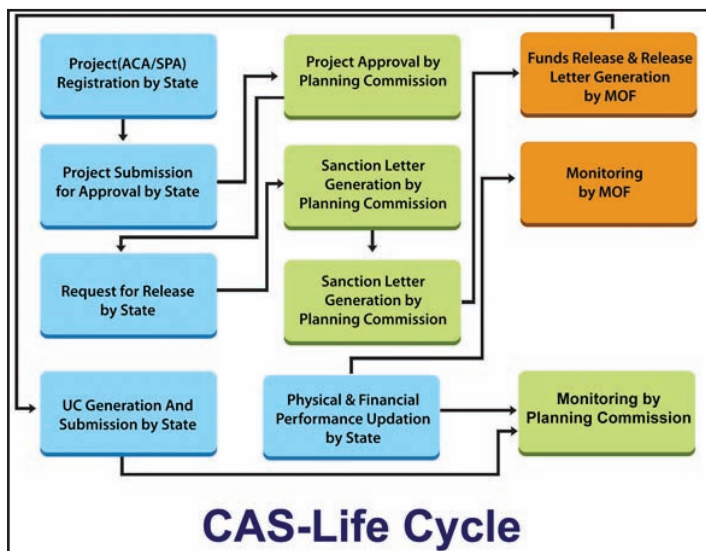


Governments and an amount of Rs.499.99 crores for 879 projects has been approved using the system by the Planning Commission. So far, Rs.498.32.crore for 879 projects has been sanctioned by Planning Commission through the system. Fifty ACA projects have been submitted by Bihar, Kerala, Madhya Pradesh and Punjab Governments, out of which 2 Projects have been approved by the Planning Commission. The Commission has also sanctioned an amount of Rs.36.58 crores to Bihar using the system. Besides this, a project from Mizoram for the financial year 2010-11 was submitted through CAS-MIS.

release of funds to Ministry of Finance, which have come through CAS online application.

Till July, 2013, 884 SPA projects have already been submitted by Himachal Pradesh and Arunachal Pradesh

Approval and sanctioning of projects for the financial years- 2010-11, 2011-12 and 2012-13 has been also done through CAS system. Bihar, Himachal Pradesh and Mizoram have generated sanction letters from the system for forwarding it online to the Ministry of Finance. The project has been widely applauded for its scalability and transparency.



**FOR FURTHER INFORMATION:**  
**A.K. Chanana**  
 Sr. Technical Director & HoD  
 NIC – Planning Commission Unit,  
 New Delhi - 110001  
 E-mail: chanana.ak@nic.in; madhu@nic.in

# INFRASTRUCTURE PROJECT MONITORING SYSTEM OF MoSPI

Infrastructural development mirrors the overall health of a nation's economy. This is particularly true for developing economies where investments in infrastructure development lead to growth, life improvement and poverty alleviation. India has invested heavily on infrastructure development and in order to realize the benefits, it is vital that the projects are implemented as per the approved plan and within the budgeted time and cost. Presently, there are several Central Public Sector Undertakings, which are implementing multiple infrastructure projects across the length and breadth of the country. Infrastructure and Project Monitoring Division, a division of Ministry of Statistics and Programme Implementation (MoSPI) is mandated with the task of monitoring the infrastructure projects being implemented by the Central Public Sector Undertakings.



**D. K. OJHA**  
Director (IPMD), MoSPI  
dk.ojha@nic.in

Edited by  
**MOHAN DAS VISWAM**

**T**he term infrastructure is defined as a set of interconnected structural elements which provide a main framework supporting an entire structure of development. Efficient infrastructure is crucial and is directly proportionate to the growth of a country.

The Central Public Sector Undertakings (CPSUs) holds a key role in the development process of our nation and forms the cornerstone of the infrastructure development in the country; though in today's time more and more Private sector entities too are getting increasingly involved in the process.

Currently, the CPSUs are engaged in executing over 560 major projects costing above Rs 150 crores in 14 different infrastructure sectors. The total original cost of these projects is more than Rs. 790,000 crores. Successful completion and timely implementation of these infrastructure projects would be critical for fair indexing of economic development and social growth.

Due to various reasons, some of these projects are delayed from the actual schedules and are suffering from cost overruns. Constant, efficient project monitoring and adapting effective control measures would be vital for better management and control to

prevent further delay ensuring successful implementation of such projects.

## ROLE OF IPMD, M/O STATISTICS & PROGRAMME IMPLEMENTATION

The Infrastructure and Project Monitoring Division (IPMD) in the Ministry of Statistics & Programme Implementation (MoSPI) is the management arm of the Government of India. The division has been mandated with process of monitoring of all Central Public Sector Infrastructure projects which have the cost of above Rs. 150 crores.

## PROJECT MONITORING SYSTEM

The Project Monitoring System forms the source of information for most of the activities of IPMD, MoSPI.

The date of approval of the project by the concerned sanctioning authority is generally taken as the zero date for the project. The approved date of commissioning of the project is taken as the original date of commissioning. Once the project is in the execution phase, based on the ground realities, the project executing agencies regularly update the anticipated date of commissioning. The variance between the original and the anticipated dates of commissioning forms the basis for analyzing delays in the projects. A similar approach is employed to monitor the health of the project with respect to the costs.

Based on the above principles, the Infrastructure and Project Monitoring Division, MoSPI has designed and developed a software solution that can collate macro-level information from Government of India sponsored infrastructure projects. This can also generate analytical reports for the consumption by various stakeholders.

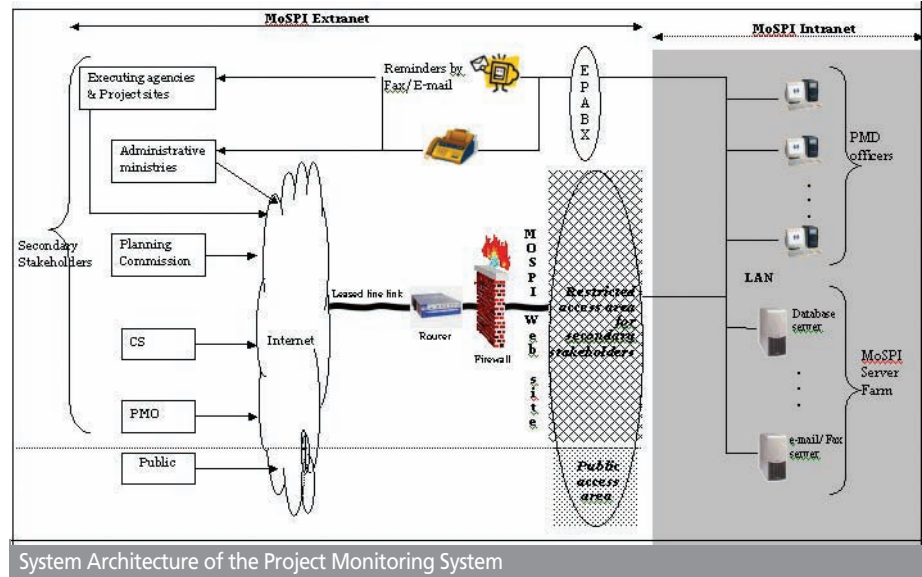
As soon as a project is approved, it is brought under monitoring by assigning a unique identifier to it in the system. The associated data sets that define the project are also created at this point in time.

All the agencies executing projects are assigned User IDs & passwords, with which they can access the system to add/modify the data related to the projects being executed by them. The basic process flow of the system is given below.

### SYSTEM PROCESS FLOW

The Project Monitoring System has a web-based simple interface for updating the project related data such as the original and revised dates, original and anticipated costs, expenditure and the background information. The data for each project is collected every month in the following manner:

- Data entry for the projects is allowed for a particular month. Project agencies would have to use the web-interface to fill in the data related to all projects being implemented by them. Each agency is provided with a unique user-id. Each project is identified by a unique-id. The user can also select a project by its name.
- After allowing entry of project data for a limited period, the data entry for the month is frozen. In order to weed out data entry errors and other



inconsistencies, the system generates algorithm-based error reports. These reports are used to cross check the data and if required, data verification is also done with the reporting agencies. Any inconsistency found is corrected during this phase.

- After data correction, the data entry for the month is closed and the data entry for the next month is opened for the project agencies to enter data for the next month.
- Post to the data collection phase, the data is analyzed, and various reports are prepared.
- The highlights of the reports along with detailed analysis are distributed among various stakeholders such as Administrative Ministries of the Project Executing Agencies, Planning Commission, PMO etc.

### PHYSICAL IMPLEMENTATION

The Project Monitoring System has been implemented on the client-server model with servers located behind a Firewall.

#### Application and Web Servers:

This has been implemented as a two-node failover cluster. For the external

users, application and web servers are accessible only through the Firewall. The failover cluster provides better availability of the application.

#### Database

The database is set up on a raid-5 configuration. Database can only be accessed from the application and web servers. The raid-5 configuration provides fault tolerance through redundancy. Scheduled backups are stored at different locations.

### TECHNOLOGY

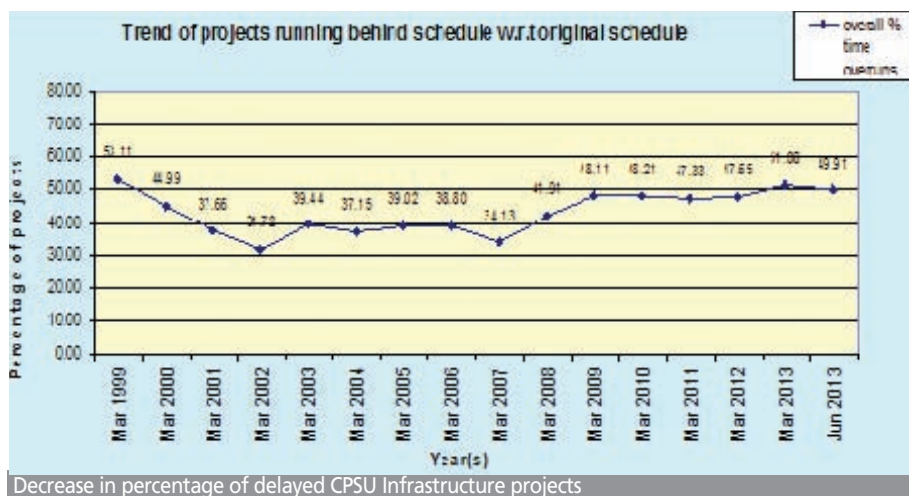
The system has been developed using the following technology:

- Operating System – Windows 2003 Server
- Web Server - Apache Tomcat
- DataBase – Oracle 9i
- Application Server – Oracle 10g
- Front End – Forms 10g, Report 10g, PLSQL Server Pages.

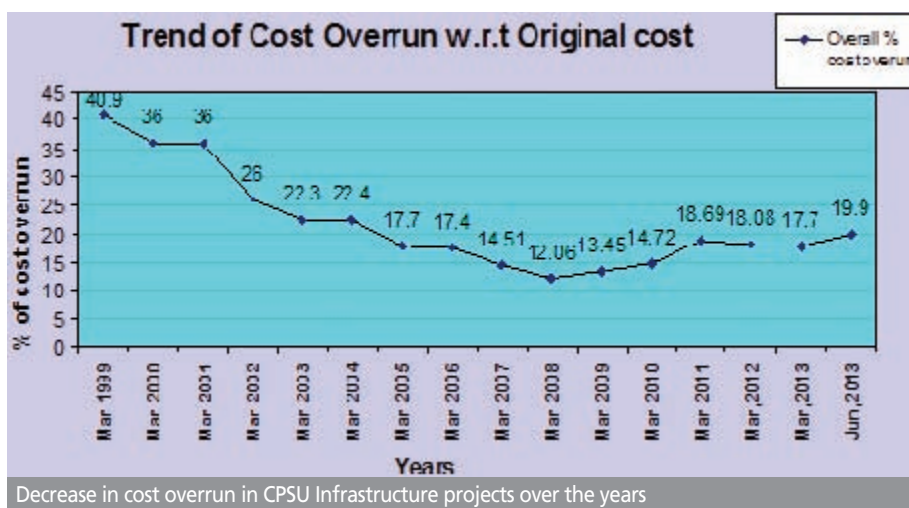
### REPORTS & OTHER OUTPUTS

Some of the most used reports generated from the system are:

- **Monthly Flash Report** - This report presents a sector-wise overview of all the projects on the monitor.



Decrease in percentage of delayed CPSU Infrastructure projects



Decrease in cost overrun in CPSU Infrastructure projects over the years

- **Quarterly Progress Report- QPR** is an in-depth analysis of all the ongoing projects and their progress vis-à-vis the last quarter. This report also includes detailed analysis of every project on the monitor.
  - **Mega Progress Report-** This monthly generated report provides an overview of the mega projects (costing over Rs 1000 crores).
  - **Snapshot-** The purpose of the report is to provide a consolidated snapshot of all the ongoing projects with the aid of limited charts and graphs.
- The analyses in all the reports are based on the following criterion:
- Changes in anticipated schedule of the projects vis-à-vis the schedule

- reported in the last period
- Changes in anticipated cost of the projects vis-à-vis the cost reported in the last period
- Track budgeted and actual expenditure for the period and the cumulative for the financial year
- Check whether the expenditure on the projects has surpassed the originally approved cost
- Check whether the projects have reported a revised scheduled or cost
- Check for new projects and projects that have been completed
- Monitor the individual projects as well as the sectors to which these projects belong
- Analyses of projects based on the

- specific regions/states of the country
- Categorization of projects in groups - having time overruns, having cost overruns and having both time and cost overruns
- Highlighting projects that are not reporting critical information like anticipated schedules and costs
- Capture and analyze the reasons for the time and cost overruns in the projects
- Monitor the achievements of the project milestones
- Highlight delays in completion of critical milestones as delay in critical milestone signify delay in the project itself

**BENEFITS OF MONITORING**

There has been a continuous decline in the extent of time and cost overruns, which can be attributed to better monitoring and system improvements by the concerned ministries, with the active support of MoSPI. An analysis of cost overruns in the last 15 years with respect to the originally approved cost shows that the cost overruns have declined from 40.90% in March 1999 to 14.72% till March 2010 and then it has more or less stabilized in the range of 17% to 19%.

An analysis of percentage of projects delayed over the last 15 years with respect to the originally approved schedule shows that the percentage of delayed projects has declined from 59.11% in March 1999 to 34.13% till March 2007. There is an upward trend from March 2007 to 48.11% in March 2009 and since then it has more or less stabilized.

**FOR FURTHER INFORMATION:**

**D. K. Ojha**  
 Director (IPMD), MoSPI  
 Sardar Patel Bhawan, New Delhi - 110001  
 Email: dk.ojha@nic.in



# CollabDDS:

## Network Enabled Medical Diagnosis and Education in Skeletal Imaging using X-Rays

The availability and reach of National Knowledge Network (NKN) due to high bandwidth and low latency has ensured the creation of applications which will be beneficial to all stakeholders in science, technology, governance and research & development. A model project funded by NKN and executed by NIC, New Delhi; AIIMS (Radiology and Orthodontics), New Delhi; CSIR-CSIO, Chandigarh and OrthoCAD Cell, IIT, Mumbai is an extension of CollabCAD to include medical and dental applications. This proof-of-concept is now transformed to Collaborative Digital Diagnosis System - CollabDDS.



**Dr. SAVITA DAWAR**  
Senior Technical Director  
savita.dawar@nic.in



**G. PRASAD**  
Senior Technical Director  
gprasad@nic.in

Edited by

**MOHAN DAS VISWAM**

### BACKGROUND

The National Knowledge Network (NKN) serves as an enabler for long distance education in real time, collaborative research between different institutions and knowledge sharing among students and faculty. The model project “Network enabled Medical Diagnosis and Education in Skeletal Imaging using X-Rays” funded by NKN Model Project Executive Committee, was undertaken as proof-of-concept to provide a network based system for radiological and dental imaging using X-rays. CollabCAD's collaborative platform is used as a base for dynamic and real-time sharing of imaging data. The high bandwidth and low latency capability of the NKN would provide an ideal platform to transmit medical imaging data and make it beneficial for both patients and physicians who desire radiological consultation with experts at tertiary level health care centre. The area of study being complicated required expertise in varied domains such as but not limited to Radiology, Orthopedics, Orthodontics, Computational methods, CAD, Rapid Prototyping and Image Processing.

### OBJECTIVES

- Analyze different medical imaging data formats from various imaging modalities



**Dr. O. P. KHARBANDA**

Head, Department of Orthodontics and  
Dentofacial Deformities, CDER, AIIMS,  
New Delhi

CollabDDS is an advanced software system of communication and collaboration of medical and dental imaging data between two or more remote centres. This indigenous system can be used to disseminate dental education through repository of case report as well as live transmission on a collaborative mode between two remote centres. CollabDDS has varied applications in distant education and health care. Its real potential can be many, including applications in research.

- Design and develop software for visualization of 2D medical imaging data
- Bi-directional transfer of data between one or more NKN nodes
- Standardized graphical markup and annotation tools for medical/dental imaging experts
- Creation of digital content repository of teaching cases for knowledge dissemination
- Exploratory work to convert X-ray images into 3D models for

visualization, implant design and prototyping.

- 2D cephalometric analysis for orthodontic applications

**TECHNOLOGY ADOPTED**

CollabDDS is built using open-source development tools like Core Java, RMI, Linux, Apache SLIDE, JITSI and libraries like Swing, Graphics2D, JAI, DCM4CHE toolkit, JavaHelp.

**STAKEHOLDERS**

- CollabCAD Division, National Informatics Centre, New Delhi
- Dept of Radio-diagnosis, AIIMS, New Delhi
- Dept of Orthodontics, CDER, AIIMS, New Delhi
- OrthoCAD Cell, Department of Mechanical Engg., IIT, Mumbai
- Computational Instrumentation

Division, CSIR-CSIO, Chandigarh


- National Knowledge Network, New Delhi

**USERS**

- Faculty/Students of NKN connected Medical/Dental College's
- Primary, Secondary, Tertiary Health Care Centre
- Medical/Dental Doctors

**HOW IT WORKS?**

The patient gets a conventional (film) x-ray done on the recommendation of the treating physician. A medical grade digitizer ( in this case, Medi6000) easily transfers the X-ray film and patient meta data into digital format at a high resolution. The data is saved locally at the remote health centre in various image formats (TIFF, BMP, JPG, GIF) and there is an option to save in DICOM file format.



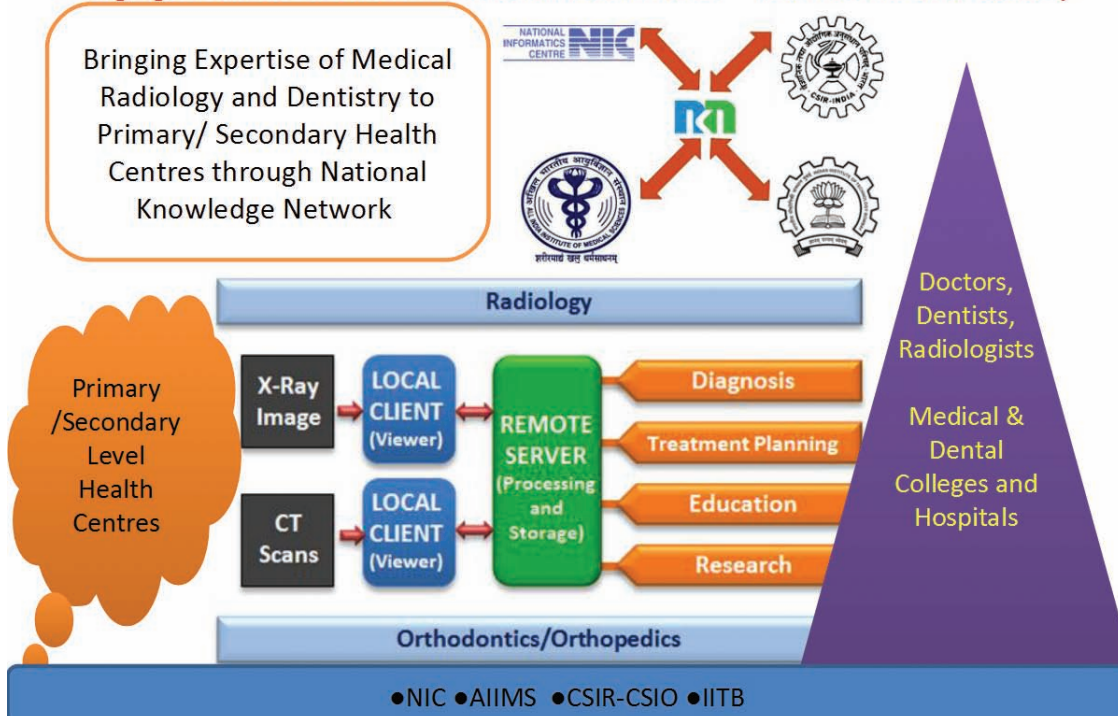
**Dr. ARUN KUMAR GUPTA**  
Head, Department of Radio-diagnosis, AIIMS, New Delhi

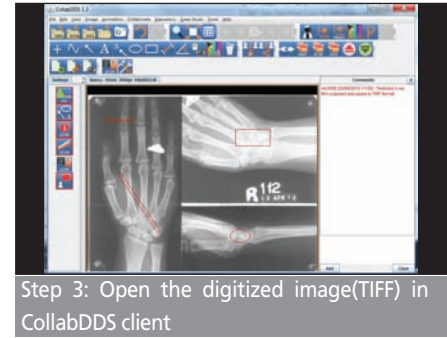
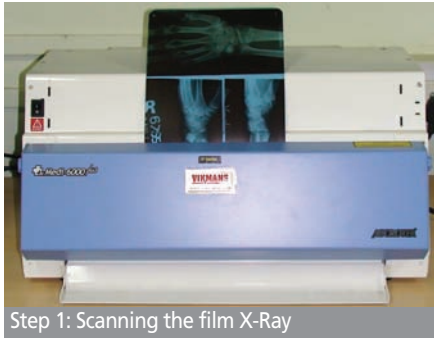
CollabDDS is unique and indigenously developed software for medical images which allows sharing, viewing and real time collaboration. It has the potential of taking medical expertise available in tertiary medical centres right up to the PHC level. It can also be applied to the field of medical education and research.

The CollabDDS server is started and the clients (authorized user's) having access to the server use the CollabDDS client at the remote centre to open the digitized image, and shares the data with the client application at the tertiary health care centre. Regions on the images can be marked by doctors/specialists with annotations for interaction and effective diagnosis. This collaborative sharing is real-time as both the physician and the radiological/dental expert will view the same image and annotations simultaneously. The image along with

**NKN-CollabDDS: Collaborative Digital Diagnosis System**

Bridging the divide between Rural and Urban Health – Towards Inclusive Society





conversations can be saved locally either in DICOM or XML, and also be stored in the digital repository at the server for future reference and teaching. Reports can be generated for viewing and printing. It runs as desktop and client-server mode on Windows or Linux OS.

**SALIENT FEATURES AND KEY DELIVERABLES**

- 2D Visualization ( X-ray images in JPEG, GIF, TIFF, PNG, DICOM)
- Post-processing DICOM images (single, multiple, series from CT/MRI)
- Image manipulation (Window level/width, Rotate, Zoom in/out, Pan)
- Dicomization ( conversion of JPEG to DICOM)

- Annotation (Graphical and text)
- Measurements ( linear, angular) and Region-of-interest tools(rectangle, ellipse)
- Collaboration (Sharing images, comments, recordable , audio-video)
- Repository (HTTP based, upload/retrieval, access/security control)
- Education (Clinical case study generation, feedback and modification)
- Documentation (HTML, context-sensitive search, indexing, glossary)

**BENEFITS**

- Efficient digital work-flow of Medical Imaging data
- Improved diagnosis and treatment

by Collaborative consultations

- Enhanced quality of public health care ICT infrastructure
- Reliability, security and accessibility of medical and dental imaging records
- Knowledge exchange via teaching cases

**CURRENT STATUS & FUTURE PROSPECTS**

- Knowledge partners on NKN for use of CollabDDS for medical & dental education
- Implementation of CollabDDS at primary/secondary health centres and hospitals
- Feedback and testing from AIIMS/CSIO on system enhancements and bug fixing
- Digital signatures for medical imaging data and reports with anonymization
- Re-construction of 3D volumetric data and surface images
- 2D Cephalometric orthodontic analysis (CSIO AutoCEPH) module development
- Designing and prototyping customized dental implants and instruments

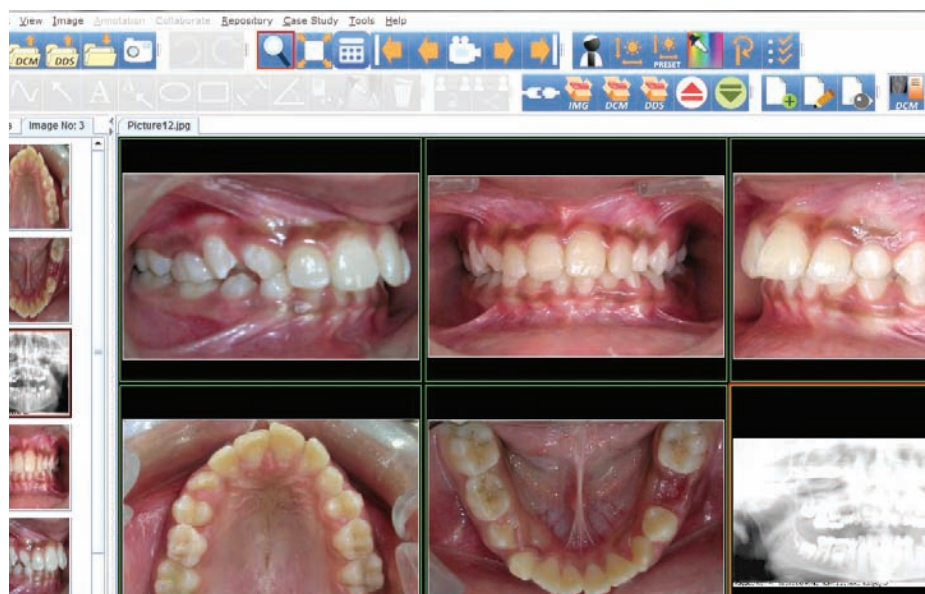


Fig. 1: Dental Case Study for Teaching

**FOR FURTHER INFORMATION:**  
 Dr. Savita Dawar  
 CollabCAD Development Group  
 Email: savita.dawar@nic.in

# iCJS: Inter-operable Criminal Justice System

The “**Interoperable Criminal Justice System**” (iCJS) has been developed for the process of speedy justice by facilitating data-exchange between the courts, police/prosecution, jails and the forensic labs. The application has been developed by NIC for the District courts, prisons and Police stations, namely Case Information System, e-Prisons and Kanoon Vyavastha (based on CIPA software application) respectively. The eFSL application has been developed by NIC Himachal Pradesh for a work-flow based interaction between Police stations and the state forensic laboratories, using online data exchange.



**DR. SAURABH GUPTA**  
State Informatics  
Officer (H.P.) & STD  
sio-hp@nic.in



**AJAY SINGH CHAHAL**  
Senior Technical Director  
ajay.chahal@nic.in

Edited by  
**VIVEK VERMA**

**T**o ensure standardization and replicability of the iCJS across the country, standard s/w applications, developed and implemented at the National level, have been used at the core level. The Common Integrated Police Application (CIPA) already implemented in all Police stations of Himachal Pradesh was enhanced by web-enabling it as “Kanoon Vyavastha”. A number of graphical dashboard drill-down reports were added for dynamic analysis to help decision makers. For improving the quality of investigations, sectoral databases such as Shastra, HimBhoomi, Vahan and Sarathi, are used as the tool in the iCJS software.

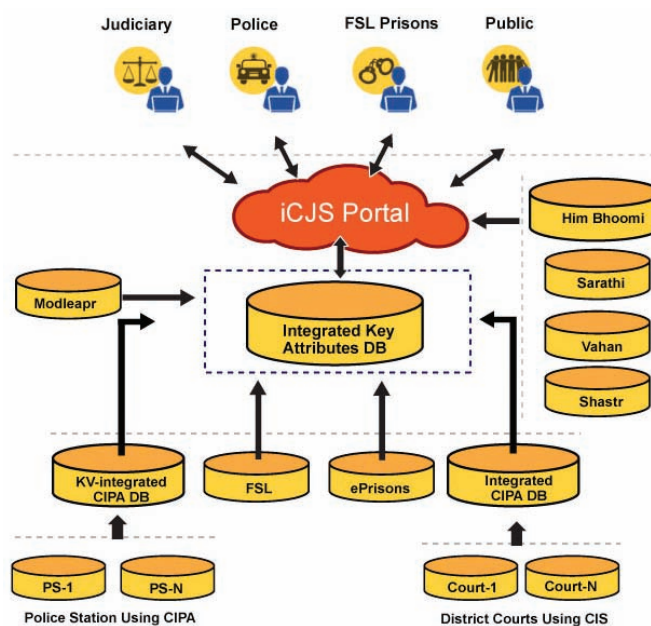
## OBJECTIVE

The main objective of the iCJS is to provide an online Integrated Management Information System by inter-linking data from courts, police, prisons and forensic laboratories for improving the justice delivery system. All the stakeholders shall have online and instant access to data available in different software applications, which will reduce the time, normally consumed in manual exchange of documents/information amongst related departments. The ultimate objective is to ensure speedy delivery of justice to the common man by interlinking related justice delivery systems and to augment the quality of investigation. The secondary objectives include doing away with the exchange of paper based information amongst

the stakeholders and utilization of digitized data of other domains directly in individual s/w applications.

## IMPLEMENTATION STRATEGY/ HIGHLIGHTS

- **Diverse software platforms:** The four applications are using two different OS, three databases and scripting technologies. Using Symmetric DS



technology, data integration was achieved and a new central software interface has been developed for MIS purpose.

- Departmental officials were afraid to link their data and intervention from the highest levels in the departments ensured that a pilot was approved to gain the confidence of employees.
- Resistance to complete data entry related to other domains: Court officials were not interested in entering police related data. Only after demonstrating that such data will eventually be useful to all stakeholders, complete data entry could be ensured.
- The number of employees to be trained on the s/w was large and was achieved by involving NIC District Centre and creating a pool of master trainers.
- Coordination among stakeholders was the greatest challenge as different stakeholders had varying objectives in using domain specific applications. Intervention from the top was required to achieve synergy.

### KEY FEATURES & DELIVERABLES

- First-of-its-kind initiative in the country
- All software applications are in work-flow mode
- Generalized query across the 4 domains
- Immediate, online and near real-time availability of data across domains through inter-linking
- Online VC request by Prisoners' relatives is a unique initiative, implemented first time in India. It facilitates the interaction between prisoners and their relatives through software based VC.
- The initiative is replicable at the national level because of use of standard



Shri J. Satyanarayana, IAS, Secretary, D. I. T., Govt. of India at High Court of Himachal Pradesh during of a meeting on iCJS implementation.

national level software applications.

- The rules and acts related to courts, prisons, police and forensics are uniform across the country. Hence the s/w meets the requirements of all the states for easy replication.
- The s/w utilization ensures online transactions between departments by enabling release of case property in online mode.
- Alerts are issued automatically in following cases to all stakeholders/users:
  - whenever some serious crime happens;
  - forensic report is ready/pending;
  - an arrest is made;
  - case is coming up for hearing in the court;
  - court passes some orders/ judgments.
- Data mining based on domain specific parameters
- Graphical Dashboard for data analysis and MIS decision-making
- Innovative applications like mobile based challaning system
- Investigative tools for queries related to other domain electronic databases

### IMPLEMENTATION STATUS

- **Courts:** 38 in 6 districts (all 100

courts to be linked by end of September 2013)

- **Police Stations:** 114 out of 114 (Common Integrated Police Application)
- **Forensic Laboratories:** 3 (100%)
- **Prisons:** 14 (100%)
- VC facility in all prisons for relatives of prisoners, Investigating Officers and courts

### TECHNOLOGY USED

The core iCJS is a web-enabled software that has been developed using Windows platform with MS-SQL at the back-end and .Net technology at the front-end. The individual s/w applications of ePrisons, Court Information System and Common Integrated Police Application (not web-based) use diverse technologies and databases. The data from individual applications is replicated in almost real-time, subject to availability of connectivity, at a central server for the iCJS application.

### FOR FURTHER INFORMATION:

**Dr. Saurabh Gupta**  
State Informatics Officer & STD,  
NIC, Himachal Pradesh  
E-mail: sio-hp@nic.in

# Publishing of Exam Results & Online Counselling from NIC Data Centre

NIC Data Centre, Delhi has always played a proactive and pivotal role in providing robust, reliable and secure service-delivery platform to its hosted applications, be it a website, portal or any e-Governance project. Continuing with its decade long success trail, this year too, NIC Data Centre has come out quite successful in publishing exam results & online counselling sessions for various Central & State Education Boards/Counselling Bodies at national level as part of its G2C endeavour.



**VIJAY KUMAR VISHWAKARMA**  
Technical Director  
vijay.vk@nic.in  
NIC Delhi



**ANUPAM JOHRI**  
Senior Systems Analyst  
anupamjohri@nic.in  
NIC Delhi



**MONAWWAR HUSSAIN**  
Senior Systems Analyst  
mhussain@nic.in  
NIC Delhi



**S.V. KRISHNA PRASAD**  
Principal Systems Analyst  
k.prasad@nic.in  
NIC Hyderabad

Edited by  
**MOHAN DAS VISWAM**

**T**o strengthen the cause of e-Governance and ensure efficiency in the process of delivering examination results to the students, NIC has started hosting exam results on the Internet. More than a decade back, the results of CBSE class Xth & XIIth examinations were the first to be published on net. Later, guided by the exemplary initiative, many more State Boards from different parts of the country seek out for NIC's assistance in publishing their results online.

On the similar lines, the concept of on-line counselling which was started long back with AIEEE/CCB (All India Engineering Entrance Examination/Central Counselling

Board) has been simulated by many other Counselling Boards for hassle-free and transparent counselling sessions.

## ONLINE PUBLISHING OF EXAMINATION RESULTS

Electronic process has spun the results publishing activity faster, better, rendering it more dynamic and interactive. NIC has responded to the needs of this new, fast moving, paperless process by offering a number of different methods and innovative combinations of novel and traditional technologies. Using mediums such as Internet, Interactive Voice Response Systems (IVRS) and SMS, NIC has ensured that students can avail quick access to their results.

A dedicated portal [www.results.gov.in](http://www.results.gov.in)

The screenshot shows the homepage of the results.gov.in portal. The header includes the logo and the text "Gateway to Exam Results & On-line Counselling in India" with a date and time stamp of 9/27/2013 12:06:56 PM. The main content area is divided into several sections:

- All Results:** A list of announced and upcoming results, including:
  - CBSE Exam Results: CENTRAL TEACHER ELIGIBILITY TEST (CTET) - JULY 2013, Announced on September 2, 2013 at 16:00Hrs.
  - Jharkhand Academic Council: Compartmental Secondary Examination - 2013, Announced on August 31, 2013.
  - Jharkhand Academic Council: Compartmental Intermediate (Science, Commerce & Arts) Examination - 2013, Announced on August 31, 2013.
  - CBSE Exam Results: Class X Compt. Exam Results - 2013, Announced on August 10, 2013 at 17:10Hrs.
  - CBSE Exam Results: Class XII Compt. Exam Results - 2013, Announced on August 3, 2013 at 15:30Hrs.
  - CA Exam Results: Intermediate (IPC) Exam Results, May 2013, Announced on July 31, 2013 at 14:30Hrs.
- Academic Exam Results:** A link to get academic examination results from various Central and State Boards, Universities and Councils in a single window.
- Entrance Exam Results:** A link to find entrance examination results for engineering, medical and other professional courses conducted by Central and State agencies.
- On-line Counselling:** A link to get details of online counselling for admission to different professional Under Graduate and Post Graduate courses.
- Registered User:** A login section with a text input field for the Login ID.
- Right Sidebar:** Contains a "Student Corner" menu with links to School Corner and Board Corner, a "Related Links" section with categories like Academics, Entrance, and Recruitment, and logos for india.gov.in, data.gov.in, and dial.gov.in.

has been developed by NIC as a single point source for the results of various examinations conducted all over India. The portal contains dedicated corners for the students, boards and schools/academic institutions.

The Student Corner on the portal enables students to get registered on the portal and submit their preferences. Besides this, it provides a whole lot of advance information related to important web resources, admission announcements, admit cards, mark sheets, online counselling to students from time-to-time.

The Board Corner on the portal facilitates various boards all across the country to communicate with schools/institutions affiliated/associated with them and announce various exams related information such as call for applications, submission dates, on-line submission of application forms, delivery of admit cards, result declaration dates as well as declaration of the results through various channels.

The School corner of the portal is customized to the needs of the schools as well as Academic Institutions and cater to their specific requirements, be it getting school/institution wise consolidated Results, electronic delivery of communications from the Examination Boards. More importantly, the schools/institutions can evaluate their performance over the years on number of parameters.

So far, the exam results published on the portal include CBSE exam results, CA exam results, and exam results of the State Boards of Goa, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, MP, Orissa, Rajasthan, Chattisgarh, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal, Jharkhand etc. Alone this year,

NIC has hosted 50 examination results of around 18 Central/State Education Boards.

### ONLINE COUNSELLING

Previously, the manual counselling process was very lengthy and cumbersome as it requires personal interaction between candidates and counsellors at various stages and takes around 30 to 40 days to accomplish.

To overcome these hassles, NIC has implemented the counselling through online system and enhanced it by reducing personal interaction to some extent, thus speeding up the whole process ensuring high transparency throughout.

NIC generated solutions have seamlessly enabled Central Counselling Boards i.e. Medical, Hotel Management (NCHM) and various State Boards to conduct their counselling activity online for the allotment of seats to the candidates (based on the criteria filled by them (rank, category, choices and seat availability within institutions) during the admission process for various professional courses like Engineering, M.Tech., MCA, MBA, Medical(UG & PG), BCA, BEd, Diploma Polytechnic courses etc.

Thousands of candidates took part in the online counselling and have been greatly benefited by this system. For current year, NIC has carried out successful hosting of 13 Central and State Counselling sessions (including the recently introduced Central Medical Counselling for PG & UG Programmes).

The statistical data of number of students appeared for counselling at various Counselling Boards for the year 2013 has been enumerated in Table-I.



**NEETA VERMA**  
Deputy Director General, NIC

NIC had initiated the process of publishing exam results online over a decade ago. Begin with CBSE results, today most of the school examination boards are publishing exam results online using NIC Services. Having all exam results at one place has made life simple for students, teachers & parents alike. Encouraged by the Success of Exam Results, today many boards disseminate admit cards & mark sheets online using the same platform.

Continuing with its success trail, NIC has extended its infrastructure services to examination boards for online counselling to assist students seeking admission in the professionals Course of Engineering, Medicine, Management across the country providing an equal opportunity to aspirants in Urban & Rural parts of India.

### TECHNICAL FEATURES OF ONLINE EXAM RESULTS PUBLISHING & COUNSELLING

The infrastructure used for hosting the Exam Results as well as Online Counselling constitute data-centre servers majorly placed at Delhi (IDC & NDC- Shastri Park), whereas some at Hyderabad(NDC).

- Setup has been created in such a way that Delhi and Hyderabad infrastructure could work as Disaster Recovery (DR) for each other.

- Server infrastructure works on multi-tier application architecture model having multiple web/application servers configured on load balanced clustering as front-end servers and Database servers on high availability/mirroring clustering as backend servers.
- Server infrastructure ready with virtualization technology facilitated central resources management for its better utilization, quick deployment of standby/staging setup needed as and when.
- Technology used is ASP & ASP.NET along with RDBMS database - SQL Server.

**A COLLABORATIVE EXERCISE**

For ensuring high rate of success, the whole exercise has to be borne out of a collective effort from all concerned authorities viz. the Educations Boards, Counselling Boards/Organizations, the NIC Regional/State Centres and the technical experts from the concerned group at NIC Headquarters. Sensitive to the needs and anxious state of the students, it has to be realized that disseminating the exam results /counselling through the Internet is not just an ICT exercise. The concerned team has to work at all odd hours to meet the varying requirements of different boards and ensure that the results are made available to the students in a timely, accurate and convenient manner. As it is a collaborative exercise, the concerned State/UT centres and the divisions at NIC HQs have to work closely and cooperatively to make this exercise a success.

Hosting of exam results and counselling activity on Internet is being successfully conducted by NIC for

S.NO.	Counselling Boards	Title	No. of Students Appeared
1	Medical Counselling	Medial counselling	41889
2	NCHM Counselling	Hotel Management	12329
3	UP counselling	UP State Entrance Examination	187021
		UP State B.Ed Joint entrance Exam	372000
		UP State Polytechnic	147209
4	Punjab counselling	Punjab State Board of Technical Education	11309
		Punjab Technical University	22531
5	Rajasthan counselling	Rajasthan Pre B.ED Online Counselling	138782
6	Chandigarh Counselling	Chandigarh Engg / Arch Counselling	7812
7	Delhi Counselling	Delhi Diploma Admissions	10671
		Netaji Subhash Insititute ofTechnology Delhi	9127
		Delhi Technology University	32864
		Guru GoBind Singh IndhraPrastha University Counselling (BBA,B.Tech)	29223
8	Gujarat Counselling	Gujarat Engg/MBA/MCA/B.Arch. Counselling	92916
		Gujarat Diploma to Degree Counselling (MTech,MPharmacy)	14186
		Gujarat Diploma Counselling	87525
9	AP Counselling	AP Engineering Counselling	#
		AP Engg(Bi.P.C) Counselling	#
		AP MBA/MCA Counselling	#
		AP Engg Lateral entry Counselling	55331
		AP Polytechnic Counselling	165585
10	Orissa Counselling	Odhisha Diploma Entrance Test	6961
		Odhisha Engineering Counselling	1855
11	Haryana Counselling	Haryana Engg/Diploma/MBA/MCA counselling	20067
12	UK Counselling	Uttarakhand Btech,Diploma,ITI Counselling	19602
13	WB Counselling	West Bengal JointEntrance Exam Board	41371
		West Bengal Medical	28949

Table- I Statistical Data of no. of Students appeared for counselling at various Counselling Board for 2013 (# - counselling still running)

many years now. NIC Data Centre is being instrumental in providing scalable, secure and readily available infrastructure support to various applications in this endeavour.

**FOR FURTHER INFORMATION:**

*Vijay Kumar Vishwakarma  
 Technical Director & HOD,  
 Web Hosting & Cloud Computing Services  
 Division, NIC Delhi  
 E-mail: vijay.vk@nic.in*



# eROR:

## Register of Ordinary Residents for the Management of Citizen Database

Ordinary Resident Register (ORR) is a physical register maintained in the state of Tripura, at the lowest tier of local self-government (urban as well as rural), to record the details of the citizens. Citizens are not entitled to civic services and benefits, unless their names are recorded in the register. eROR is a workflow based cross-sector solution developed for real-time management of citizen database in Tripura so as to ensure better and hassle-free delivery of citizen-centric services.



**ACHINTYA KR. DE**  
Technical Director  
ak.de@nic.in



**PRADIP ROY**  
Senior Systems  
Analyst & DIO  
pradip.roy@nic.in

Edited by  
**RUBAIYAT ALI**

**T**he physical ORR in Tripura are maintained according to Gram-Panchayats in rural areas and wards in urban areas. They record demographic information of each family such as name (Head of the Family and all the members including relationship with Head of the family), sex, age/DOB, qualification, occupation, house type, land holdings, irrigation details, sanitation details, water supply and electric supply connection details. In addition, the State Government has also decided to collect the Aadhar No. or the Enrolment ID (for subsequent translation to Aadhar No.)/EPIC No./Bank details (Branch & Account No. when available), PDS details (FPS Name & Ration Card No.) & MGNREGA Job Card details.

### OBJECTIVES OF THE PROJECT

The State Government of Tripura is in pursuit of empowering its 3-tier Panchayati Raj system through the Panchayat Department, and requested NIC Tripura to develop application software to maintain a database and achieve the following objectives:

1. Real time management of citizen database in Tripura
2. Better delivery of residency-related services such as:
  - Inclusion of name in ROR (by



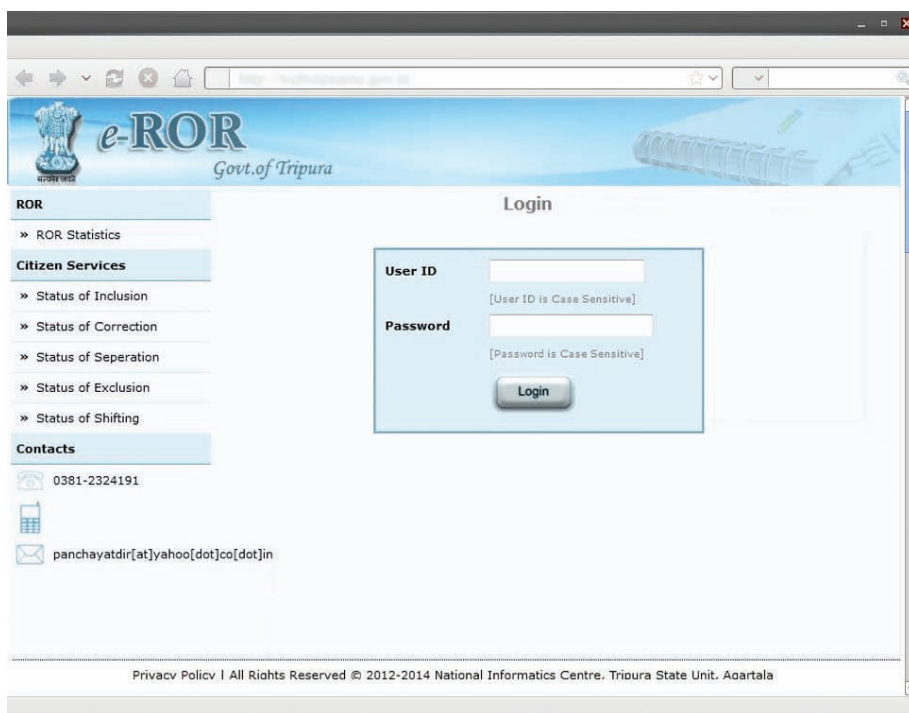
**KIRAN GITTE, IAS**

District Magistrate & Collector, West Tripura

The District Administration draws its strength from responsive public institutions, established procedures and robust infrastructure. Information Technology has given a new flip for making the administration more effective and efficient. The RoR (Records of Ordinary Residents) is the basic document for the rural families and is referred for giving ration cards, Birth and Death certificates, selection of beneficiaries for housing, land allotment, etc. The eRoR is updated to include latest parameters of financial inclusion, electronic tracking and host of other public service indicators. The launch of eRoR in West Tripura district under technical supervision of NIC has helped the District Administration in interlinking other databases of marriage registration, health, ICDS, banking facilities, MGNREGA etc for effective and timely delivery of public services.

birth/adoption/marriage)

- Deletion of name from ROR (by birth/adoption/marriage)



- Shifting of homestead in ROR (Inter/Intra Gram Panchayat (GP) or Municipal ward/inter-state)
  - Separation of family in ROR
  - Correction/Updation of records in ROR
3. Aadhar-based mapping of residents with different available Sectoral databases
  4. Developing a framework for error-free need assessment and targeted, relevant & timely assistances
  5. Profiling for identification of defaulters and enforcement
  6. Paradigm shift in decentralized planning

Accordingly, the project was taken up across the state during 2012-2013 with particular emphasis on West Tripura district, with its Mandwai rural development block as a pilot.

**EVOLUTION OF eROR**

The development of eROR can be traced back as following:

**1. ROR Number:**

The State Government issued guidelines for structuring and adoption of ROR Number and Family Number in the physical registers.

**2. Digitization:**

Physical ROR registers were digitized with names in English as well as in Bengali.

**3. Solution:**

eROR at <http://eror.tripura.nic.in> was deployed as a web-based application with functionalities for data entry, draft publication, data quality reports, data quality improvement forms, final publication and different citizen-centric transactions such as inclusion/deletion of name, shifting of homestead, separation of family and correction of records.

**4. Data Quality:**

Post digitization, Data Quality Reports were generated for each GP, and distributed to the respective Panchayat authorities for field verification.

**5. Draft Publication:**

Draft publication of ROR was completed followed by hearing and disposal of claims and objections received from the citizenry. Special thrust was given to correctly capture every member’s Aadhar No., EPIC No., MGNREGA Family Job Card No. and bank details.

**6. Adoption:**

The Government issued instructions to do away with manual ROR and adopt

Service Component	In Manual System	Through eROR
Pre-Application	Personal visit to GP office – at least half a day	Online Entry from home or nearest CSC/Internet Kiosk
Application	Takes 10 minutes on availability of panchayat functionary	Takes 3 minutes, not dependent on availability of panchayat functionary.
Verification	The applicants’ papers are submitted at the Block Offices followed by action from the designated Panchayat Officer- approximately 7 days	Online verification - 3 minutes
Approval	Approval and signature of the Executive Officer of the Panchayat Samiti - approximately 3 days	Online Approval - 5 minutes
Service Delivery	The certificate physically travels to the GP Office.	Digitally signed certificate delivered online

eROR as the finally published record of ROR in the state.

**7. Authenticity & Non-Repudiation:**

ROR Certificates were authenticated by Digital Signature of the issuing authority, and delivered online to the citizens from GP offices as well as CSCs.

**RESULTS ACHIEVED**

**a) Tangible and In-Tangible benefits achieved:**

- Reduction in service delivery time and clearing of pendency



Inauguration of eROR

- Online verification of Residency for

law enforcement and eligibility of services

- Synchronization of Sectoral databases along with change in eROR
- Sectoral databases such PDS are reverse engineered based on eROR

**b) Quality of Governance:**

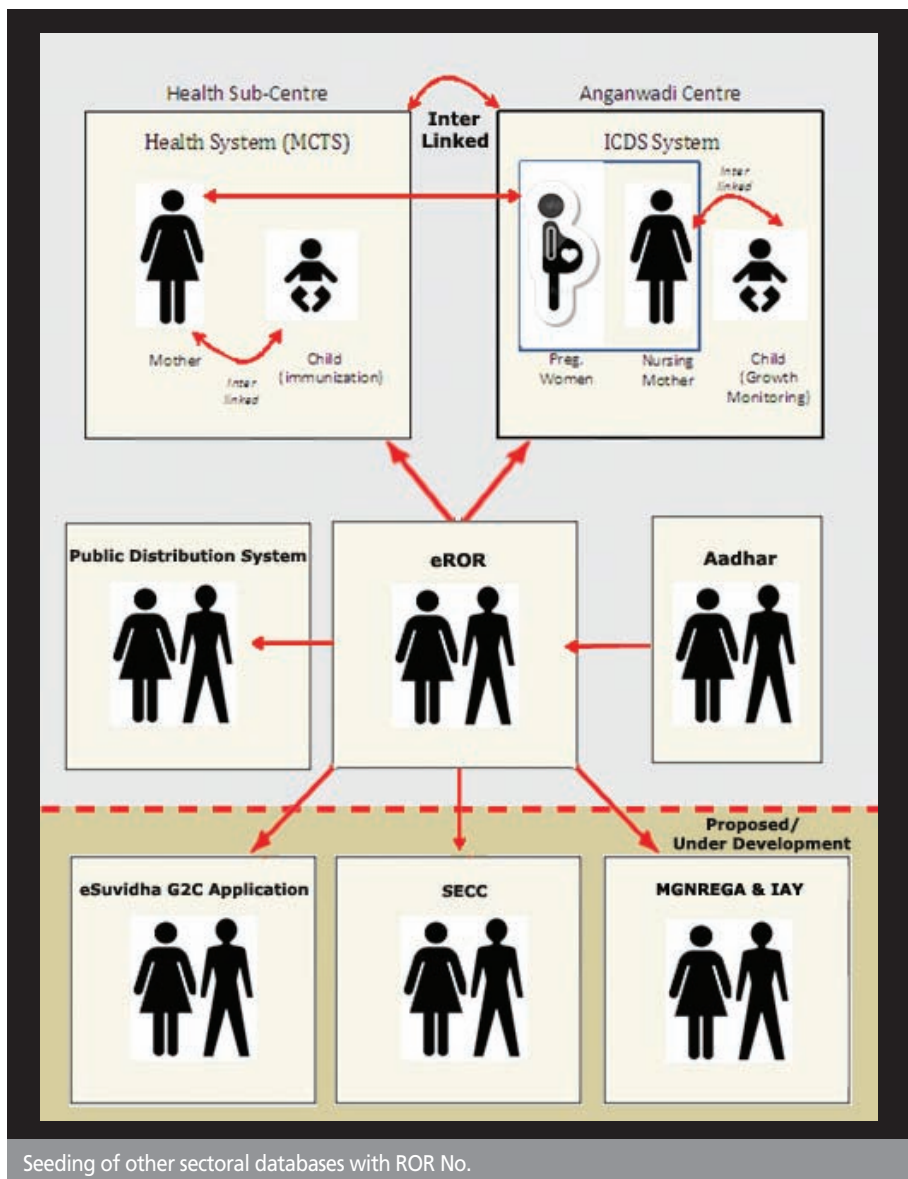
- Digitally signed eROR services
- The eROR database is error free, de-duplicated and mapped on different sectoral databases

**c) Simplification of procedures:**

- Citizens can apply online 365x7 for eROR services, in addition to counter-based facilitation
- Applicants can track status and download certificates

**d) Operability:**

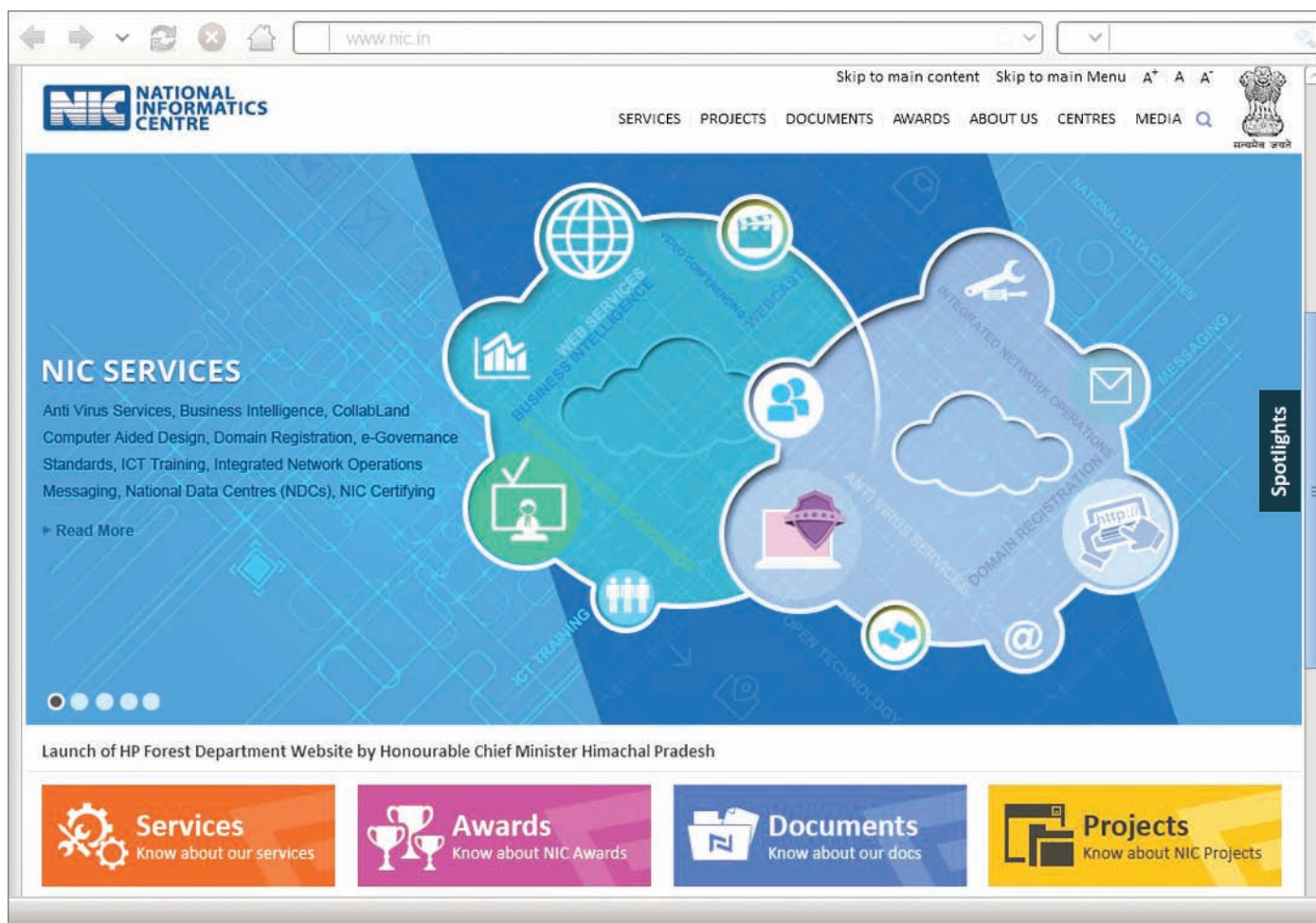
- eROR data exposed as web services is used by other authorized eGov applications such as PDS, MCTS, ICDS
- eROR based web services are used to validate the residency of the applicant in other eGov applications such as eSuvidha, Land records registration etc.



Seeding of other sectoral databases with ROR No.

**FOR FURTHER INFORMATION:**  
 Achintya Kumar De  
 Technical Director,  
 NIC Tripura State Centre  
 E-mail: ak.de@nic.in

# http://www.nic.in/



## CONTENT

- Homepage strongly establishes the ownership and purpose of the website.
- Website is rich in relevant content with back-end to update/ receive contributions from multiple sources.
- Well-planned information architecture for maximum accessibility.
- High textual clarity and legibility; light colour background ensures proper contrast for reading along with font enlargement features
- GIGW compliant website
- Proper colour coding for links and font handling for content hierarchy
- Elaborate Accesibility Statement, Terms of Use and Hyperlinking Policy given

## DESIGN

- Well architected website for usability and easy navigation
- Simple, minimalistic design yet colour rich homepage and highlighted graphics
- Consistent and refined usage of fonts, colour scheme and graphical representations
- Easy identifiable, relevant graphic icons and symbols used
- Vivid and attractive banners depicting the various projects, products & services
- Search feature provided to enable quick and relevant search results

## TECHNOLOGY

- Open Source technology used for development and implementation
- jQuery and CSS have been effectively used for better user experience on home and other pages.
- Sliding box drupal functionality used for Services, Awards, Documents and Projects sections on homepage.
- jQuery Carousel plugin used for “Spotlight Slider”
- Tabber Drupal functionality deployed to enable users to view listings in multiple displays eg. Projects, State wise/District wise search etc.

## VERDICT

The new avatar of the website of NIC comes high in terms of looks and usability. The website carries a professional look and feel with a stand-alone identity. It ranks high in terms of content, design and technology used, thus qualifying for the “Web Design of the Issue”.

# SECURING YOUR DESKTOP

In today's computing environment, the security of all computing resources, from network infrastructure devices to users' desktop computers, is essential. There are many threats to users' computers, ranging from remotely launched network attacks to malware and viruses that are spread through e-mails, websites, and files. Increasing the security of individual desktops protects them from these threats and reduces the chances of being compromised. The main objective of this article is to formulate a security configuration policy for Microsoft Windows Operating Systems called as Baselines. These baselines can be adapted to any organization running any versions of Windows Operating Systems. Apart from these baselines, Anti-Virus and Windows Updates are mandatory to ensure System Security.



**Dr. SHUBHAG CHAND**  
Technical Director  
shubhag@nic.in



**VINOD KUMAR J**  
Scientific Officer SB  
nj.vinod@nic.in

**G**roup Policy is a feature of the Microsoft Windows Operating systems that controls behaviour of the operating system. Group Policy provides the way of configuring of operating systems policy, applications behaviour with operating system, and user settings. Group Policy primarily decides what users can and cannot do on a computer system.

## GROUP POLICY OBJECT (GPO)

Group Policy Object is a group of configuration policies that configures a group policy. Our primary objective is to formulate a Group Policy Object that enhances the security configuration of the system without affecting its working. Some standards and list of security steps should be decided to make the group policy object effective. Available standard has been adopted as reference and new GPO is prepared. This GPO Object is applied to the individual systems to enhance the security.

## SECURITY BASELINES

Security baseline is a collection of Group Policy Objects grouped on the basis of features. New baselines can be created by adding or removing the Group Policy Object from the available Baselines. Microsoft and other Security Agencies provide several baselines for Windows Operating Systems Security. Each baseline specifies the basic change that has to be made in the policy.

The commonly used baselines

provided by the Microsoft are Specialized Security Limited Functionality (SSLF) and Enterprise Client (EC).

Specialized Security Limited Functionality (SSLF) Baselines are used in environment, which has a high risk of attack. Enterprise Client (EC) Baselines are used in enterprise environment, which is usually comprised of a server and client system that need to be protected from threats on the Internet.

These two baselines i.e. EC and SSLF can be combined to create a new baseline as per the organization requirement. Microsoft has published their baselines for all available versions of Windows Operating Systems.

Another baseline commonly used was evolved from the Federal Desktop Core Configuration Mandate defined by the United States Government & named as United States Government Configuration Baseline (USGCB). The purpose of the USGCB is to create security configuration baselines for systems deployed in Federal Agencies of United States. USGCB has published their baselines for Windows 7, Windows Vista, Windows XP, Internet Explorer and Red Hat Enterprise Linux. These baselines are published by National Institute of Standards and Technology (NIST).

To strengthen the desktop security further, new baseline can be created by combining the Microsoft baselines and USGCB baseline depending upon the organization need.

## SECURITY COMPLIANCE MANAGER

To create Group Policy Object for the prepared baseline, a Security Compliance Manager provided by the Microsoft is used. This tool helps in creating a GPO by importing the available

GPO and modifying it as per the organisation requirements, merging two or more different baselines to create a new baseline etc.

### APPLYING BASELINES

Once the baseline and the Group Policy Object are ready, we need to deploy these policies in the client machine. If the machine is available in the domain, we would simply update the GPO in the Active Directory Server and push it to all the clients. But if the machine is not available in the domain, we need to have a special software issued by Microsoft called Local GPO.

This Local GPO has built-in script that has the ability to read the GPO object and apply it to the desktop.

### HOW TO IMPLEMENT?

Initially, one has to prepare a list of security configurations from the baselines, which are essential for the concerned organisation. Then, prepare a Group Policy Object, and implement this GPO in all the desktops of your organisation. If there is any performance or work related issue with

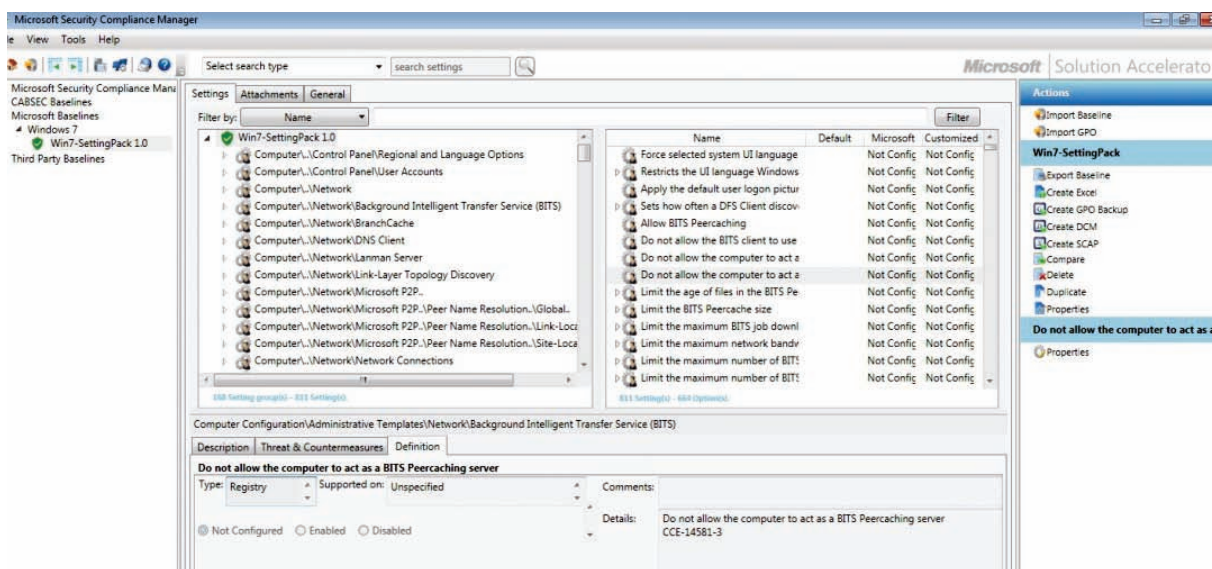


Figure: Screenshot of Microsoft Security Compliance Manager

the implemented baseline, issues have to be identified and new baseline have to be prepared moderating the security settings. Each time whenever you change or add to the security settings, you have to follow all the above steps. Once the perfect GPO is ready, the batch file so created will get the GPO object location and implements the complete security baselines on the client system, which would internally implement more than 450 security settings for Windows 7 Operating System, depending upon the baselines one has adopted for the concerned organisation, which is not feasible when done manually.

### SECURITY AUDIT

To check whether the baseline is implemented properly, one can use any auditing tools available in the open market. For example, Belarc Advisor is one tool which can audit the client security policy and provides the rating based on USGCB baselines. Similarly, there are many tools available which can benchmark the system based on the commonly used baselines like

USGCB or Microsoft baselines and provide the rating for the system.

### CONCLUSION

Implementing either the USGCB Baselines or Microsoft SSLF Baselines directly ensures that that system security rating is more than 80% in most of the commonly available third party security auditing tools.

To achieve higher security ratings, one has to add more security steps in the USGCB or SSLF baselines.

Sustainable efforts can be made to maintain constant vigil regarding computer security by implementing a strong baseline and computer security audit. They should be carried at regular intervals as per concerned organization needs.

Apart from implementing a strong baseline, Anti-Virus software should be regularly updated.

#### FOR FURTHER INFORMATION:

**Dr. Shubhag Chand**  
HOD, Cabinet Secretariat  
Rashtrapati Bhawan  
New Delhi.  
E-mail: shubhag@gmail.com

# UBIQUITOUS PROMISES:

## Internet of Things

Human civilization over time devised various ways to communicate and interact with one another through the means of postal/telephonic/Internet based communication. Present world is enjoying all time connected phenomena, riding on the successful implementation of Internet and Internet based technology. On the same pattern, the machine to machine communication is progressing very fast in such a fashion that voluminous information generated can be used in improving the standards of living and taking decisions in real time. This communication and information availability can be used for reduction in product/service cost, effective pricing and enforcing competition which will help the enterprises of tomorrow to offer tailored products of quality which are requirement based.



**MUKESH K. RALLI**  
Technical Director  
ralli.mukesh@nic.in

Edited by  
**VIVEK VERMA**

**T**he ongoing development of various sensors and actuators is opening new vistas of development. Together with advancements in the field of barcodes and RFID, the advancement in machine to machine communication is making a rapid stride which is riding successfully on the adoption of IPv6 and successful implementation of cloud based architecture. This phenomenon, IoT - Internet of Things, started in 2009 and is taking definite shape along with new promises.

In physics, chemistry and biology, the idea of self-organization is well documented. Applied to the IoT, self-organizing networks have come to mean the temporary formation of a network in order to collect specific information or measure a specific phenomenon. Various companies and technical experts are expecting that by 2020 around 15 to 50 billion devices will be interconnected, which means that each and every individual will be connected to six devices on an average. With so much inter connectivity among various devices doing machine to machine communication, Internet will become central nervous system of our modern world.

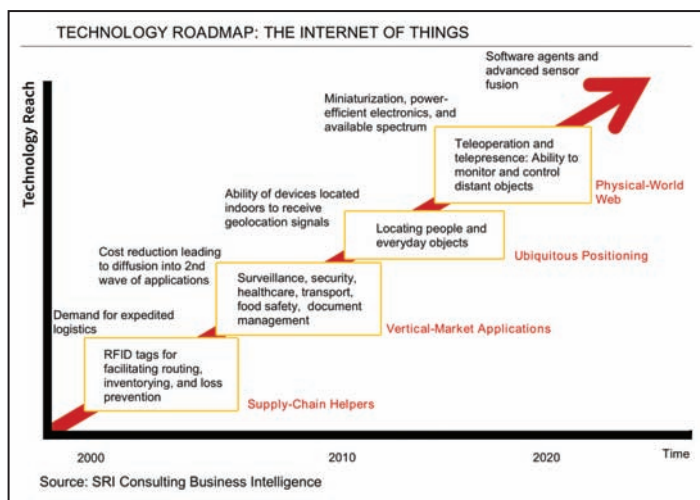
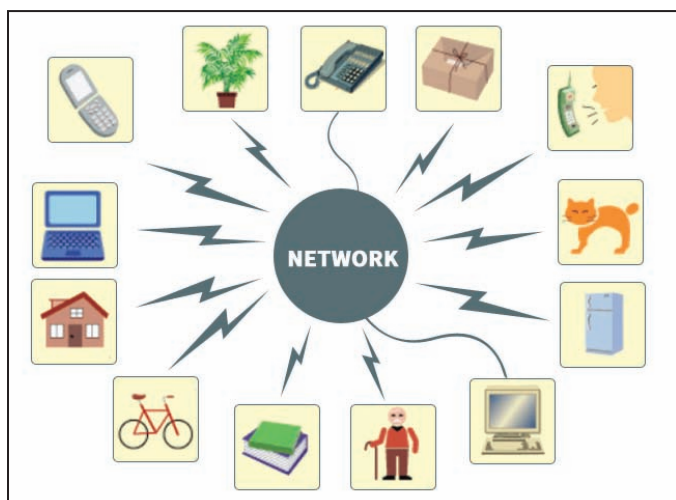
The widespread espousal of the Internet of Things will take time, but the time line is advancing, due to perfection in essential technologies. Advancements in wireless networking

technology and the greater standardization of communication protocols have enabled data collection from these sensors almost anywhere, at any time. Ever-smaller silicon chips for this purpose are gaining new capabilities, while costs, following the pattern of Moore's Law, are falling. Huge increases in storage and computing power, some of it available via cloud computing, make number crunching possible at very large scale and at plummeting cost.

Studies, experiments and parallel implementation has been started in various areas successfully and areas like transport, medical, time management, pollution management(carbon emission), oil and natural gas exploration etc. are main areas where this new idea is penetrating largely.

According to Mckinsky, the IoT developments can be categorized in two broad categories viz. (i) Information and Analysis (ii) Automation and Control. Applications related to Information and Analysis, Enhanced Situational awareness, Sensor driven Decision Analytics areas are sub-categorised under category one and under category two will be Process Optimization, Optimized Resource Consumption and Complex Autonomous System. Given below are few instances/areas related to this categorization which are under experiment/use or are in the process of development and further research:

- Researchers are be able to map carbon emissions at street level in real



time in cities around the globe so as to find most offending sources of carbon in order to plug these holes and slow down the pace of climate change.

- The companies would be in better position to deliver goods and services according to the exact needs of the tailored product to a specific consumer segment, that too at lower cost with more features.
- Not only optimization of our planet's scarce resources but also prevention of the depletion of these resources will be possible. This optimization will not only be natural resources or systems, but also for man-made ones as well.
- The real time information will result in adding value to highly distributed and loosely connected supply chains of today's massive organizations running operations across the globe.
- The GPS trackers could be applied as tags or stickers to everything be it cell phones, wallets, car keys etc. which would let everything to be tracked and found easily when lost. Each person would have their own sphere of objects they could track and find instantly.
- Most people have a hard time keeping track of all the food they have in their house at any given time. If the food industry started adding smart tags

to all their packaging, simple apps could be created that monitor freshness, inventory, recommend possible meals, and creates grocery lists for the next time someone goes shopping.

- Experiments in Dairy sector in Norway on cows have led the owners to ascertain the condition of cows in their dairy farms, whether she is ill/pregnant and help the dairy owners to take the remedial measures accordingly.
  - Precision farming equipments with wireless links to data collected from remote satellites and ground sensors can take into account crop conditions and adjust the way each individual part of a field is farmed—for instance, by spreading extra fertilizer on areas that need more nutrients.
  - Billboards of tomorrow will peer back at passersby, assessing how they fit consumer profiles, and instantly change displayed messages based on those assessments.
- Though above presented ideas may seem to open many powerful vistas which IoT will offer but there are challenges and issues which need to be taken into account.
- With numbers of inter-connected heterogeneous devices and

communication among these, there will be need of highly sophisticated and well tuned cloud based network, which could handle at times the ebbs and high data. There will be also issues in creating address space for all the connected devices as huge data inflow will cause strain on networking infrastructures.

- The heterogeneity of the entire system further complicates security concerns, as certain devices may require a higher degree of encryption than others.
- Privacy needs to be maintained in human-device interaction and the confidentiality of shared organisational data must be protected. Though the idea of IoT will be appealing to many but there are others who see this as infringement of their privacy.

However, whenever new idea takes place, concerns are obvious to come to fore but at the same time there should be enough confidence in the hard work of scientists/technologists who are engaged in these developments and encourage them to clear all obstacles in the way for the betterment of all.

### FOR FURTHER INFORMATION:

**Mukesh Kumar Ralli**

Technical Director, NIC Punjab State Centre  
E-mail: ralli.mukesh@nic.in



# RESPONSIVE WEB DESIGN:

## Device Friendly Web Viewing

India is a fast growing market for internet users. Technological innovations and availability of new handy devices help people to access internet more on their smart phones, tablets, net-books and other such mobile devices than the desktop PCs. Nowadays, every website owner wants a mobile version of their website to cater to the growing number of non PC users. In many cases there are separate designs for the BlackBerry, Android Phone, iPhone, iPad, Windows Phone, net-book, Kindle, etc. This changing demand of website viewing allows many web owners to adopt the new trend called Responsive Web Design.



**ALKA MISHRA**  
Senior Technical Director  
amishra@nic.in



**D.P. MISRA**  
Principal Systems Analyst  
dpmisra@nic.in

### WHAT IS RESPONSIVE WEB DESIGN?

Responsive Web Design is a web design approach aimed at crafting sites to provide an optimal viewing experience. This also suggests that design and development should respond to the user's behavior and environment based on screen size, platform and orientation. As the user switches from their desktop to tablet, the website should automatically switch to accommodate for resolution, image size and scripting abilities. In other words, the website should have the technology to automatically respond to the user's devices.

### MAIN FEATURES

Responsive Design basically allows a website to respond or adapt to a different viewport sizes without setting a specific domain/sub-domain for people using mobile devices or switch to a different set of code bases. The look and feel of the website can be maintained so as to have similar experiences across different device sizes. This is possible with the use of viewport Meta-tag and CSS3 media queries. The Responsive Web Design must have the following features:

- The site must be built with a flexible grid foundation.
- Images that are incorporated into the design must be flexible themselves.
- Different views must be enabled in different contexts via media queries.
- Viewport Meta-tag is placed inside the <head> tag and is used to control the scale of the web page.

- The second component is the CSS3 media queries, which specify the styles for specific viewport sizes.

### IMPLEMENTATION IN DATA PORTAL INDIA

We have used the following basic techniques to implement the responsive web design in the upcoming version of the Data Portal India ([www.data.gov.in](http://www.data.gov.in))

- **Flexible/Adaptive layout** – There is an intelligent use of CSS media queries to modify the layout in ways that suit different screen sizes. Responsive Grid has been used to quickly build responsive layout. The flexible grid helps to make a design flexible and fluid.
- **Fluid grids and layouts** – It uses relative units like percentages instead of fixed width units like pixels. The best solution for flexible web design will be achieved by defining parameters for columns, spacing and containers. Size and spacing are the two main components to focus on creating your flexible grid system. In place of pixels, use ems and percentages as your units of measurement.
- **Flexible media/images** - Images and other media (like videos) are scaled using relative units so that they don't expand beyond their containing element.
  - To maintain fast loading time, use images of a manageable size.
  - An alternative to scaling is cropping. The CSS overflow property (e.g. overflow: hidden) gives us the ability to crop images dynamically.

■ The option is available to have multiple versions of the same image and then serve up the appropriate sized version depending on the user.

## MEDIA QUERIES

Media queries allow the page to use different CSS rules based on characteristics of the device the site is being displayed on, most commonly the width of the browser. Conditions such as min-width, max-width, device-width and orientation, control how content is displayed differently. For example, max-width sets a maximum browser width that a certain set of styles would apply to.

## FRAMEWORKS FOR RESPONSIVE WEB DESIGNS

There are various open source responsive HTML5 frameworks, boilerplates and tools for front-end web development using HTML, CSS, and JavaScript. Here are glimpses of top ten frameworks that one can try:

- **Twitter Bootstrap (Licence: Apache Licence v2.0):** Bootstrap was made to not only look and behave great in the latest desktop browsers (as well as IE7!), but in tablet and smart-phone browsers via responsive CSS as well. It has been packed with features like a 12-column responsive grid, dozens of components, typography, JavaScript plug-ins, form controls, and even a web-based Customizer to make Bootstrap customized.
- **Foundation (Licence: MIT Licence):** Foundation is developed in SaaS, which is powerful CSS pre-processor that helps you to write cleaner, more organized CSS. You can maintain it easily over time without the typical headaches faced in vanilla CSS.
- **Skeleton (Licence: MIT Licence):** Skeleton is a small collection of CSS files that can help you rapidly develop sites

that look beautiful at any size, be it a 17" laptop screen or an iPhone. Skeleton is built on three core principles: responsive grid down to mobile, fast to start, agnostic style.

- **HTML5 Boilerplate (Licence: Multiple open source licenses):**

HTML5 Boilerplate assists the users to build fast, robust and malleable web apps or sites. HTML5 Boilerplate has distinct build script projects to help augment the performance of the site/app in a production environment.

- **HTML KickStart (Licence: MIT Licence):** HTML KickStart is an ultra-lean set of HTML5, CSS, and jQuery (javascript) files, layouts, and elements designed to develop a responsive design.
- **Montage - HTML5 Framework (Licence: BSD License):** MontageJS supports simple and two-way data binding between objects, components, and collections. Data binding helps keep your UI and model data in sync to avert manually tying your data into the DOM.
- **SproutCore (Licence: MIT Licence):** SproutCore is an open-source JavaScript framework. Its goal is to allow developers to create web applications with advanced capacity and a user experience equivalent to that of desktop applications. When developing a SproutCore application, all the code is written in JavaScript. A notable divergence of SproutCore is Ember.js. Both projects are maintained separately and have taken different directions.



- **Zebra (Licence: LGPL):** Zebra brings fresh views and possibilities to develop web based Rich UI applications. The approach sits on top of HTML5 Canvas element that makes it possible to render any imaginable UI. Zebra development is much closer to software engineering, where you write well structured, manageable, extendable code basing on easy Zebra OOP concept.
- **CreateJS (Licence: Liberal MIT Licence):** CreateJS is a suite of modular libraries and tools which work together to enable rich interactive content on open web technologies via HTML5. These libraries are designed to work separately, or mixed and matched to suit your needs. The CreateJS Suite is comprised of: EaseJS, TweenJS, SoundJS, PreloadJS, and Zoë.
- **Less Framework (Licence: MIT Licence):** Less Framework is a CSS grid system for designing adaptive websites. It contains 4 layouts and 3 sets of typography presets, all based on a single grid.

### FOR FURTHER INFORMATION:

**Alka Mishra**  
Senior Technical Director,  
NIC Hqrs. Delhi,  
Email: amishra@nic.in

# BHILWARA:

## From Textiles to Excellence in ICT

Bhilwara has earned a prominent spot on the industrial map of India. It has emerged as India's largest manufacturer of fabrics. Also known as textile city of India, it is a famous industrial town in Rajasthan with presence of renowned industrial groups. The fabric is exported to countries like Argentina, Belgium, Brazil, Germany, Italy, Nepal, South Africa, USA, Canada, etc. The district has taken large strides in ICT and leading e-Governance from the front.



**ARUN KUMAR BANGER**  
District Informatics Officer  
[ak.banger@nic.in](mailto:ak.banger@nic.in)



**KUNAL DERASHRI**  
District Informatics Associate  
[kunal.derashri@nic.in](mailto:kunal.derashri@nic.in)

INPUTS FROM CHANDAN SEN, INFORMATICS STATE CORRESPONDENT, RAJASTHAN

Edited by  
**VIVEK VERMA**



rich repository of information, <http://bhilwara.nic.in> assists citizens in getting acquainted with the District Administration. Apart from providing the details related to industry, tourist places, climate, history, citizen charter, etc., it also provides information regarding various initiatives undertaken by District Administration for the benefit of citizens.

### KEY ICT INITIATIVES

#### 1. Land Record Computerization (APNA KHATA):

With all the 16 Tehsils of the district moved online, the Apna Khata system delivers instant, accurate & updated ROR to the citizens. A touch screen kiosk has been installed at District Centre through which citizens can get latest information of their land records. Bhilwara Tehsil of district has been issuing Digitally Certified ROR (Record of Rights) to the citizens.

#### 2. Prashashan Gavon ke Sang (PGKS-2013):

Started on 10th Jan, 2013, 383 camps have been organized under the initiative in different blocks and Panchayat Samitis. All the grievances, redressals and decisions made during the camps were fed online to provide timely and accurate progress report to the District Administration for decision making. About 40,000 mutations were opened, and more than 36,000 Nakals were issued during the process.

#### 3. Special Pension Maha Abhiyan:

Started in April, 2013, under the abhiyan



**ONKAR SINGH, IAS**  
District Collector & DM BHILWARA

National Informatics Centre, Bhilwara is playing a pivotal role in implementing citizen centric good governance in Bhilwara District since its inception. The district unit of NIC has taken significant strides since then & has helped us in bringing about a qualitative change in the administration of the district.

The district website maintained by NIC has proved to be very useful and informative. I also appreciate the efforts made by Mr. Arun Banger, DIO-NIC, Bhilwara and his team in the APNA KHATA Project and making this a success story for the District Administration. I congratulate the entire team of NIC Bhilwara for their contributions and active support to District Administration for promotion of ICT culture in the district. I wish the team all the best in their present and future assignments.

more than 1.25 lakh applications have been disposed. Out of this, 1.10 lakh applications have been sanctioned and made online.

**4. Rajasthan Guaranteed Delivery of Public Service Act 2011:**

The Government of Rajasthan has enacted the RGDPS Act, 2011 to ensure that public services are delivered to the citizens in a transparent, timely, efficient and responsible manner. Currently, 153 important services of 18 departments are incorporated in the act. In Bhilwara district, all offices have started MIS Entry on the RGDPS portal and received more than 4.5 lakh applications from which approx 4.30 lakh applications have been disposed off.

**5. Integrated Financial Management System (IFMS):**

It is an e-Government initiative for effective, accountable and transparent Public Finance Management. It is a web based system which includes budget planning, estimates preparation, fund management, treasury functions etc. IFMS has been implemented successfully in treasury and all sub treasuries of the district.

**6. SUGAM-RPG (http://sugamrpg.raj.nic.in):**

It is a web based grievance redressal system which is monitored regularly by District Administration for the redressal of public grievances.

**7. Pay-Manager (http://paymanager.raj.nic.in):**

This is web based system to generate the pay bills of employees in the district. Training of more than 200 DDOs has been conducted to work on this module and now technical support is being given to the officials for the generation of pay-bills.

**8. Sugam Single Window:**

This system facilitates citizens in getting varied services (various type of certificates viz. SC/ST/Bonafide/OBC, etc) at one place. More than 1.70 lakh certificates have been issued so far to the citizens.

**9. General Elections:**

Support has been provided for successful conduction of Lok Sabha, Assembly, NagarPalika and Panchayati Raj elections encompassing various polling activities and result declaration process.

**10. Arms License Monitoring System:**

This application keeps updated record of Arms licenses registered by the District Administration.

**11. SAMADHAN:**

This application is used to keep track of daily JAN-SUNWAI held by the District Magistrate. This software keeps record of

the petitioner and the action taken on his/her application. This system works as a Local Grievance Management System.

**12. IT Awareness Trainings:**

From time to time, various IT awareness trainings have



Shri Onkar Singh, District Collector issuing Digitized Jamabandi to the citizen

been organized for the officials to train them to work on new projects as well as enhance their knowledge of the ICT tools and technology.

**13. Video Conferencing Service:**

It is being conducted regularly as per the schedule received from the concerned department and District Administration.

**14. District LAN Network:**

A high speed network line of 100 Mbps capacity is provided to all the departments in the district. LAN network consists of more than 125 nodes connected to each other and maintained by the District NIC Centre.

**15. Achievements:**

- District owns first place among all districts in implementing APNAKHATA project in the state of Rajasthan with all the Tehsils moved online in record time.
- District NIC Centre received appreciation from District Administration for continuous support and timely & effective reporting during PGKS Abhiyaan, 2013.
- Under Pria-Soft Accounting Project more than 350 Gram Panchayats Accounting data has been made online for the year 2011-12.



**FOR FURTHER INFORMATION:**  
**Arun Kumar Banger**  
 District Informatics Officer,  
 Bhilwara, Rajasthan  
 E-mail: rajbhi@nic.in

# HAMIRPUR:

## Bridging the Digital Divide

Hamirpur, one of the twelve districts of beautiful state of Himachal Pradesh, lies in the middle of the Shivalik Ranges. It is the state's most literate district and well connected by roads. Majority of the people serve for defense forces thus popularly known as "Veer Bhoomi." The district is also widely famous for Child-Saint Shrine Baba Balak Nath.



**VINOD GARG**  
District Informatics Officer  
[vinod.garg@nic.in](mailto:vinod.garg@nic.in)



**BHUPINDER SINGH**  
District Informatics  
Associate  
[bhupinder.singh@nic.in](mailto:bhupinder.singh@nic.in)

Edited by  
**VIVEK VERMA**

**D**istrict NIC unit, Hamirpur was setup in 1989 and has made tremendous strides towards empowering district administration with IT tools, spreading IT culture and development/implementation of numerous IT applications. The key initiatives taken up at various levels include:

### INITIATIVES IN DISTRICT COLLECTORATE

- **Election Support:** Support has been provided for entry and random deployment of polling staff, counting staff, result compilation & dissemination to ECI for HP Vidhan Sabha Elections. Also, facility has been provided for Electoral Roll Management for conducting PRI/ULB Elections.
- **RefNIC:** This system has been used for computerized monitoring the movement of letters/files in the sections/branches of different offices.
- **SchemesMIS:** This system carries out sanctioning of funds, monitoring of physical/financial progress of various developmental schemes.
- **e-Soochna Kiosk:** Touch-based G2C system provides information regarding history, geography, fact-file, tourism, schemes, vehicle/license queries, contacts, PRI members.

### SUGAM KENDRAS

Sugam Kendras have been set up in all Sub-Divisions, RTO and Tehsils with software support from NIC.

### IMPORTANT G2C SERVICES:

- **Transport Computerization:** Vahan -



**ASHISH SINGHMAR, IAS**  
Deputy Commissioner, Hamirpur, HP

I wish to take this opportunity to thank the NIC unit, Hamirpur for the full support & cooperation in implementing the various e-Governance initiatives of the Centre and State Governments in the district. The various e-Governance initiatives have gone a long way in providing multiple public services in a transparent and efficient manner. I look forward to innovate in this area at the district level too with the support of NIC District Unit, so that we can provide better governance to our people.

application for issuance of Registration Certificates and Permits of Vehicles. Sarathi - application for issuance of driving/conductor licenses. Data is auto ported to SR/NR over VPNoBB.

- **e-Samadhan** is a role based web application implemented for all the departments for redressal of public grievances/demands.

- **Lok Mitra:** The pilot of the project was launched in 2001 in district Hamirpur. At present, it has been merged with CSC project and is being extended to the village level where VLEs are working as front-end delivery centres.

- **Shastr:** It is a system for issuance and

renewal/endorsement of Arms Licenses.

- **HimBhoomi LMK:** HimBhoomi LMK is a web interface for issuance of RoRs to the land owners of the state.

## FINANCE & TREASURY COMPUTERIZATION

- **e-Kosh:** e-Kosh software is implemented in all the treasuries of the district. Computerized tokens are assigned to bills/challans for subsequent processing till payment/receipt.

- **e-Pension:** A web based system for management of pension scrolls, arrear calculation etc for the State Government pensioners.

- **e-Salary:** Implemented in all treasuries to generate salary scrolls of the employees of various departments.

## REVENUE DEPARTMENT COMPUTERIZATION

- **Location Directory** of all revenue villages is maintained in a standard form through this application for use in various applications.

- **HimRIS** is used for registration of land deeds in integration with the HimBhoomi s/w where mutation data is transferred automatically.

- **HimBhoomi** is used to computerize Land Records and for generation of registers and related MIS reports.

- **LokPraman Patra** is used for issuance of all types of certificates issued by all the Executive Magistrates.

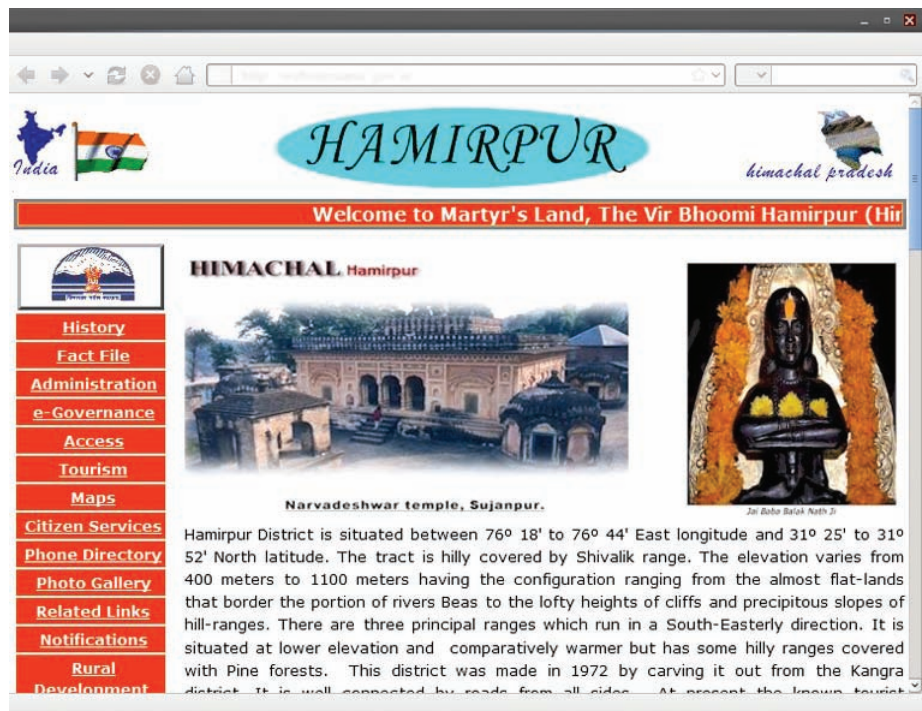
## SOCIAL JUSTICE & EMPOWERMENT

- **e-Kalyan** software is used for disbursement of welfare pensions through Bank Accounts, MOs and Post Office Accounts.

- **e-Pehchan** software is used for issuance of the Disability and Senior Citizen Identity Cards.

## RURAL DEVELOPMENT & PANCHAYATI RAJ

- **NREGA Soft:** Online s/w is



implemented in DRDA, blocks and all the Gram Panchayats.

- **IAY** is a complete MIS for management of allotment and progress of sanctions done under Indira Awaas Yojna.

- **DEAS** is a computerized solution for maintenance of accounts on double entry accounting system at blocks.

- **e-PRI:** Implemented at the Gram Panchayat level, it is a complete suite for the management of PRI activities.

## OTHER MAJOR PROJECTS

- **DBT:** A GoI flagship programme being implemented for Direct Transfer of Benefits to the beneficiary's bank account under numerous Central/Centrally Sponsored and State Schemes. Hamirpur is among first 18 districts to implement LPG scheme.

- **Manav Sampada** manages the full details of employees and generates service books electronically.

- **Kanoon Vyavastha** application is used to automate the process at Police Stations. It is integrated with State Police Portal for auto transmission of data and generation of MIS reports.

- **RCMS:** Revenue Courts Monitoring System aims to computerize revenue courts.

Some of the other projects that are running successfully are e-Courts, IDSP, e-Mamta, NADRS and e-Rozgar.

## DISTRICT WEBSITE

The official website of District Hamirpur (<http://hphamirpur.nic.in>) has been designed & developed as a one-point-source of information about history, fact-file, culture, temples, accessibility, tourist places and citizen services etc.

## NICNET & VIDEO CONFERENCING

NICNET is connected with State Hqrs. over 1 Gbps link and backed up with 34 Mbps link to provide smooth connectivity to different departments. NKN Connectivity is extended to NIT, Hamirpur and HP Technical University. VPNoBB connectivity is provided to RTO/R&LAs, NADRS nodes and courts. Centre provides point-to-point/multi-point Video Conferencing services to different departments.

### FOR FURTHER INFORMATION:

**NIC District Centre**  
Hamirpur, HP  
Email: [hpham@nic.in](mailto:hpham@nic.in)

# MUZAFFARNAGAR:

## Treading fast on e-Governance turf

Muzaffarnagar, located in the northern part of Uttar Pradesh is popularly known as "The Sugar Bowl of India". With a population of 41,38,605 (Provisional figures of the 2011 census of undivided Muzaffarnagar) the district spreads over an area of 4049 square kilometers and has 4 tehsils, 9 development blocks and 600 villages. The economy of the district is mainly based on agriculture & sugarcane industries.



**GAURAV TYAGI**  
District Informatics Officer  
NIC-Muzaffarnagar  
gaurav.tyagi@nic.in



**HEMANT GAUR**  
Principal Systems Analyst  
NIC-Muzaffarnagar  
hemant.gour@nic.in

Edited by  
**ANSHU ROHATGI**



uzaffarnagar Unit of the NIC was set up in 1988 and the initial going was tough. But over the years, many projects have been accomplished successfully. Some of these are:

### KEY ICT INITIATIVES

#### 1. Janwani & Jansuchna:

Shri. Subhash Chand Sharma, IAS, District Magistrate, Muzaffarnagar launched two web based Services JANWANI & JANSUCHNA, developed by the NIC, Muzaffarnagar. 'JANWANI' facilitates online monitoring of public grievances submitted to District Magistrate daily by the people.

JANSUCHNA has been developed for online monitoring & registration of applications received by District Administration under RTI Act.

#### 2. Touch Screen Kiosk

The kiosk installed at Sadar Tehsil enables farmers to check the updated status of their land records using a touch screen.

#### 3. SARTHI

SARTHI application for issuance of Smart Card based driving licenses (SCDL) was launched in Muzaffarnagar by the then District Magistrate Shri Suredra Singh on 9th April 2013. The first SCDL of the district was issued to Mr. Singh after completion of the required formalities, such as digital fingers scanning, capturing of digital photograph and digital signatures of the applicant.

#### 4. LRC (Land Record Computerization)

Land Record Computerization is operational in 4 Tehsils of the district. The



**SURENDRA SINGH, IAS**  
District Magistrate, Muzaffarnagar

NIC, Muzaffarnagar, has been instrumental in successfully propagating and integrating a culture of Informatics with the working of the District Administration. The District Centre has continued to promote IT culture and awareness in this district along with providing full ICT support of the District Administration and other Government Departments. With the launch of SSDG e-Governance program, Jan Sewa/Lokvani Centers are in a strategic position to offer e-Governance applications at the micro level. This program has improved accountability and effectiveness of government services and operations. It has ensured efficient delivery of Government services to the citizens.

mutation data entry & update process, which generates new khatauni (Record-of-Rights) has been computerized by Bhulekh software. The computerized copies of RoR are issued to citizens from Tehsil Offices and JanSeva/Lokvani Kendras at village level. Monthly update of Bhulekh portal (<http://bhulekh.up.nic.in>) is systemized. This enables the citizens to check their land records on the Internet without the need to run around Tehsil Hqrs again and again.

**5. State Portal, SSDG & eForms**

The State Portal and eForms Services from Common Service Center, Nairana, launched on 1st August 2012, enables citizens to apply for 26 services of 8 line departments from the nearby CSC/Lokvani Centres. About 1.61 lakh applications were received at various centres in the last one year out of which 1.36 lakh services were provided with a rapid delivery rate of 85%.

**6. Judicial Service Centre**

Hon'ble Justice of Supreme Court of India, Shri B.S Chauhan inaugurated the automated Judicial Service Centre and computer server room in Muzaffarnagar in 2012. This centre has been set up under the e-Courts program of NeGP wherein all the 32 courts have been connected over LAN. NIC, Muzaffarnagar provides all the technical support to the project. Training for computerized system was imparted to judicial officers along with laptops. District court and jail of Muzaffarnagar will soon be equipped with the video conferencing facility.

**7. NADRS (National Animal Diseases Reporting System)**

NIC, Muzaffarnagar is one of the front-runners in implementing the NADRS project for Animal Husbandry launched by Ministry of Agriculture, GoI. NADRS is a web based online system designed for the monitoring and surveillance of 143 animal

diseases and their control in the country.

**8. Election Duty Computerization**

Almost all the election processes like polling personnel deployment; EVM management and random allocation of booths to polling parties have been streamlined. In addition, the district center also facilitates online transmission of counting and result data to the Election Commission of India, Doordarshan and State Election Commission at the time of elections.

**9. District and Sessions Judge, Muzaffarnagar (UP) website**

NIC, Muzaffarnagar has designed, developed & hosted the website of District & Sessions Judge, Muzaffarnagar in compliance with the guidelines issued by District Judge, Muzaffarnagar. It provides information about the functioning of the District & subordinate courts along with the details about present & former District Judges, sitting Subordinate Judges & functioning of the District Court. The home page of the website also has important links of the Supreme Court, High Court Allahabad, Law Commission of India, Ministry of Law & Justice etc. To keep track of latest judgments & new events in High court Allahabad, RSS feed is also incorporated on the home page.

**10. E-Governance Tableau Display on Republic day**

In 2013, the citizens of Muzaffarnagar first time witnessed the colorful tableau by State Government Departments and schools on Republic Day parade at Police Lines.



Training Session in progress.

NIC, Muzaffarnagar, showcased two tableau on e-Governance & social evil dowry during the parade. The e-Governance tableau of NIC, Muzaffarnagar was adjudged the Best Tableau of the parade.

**11. VC Setup**

The NIC, VC studio in Muzaffarnagar conducts regular VC sessions for the district administration. The VC setup was also used by Mr Sachin Pilot, Minister of State for Communication & IT for inaugurating 5 Post Offices in Western U.P.

**12. ICT and Training Support**

The NIC District Unit provides technical support to other departments in basic computer training, application specific training, implementation, recruitment process, presentation and networking.

Apart from these, the District Centre is also actively implementing various projects of state & centre, such as TISNIC (Treasury Computerisation), PDSNIC (Pension Distribution System), RevenueSoft, PRERNA (Property Registration System), AGMARKNET, MNREGA, CONFONET etc.



Tableau display by NIC-Muzaffarnagar on Republic Day

**FOR FURTHER INFORMATION:**  
 District Informatics Officer  
 NIC District Centre  
 Room No.-7, Collectorate  
 Muzaffarnagar – 251001 (UP)  
 E-mail-upmuz@nic.in



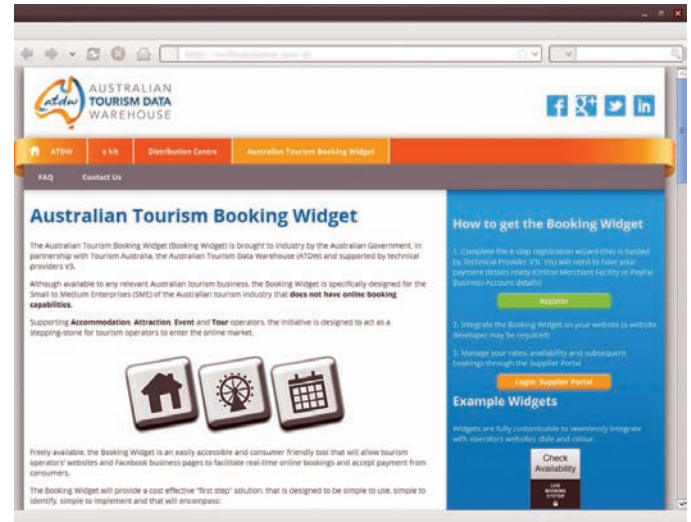
## International e-Gov Update

## AUSTRALIA LAUNCHES ONLINE BOOKING TOOL FOR TOURISM

**T**he Australian Government in collaboration with Tourism Australia and the Australian Tourism Data Warehouse (ATDW) has come up with an online booking widget that offers online booking and payment options to tourist operators and consumers. The widget is specifically designed to cater to Small and Medium Enterprises or SMEs of the Australian tourism industry that lack online booking capabilities.

The widget is highly consumer-friendly and accessible. Moreover, it is cost-effective and simple to use and implement. Also, it is fully customizable and can be seamlessly integrated with the style and colour of the operator's website. Besides this, it also comes with a Payment solution, a Supplier portal, an easy to download Facebook Booking App and customer support services.

At present, while 84 percent of the tourist operators in Australia are online but the number of these operators offering online booking and payment option is only one-third of the total number. So far, the Australian Government has invested AU\$500,000 for the development of the widget.



**For Further Information**  
<http://www.bookingwidget.com.au/>

## INTERACTIVE DRIVER FATIGUE MANAGEMENT TOOL LAUNCHED IN CANADA

**A** unique website called North American Fatigue Management Program (NAFMP) has been launched in Canada, designed to address the issue of fatigue and its management among drivers of commercial vehicles.

The website is a collaborative effort between multiple stakeholder groups mainly comprising of Transport Canada and the US Federal Motor Carrier Safety Administration. Other organizations that have teamed up for this initiative include Alberta Workers Compensation Board, Alberta

Employment and Immigration, Alberta Transportation, Alberta Motor Transport Association Commission de la santé et de la sécurité du travail du Québec, Société de l'assurance automobile du Québec and the American Transportation Research Institute.

The main objective of the website is to provide bus and truck drivers information on how to manage and reduce the driver fatigue for an enhanced road safety. The interactive website serves as a potent tool for increasing the awareness on various factors contributing towards fatigue and also focuses on various fatigue management technologies and strategies available. It also gives information on the screening of sleep disorders and their further treatment.

In total, the website has ten learning modules furnishing information and best practices for fatigue management for people involved at all levels of motor carrier operations, drivers and their families. An Implementation Manual provides direction and support for the operation of NAFMP in an environment of carrier operations; a Learning Management System incorporates quizzes and module exams for an interactive online learning. Also, there is a unique Business Case and Return-On-Investment Calculator that provides complete assistance to carriers for calculating the cost and benefits of deployment of NAFMP.

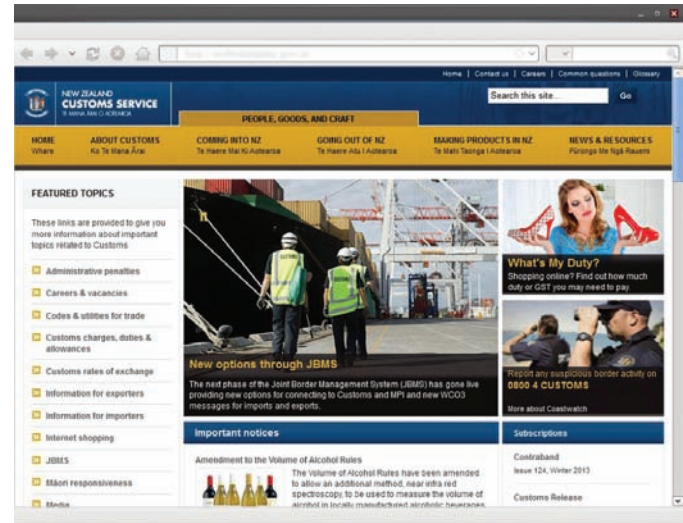
**For Further Information**  
<http://www.nafmp.org/en/>



## JOINT BORDER MANAGEMENT SYSTEM FOR MODERNIZING CUSTOMS LAUNCHED IN NEW ZEALAND

**A** Joint Border Management System (JBMS), to modernize the customs and for enabling quick processing of goods passing in and out of New Zealand, has been launched by New Zealand's Customs Service and Ministry for Primary Industries (MPI). This large project worth of NZD 89 million (USD 70.9 million) is being rolled out in two phases (tranches) to ensure thorough testing prior to delivery. In the meantime, the existing border systems will continue till December 2014 when the new system will get mandatory.

The first phase of the project features the Trade Single Window (TSW) that allows exporters, importers, brokers, agents and other concerned in the cargo industry to submit all shipment details electronically at a single place rather than to various Government Agencies thus reducing the processing time. The current craft and cargo reporting messages are now replaced with the new messages based on version 3 of World Customs Organization's international trade data model. Also known as WCO3, these new messages contain the information needed by each of the Government Agencies. In the second phase of the project, plans are there to fully replace background systems with



JBMS and to further enhance the TSW.

**For Further Information**

<http://www.customs.govt.nz/Pages/default.aspx>

## PHILIPPINES STARTS WORK ON MOBILE APP FOR MONITORING ILLEGAL FOREST ACTIVITIES

**T**o monitor and curb illegal forest activities, the Department of Environment and Natural Resources (DENR) of the Philippines is soon going to launch a mobile application. The app is named as 'SnapPlot'. A Memorandum of Agreement (MOA) has been signed by the department with Smart Communications Inc. and two other companies, the

Philippine Disaster Recovery Foundation (PDRF) and Wide-Out Workforces Inc., to launch the "SnapPlot" mobile app.

The new app will enable users to click a picture of the activities they wish to monitor or report besides geo-tagging its location. The picture can then be uploaded on the website of SnapPlot and here it would be automatically plotted on a map. The pilot site for the project is the Upper Marikina River Basin Protected Landscape (UMRPBL). The SnapPlot will be used for six months to monitor the UMRPBL region. Besides this, the app will be used by PDRF to provide logistical support to the project and to carry out reforestation in UMRPBL. SnapPlot will be used by the department to carry out monitoring and enforcement activities.

"SnapPlot will allow users to share valuable information that can help DENR enforce forestry laws effectively, and take necessary actions to help everyone living in and around the area in times of calamities", said Mr. Ramon J. P. Paje, Secretary, DENR.

**For Further Information**

<http://www.denr.gov.ph/>

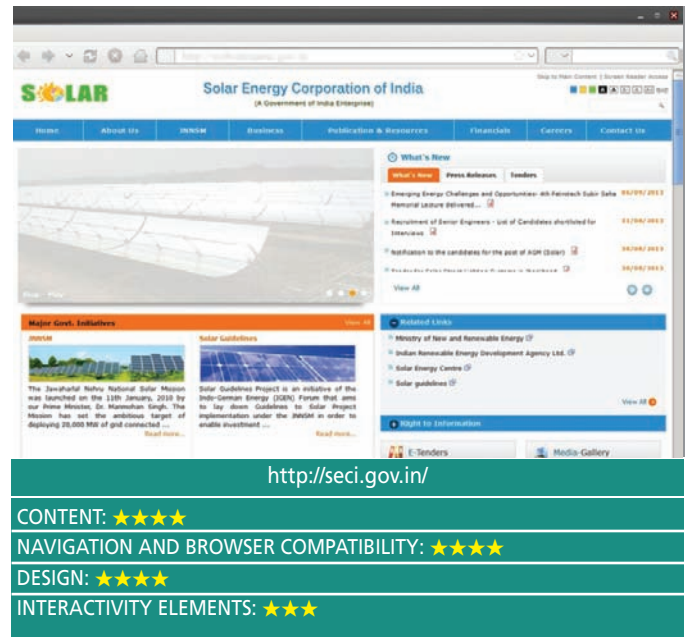


## Cyber Governance

### SOLAR ENERGY CORPORATION OF INDIA (SECI)

Established under the administrative control of the Ministry of New and Renewable Energy, Government of India, Solar Energy Corporation of India (SECI) is a public limited company incorporated under section 25 of the Companies Act. The organization is born with an objective to own, operate and manage, both grid connected and off grid solar power stations. SECI endeavors to promote research and development besides selecting suitable sites for solar power stations and ancillary facilities; exchange, distribute and sell power in accordance with the policies and objectives lay down by the Central Government under the Jawaharlal Nehru National Solar Mission (JNNSM).

The website of the organization is quite visually appealing with clutter-free, minimalistic design and clear identity elements. The rich content of the website is well laid and seems to be updated on the frequent basis. The website offers content related to vision & mission, objectives and Organizational structure of SECI, business and services provided by SECI, along with publications & resources and financials. The latest notifications, press releases and tenders are displayed on the right side menu of the homepage. The links to the related websites and RTI linked information are also featured.



http://seci.gov.in/

CONTENT: ★★★★★

NAVIGATION AND BROWSER COMPATIBILITY: ★★★★★

DESIGN: ★★★★★

INTERACTIVITY ELEMENTS: ★★★★★

The website has a well laid Site Map besides explicitly stated Website Policies. The website provides screen reader access and can be viewed in English and Hindi languages. It also has a feedback section for obtaining important suggestions and feedback from users. The website exhibits high compatibility with all major browsers.

### AYUSH, KARNATAKA

Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was created in March, 1995 and re-named as Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) in November, 2003. It aims to provide healthcare, research and education



http://www.karunadu.gov.in/ayush/index.html

CONTENT: ★★★★★

NAVIGATION AND BROWSER COMPATIBILITY: ★★★★★

DESIGN: ★★★★★

INTERACTIVITY ELEMENTS: ★★★★★

in the fields of Yoga & Naturopathy, Ayurveda, Unani, Homoeopathy and Siddha systems. The AYUSH systems are traditional yet time-tested methods evolved to undertake disorders arising from modern day lifestyle regimes, which are posing as a major health threat.

The diligently designed website of the department is also a rich repository of latest information. The aesthetically planned website deploys green as the background colour to symbolize nature and natural therapies. The header region provides information related to the objectives and mission & organizational structure of AYUSH Karnataka, lists of doctors, hospitals and dispensaries, acts and regulations, courses offered under AYUSH and list of institutions offering these courses, besides information related to NRHM. Information affiliated with various alternate medicine systems such as Ayurveda, Yoga, Unani Chikitsa, Siddha and Homeopathy is featured just below the header region. The left side menu of the homepage contains information related to various schemes, Drug Licensing Authority, News, Publications, State Campaigns, links to related websites, FAQ's and Photo Gallery.

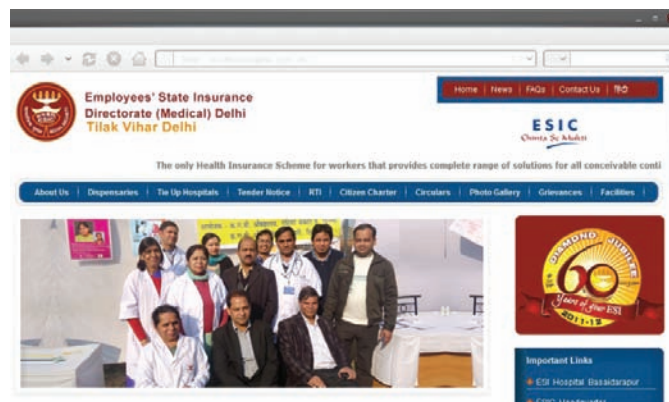
The website offers easy and quick navigation between pages and is quite compatible with all major web browsers.

## EMPLOYEES STATE INSURANCE DIRECTORATE (MEDICAL), DELHI

Employee State Insurance is a comprehensive Social Security Scheme formulated to protect the organized sector employees from the critical events like sickness, maternity, temporary or permanent disablement and death caused by employment injuries. It also aims to provide medical care to the insured employees and their families. The Medical Scheme in Delhi is being administered by the ESIC by a separate Directorate administered by Director (Medical) Delhi. In NCR, Primary & Secondary medical care is dispensed through 32 dispensaries along with 04 dispensaries in Noida & 04 Hospitals in Delhi along with 01 hospital in Noida.

The website has been conscientiously designed using a harmonious mix of colours. A comprehensive Search Map ensures quick and easy navigation between the pages. The website is available in both Hindi and English languages.

In terms of content, the website is laden with up-to-date information. The header region of the website features content related to mission and vision of Directorate (Medical) Delhi, list of dispensaries and chemist affiliated with the scheme, list of tie up hospitals, Citizen Charter, RTI, Tender Notices, Circulars, Photo Gallery and more. The



<http://dmdesic.nic.in/>

CONTENT: ★★★★★

NAVIGATION AND BROWSER COMPATIBILITY: ★★★★★

DESIGN: ★★★

INTERACTIVITY ELEMENTS: ★★★

most recent advertisements/ notices are featured on the top of header in the form of a ticker. Information related to other benefits and important links are featured on the right hand side of the website.

Users can submit their grievances through a dedicated Grievances page. The website seems to be compatible with all major browsers.

## INSURANCE REGULATORY & DEVELOPMENT AUTHORITY (IRDA)

Established with a mission to protect the interests of the policyholders and to regulate, promote and ensure orderly growth and development of the insurance industry in India, Insurance Regulatory and Development Authority (IRDA) is a statutory body set up under the aegis of IRDA Act, 1999.



<http://www.policyholder.gov.in/>

CONTENT: ★★★★★

NAVIGATION AND BROWSER COMPATIBILITY: ★★★★★

DESIGN: ★★★★★

INTERACTIVITY ELEMENTS: ★★★★★

The website of the authority provides the overview of Indian Insurance Market and performance highlights of Indian Insurance Industry including Life Insurance and Non-Life Insurance business.

This website is quite well off in terms of content and aims to create public awareness about different type of insurance policies, criteria to be noted before taking any policies and Grievance details if they have any issues with the policies. Guidelines about Where to buy, how to buy, FAG's, Do's and Don'ts, general advices of Insurance policies like Life, Travel, Health, Motor & Property are available which addresses common people queries related to Different Insurance Policies. The handbooks on Insurance for Life, Travel, Health, Motor & Property are made available on major regional languages like Hindi, Gujarati, Tamil, Punjabi, Tamil, Telugu etc.

The latest news is features on the homepage in the form of ticker while a comprehensive sitemap ensures smooth search ability and easy navigation. From design perspective, the website is diligently organized with judicious use of colors.

The website is high in terms of interactivity and offers Integrated Grievance Management System (IGMS) that facilitates online registration of policyholders' complaints and helps track their status.

**CONTRIBUTED BY: LOKESH JOSHI**  
Principal Systems Analyst  
E-mail: lokesh@nic.in

## NATIONAL FOOD SECURITY ORDINANCE (NFSO-2013) LAUNCHED IN HARYANA

**T**he National Food Security Ordinance-2013, promulgated by the President of India on July 5th 2013, is a historic initiative for ensuring food and nutritional security of the people. On July 9, 2013, Chief Minister Haryana announced to launch this scheme in Haryana.

Thereafter, the scheme was successfully launched by Hon'ble Chief Minister of Haryana on 20th August 2013 at Panipat, becoming first state in India to practically implement NFSO-2013. The coveted scheme of Government of India was started by distribution of food grains to the beneficiaries by CM. The scheme was simultaneously launched in all the 21 districts of Haryana.

Under NFSO-2013, Haryana Government has targeted to cover 126.49 lakh beneficiaries (49.89% of total). This comprises of 90.28 lakh Rural and 36.21 lakh urban populations. The State Government has decided to use the recently conducted SECC-2011 survey as the

base data for the purpose of identification of the beneficiaries.

The main objective of processing the survey data was to identify the beneficiaries who could be covered under NFSO-2013 using the merged SECC-2011 and NPR - National Population Register data. Provisional SECC-2011 and NPR merged data was obtained from NDC - National Data Centre, Delhi through intensive coordination between State Government, Ministry of Rural Development, Ministry of Urban Development and Poverty Alleviation, Department of Census, BEL and NIC. At NIC Haryana, this data was processed and brought to the stage where the different criteria could be applied to it to identify the intended beneficiaries. The major challenges were sheer volume and quality of data, time constraint and combinations of parameters enabling the State Government to reach at suitable



Shri Bhupinder Singh Hooda, Hon'ble CM Haryana during inauguration function of NFSO-2013 in Panipat.

criteria for identification of beneficiaries.

The process was successfully completed after several iterations on criteria for inclusion and exclusion of families. Subsequently, PDF list was submitted to the State Government. Further tasks of printing, distributions etc is being carried out by State Government through DFSCs and DCs with active technical support of DIOs of NIC.

During his speech, CM appreciated the efforts of all those involved in successful implementation of scheme.

**Sundeep Moudgil & Neeraj Singhal, Haryana**

## WEBSITE OF DEPARTMENT OF AGRICULTURE LAUNCHED BY CM, PUNJAB

**T**he website of Department of Agriculture, Punjab was formally launched by Hon'ble Chief Minister Sardar Parkash Singh Badal in a state-level function organized by Department of Agriculture on 9th July 2013 at Punjab Bhawan, Chandigarh. Chief Parliamentary Secretary, Financial Commissioner, Development and other senior officers

of Punjab Government were also present during the ceremony. The website has been designed, developed and hosted by NIC Punjab using open source technologies using PHP, CSS, Java script, J Query.

A detailed demonstration of the website was given to Hon'ble CM by Director Agriculture and team of officers from NIC Punjab comprising of Shri Ajay Malhotra, PSA and Ms. Parminder Kaur, SA. Chief Minister and Chief Parliamentary Secretary



Hon'ble CM Punjab inaugurating the website of Department of Agriculture

lauded the efforts of the department and NIC Punjab in this venture.

**Vikram Jeet Grover, Punjab**

**STATE LEVEL WORKSHOP ORGANIZED ON eTAAL AT NIC, U P STATE UNIT, LUCKNOW**

**N**ational Informatics Centre, U.P. State Unit, Lucknow organized a half-day workshop on eTaal – ‘eTransaction Aggregation and Analysis Layer’ on 12th July 2013 under the chairmanship of Shri Jeevesh Nandan, Principal Secretary, IT & Electronics, GoUP. Dr (Mrs.) Shefali Dash, Dy. Director General, NIC and National Coordinator for eTaal along with Shri I.P. Sethi, Sr. Technical Director and Shri O.P. Gupta, Scientist-B from NIC-Headquarters, Delhi, conducted the workshop and explained the technical process and inputs required to integrate the e-Governance services of the state with the eTaal Portal. Shri S.B.

Singh, DDG & SIO, UP showcased the already integrated projects of UP on eTaal and outlined other citizen centric services that can be integrated with eTaal.

eTaal is a web portal (etaal.nic.in) for dissemination of transaction statistics of central & state level e-Governance projects including Mission Mode Projects of DeitY. It receives transaction statistics from the web based applications running in different parts of the country and provides a National Dashboard displaying the statistics of services under different categories.

More than 50 participants attended



Dr. Shefali Dash, DDG, NIC, Shri Jeevesh Nandan, IAS, Principal Secretary, IT & E, GoUP & Shri I P Sethi, STD, NIC during the workshop

the workshop including Shri J.P. Singh, State Coordinator, Centre of e-Governance, GoUP, Representatives from State e-Mission Team, Service Centre Agencies (SCA) implementing the NeGP programme in the state & NIC, UP Project Coordinators & Development teams involved in e-Governance initiatives in the state.

**Anshu Rohatgi, Uttar Pradesh**

**NIC RAJASTHAN BAGS TWO GOLD AWARDS AT SKOCH EVENT, DELHI**

**N**IC Rajasthan received two gold awards at the SKOCH event held in New Delhi recently. NIC Rajasthan’s two projects viz- Integrated Works Monitoring system (<http://rdprwms.raj.nic.in>) and Pre-Conception, Pre Natal Diagnostic Technique (<http://pcpndt.raj.nic.in>) were selected for the awards. These were received by State Informatics Officer and Deputy Director General of NIC Rajasthan- Ms. Indu Gupta and the team of NIC Rajasthan. The award was presented by Shri Nandan Nilekani Chairman of the Unique Identification Authority of India (UIDAI) at an event attended by ICT personalities from the country. Another project SUGAM RPG (<http://sugamrpg.raj.nic.in>) was also

selected for the order of merit award.

SIO Rajasthan informed that “Integrated Works Monitoring System is an integrated Web Based solution for Rural Development Department, Government of Rajasthan. It is being used as an effective tool for rendering insight of every aspect associated with the development works proposed under various schemes of Rural Development Department. This software captures the details of all proposed works under various schemes as a single window interface during complete life cycle of the project and retains information for usage at a subsequent stage. Similarly,



NIC Rajasthan Team receiving the Award

this web based software functions as a monitoring tool for Form F under PCPNDT Act, and has been implemented all across the state for more than 1500 sonography centres. It monitors 1500+ centres which are registered with department for ultra sonography”. SUGAM RPG is a software for redressal of public grievances used across the state.

**Chandan Sen, Rajasthan**

### FIRST STATE LEVEL WORKSHOP ORGANIZED BY NIC-PUNJAB ON 12TH-13TH SEPTEMBER, 2013

# N

IC-Punjab organized first State level workshop on computerization of Transport applications in collaboration with State Transport Department, Punjab during 12th - 13th September 2013. The workshop was inaugurated by Shri Jagpal Singh Sandhu, IAS, Principal Secretary, Govt. of Punjab, Department of Transport. During his inaugural address he emphasized on process re-engineering in the transport department so that better services can be rendered to the citizens of the state.

Shri Navneet Kukreja, DDG & SIO, Punjab welcomed Shri J S. Sandhu, IAS, Shri Harjeet Singh, IAS, DTOs and DIOs from all 22 districts of Punjab. He applauded the efforts made by Transport department in bringing the transparency by implementing ICT initiatives taken by NIC.

Shri Harjeet Singh, IAS, State Transport Commissioner, addressed the delegates and emphasized on introduction of e-governance in Transport department so as to have a good impact on the citizens.

Dr. Mahesh Chandra DDG, NIC presented the keynote remotely through Video Conferencing. He apprised the delegates about the new initiatives taken by NIC by introducing many more new services through National Portals of VAHAN and SARATHI. He briefed about the need to have interfaces for sharing database with the agencies like IRDA, Policy, CBI, RBI, Vehicle manufacturers, etc.

The National Team of SARATHI from NIC Hyderabad led by Shri BV Reddy TD, deliberated upon new features available in SARATHI. They



Workshop in progress

also demonstrated the submission of LL/DL online through portal, slot booking for test, Screen Test Aid for Learner License (STALL) and Mobile based Enforcement module.

The National Team of VAHAN led by Shri G Ghosh, DDG presented various modules available on VAHAN portal. They also appraised the delegates about the new initiatives like Homologation Database, Manufacture Database and Dealer database, integration with IRDA, and agencies like Police, CBI etc.

**Sarbjeet Singh, Punjab**

### C-FORM SENSITIZATION PROGRAMME ORGANIZED AT LEH, LADAKH UNDER IVFRT-MMP

# C

-Form sensitization programme was held on 22nd July 2013 at DC Office Conference Hall, Leh, Ladakh. Members of Hoteliers Association, FRO Staff and NIC participated in the programme. C-FRO rollout was done at FRO Leh office on 18th July 2013.

Shri Abdul Khaliq, DSP, FRO Leh presided over the programme. He emphasized the importance of submission of C-Form by the hotels, guest houses and other institutions. He directed the members of Hoteliers' Association to start the procedure of online C-Form submission and to

inform all the hotels/guest houses and other institutions to do the same.

Shri Jamyang Namgial, Technical Director and DIO Leh, NIC briefed the members about the IVFRT project, Foreigners Act regarding C-Form submission and the technical requirements for online submission of C-Form.

Shri Tahir Mahajan, SSA and Coordinator of IVFRT project NIC gave a detailed online demonstration on the hotel registration, C-Form data



Inaugural Session of the Sensitization Programme

submission and online C-FRO registration. At the end of the session queries raised by members of Hoteliers Association were replied by the officials from NIC and FRO. The sensitization programme ended with hearty vote of thanks to all.

**N.K. Prasad, Delhi**

## WEBSITE OF HIGH COURT OF TRIPURA INAUGURATED

**T**he website of High Court of Tripura ([www.thc.nic.in](http://www.thc.nic.in)) was launched by Hon'ble Judge, Supreme Court of India and In-Charge e-Committee, Justice Shri Madan B. Lokur on Saturday, the 10th of August 2013. The Case Information System (CIS) and its inbuilt SMS service, developed by NIC - HQ Courts Informatics Division, were also inaugurated.

The High Court's website represents a rich amalgamation of static content and dynamic data related to Case Status, Cause List, Court Orders and Judgments. The CIS system is a process flow based system and has facilities for filing cases, registration, cause list preparation, recording court room proceedings, uploading judgments and orders. It also comes

with an inbuilt facility for sending SMS to advocates and litigants when a case is filed, or if there is any fault in filing case, or if the case is present in next day's cause list.

The occasion was graced by Shri Deepak Gupta, Hon'ble Chief Justice of Tripura. The other dignitaries present during the ceremony were Justice Shri U.B. Saha, Justice Shri S.C. Das, Justice Shri S. Talapatra, Chief Secretary, Tripura.

Justice Shri Madan Lokur explained the e-Courts project implemented throughout the country and admired the achievements of Tripura in implementation of the project. He also appreciated the state in some pioneering efforts like carrying out of



Inaugural session in progress

cases arguments through Videoconferencing technology.

Hon'ble Chief Justice expressed his thanks to NIC-Tripura for active support in implementation of the services and requested NIC's support in implementing the SMS service in all the courts of Tripura. Justice Shri S. Talapatra also explained the need for IT based services in judiciary and thanked NIC's effort in implementation of IT based services.

**Chaitali Bhattacharjee, Tripura**

## STANDARDIZED PORTAL OF DISTRICT SAMBALPUR INAUGURATED

**T**he Standardized District Portal of Sambalpur (<http://sambalpur.nic.in/> or <http://oddistricts.nic.in>) was inaugurated by Shri Amarnath Pradhan, Hon'ble MP (Loksabha), Sambalpur on 5th August 2013 in a district level meeting organized by the District Administration at DRDA Conference Hall, Sambalpur. Speaking on the occasion, Hon'ble MP explained about the benefits of the new portal and role of ICT in day to day activities of the district administration.

Speaking on the occasion, Collector & DM, Shri Balwant Singh, IAS lauded the effort of the district administration in wider dissemination of information related to various

developmental schemes for the benefit of common masses and in making the administration more people-centric.

Dr. R.N. Behera, Senior Technical Director, NIC, Odisha State Centre, Bhubaneswar explained about National Portal of India and services provided by the single window system standardized District Portal of Sambalpur.

Additional District Magistrate, Shri Madhab Chandra Bariha, Senior Officers of District Administration, NIC Odisha State Centre and others were also present on the occasion.

The portal has been designed and



Guests and participants during inauguration of the portal

developed by NIC Odisha State Centre under the guidance of Data Centre and Web Services Division, NIC (HQ), New Delhi. The portal contains vital information related to the district, various Government Offices and line departments in the district along with various developmental schemes and services.

**A.K. Hota, Odisha**