

Informatics

An e-GOVERNANCE PUBLICATION FROM NATIONAL INFORMATICS CENTRE



States
Maharashtra & Punjab

Districts
Shimla, Hisar & Kozhikode

Online Key Management
System

Certificate Generation
Module

Web Application
Firewall

Object Detection
Technologies

Spotlight

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District Governance Mobile Challenge

PATRON

Dr. NEETA VERMA

ADVISORY PANEL

Nagesh Shastri

Shalini Mathrani

I.P.S. Sethi

Ajay Singh Chahal

EDITOR

Mohan Das Viswam

ZONAL EDITORS

Dr. Dibakar Ray

Reuban K.

Kavita Barkakoty

A. K. Dadhichi

WEB VERSION

Sunil Sunsunwal

Archana Sharma

DESIGN SUPPORT

Mukesh Bharti

Rohit Maurya

PRINT & CIRCULATION

Anita Bhardwaj

PUBLISHED BY

National Informatics Centre

Ministry of Electronics & IT

Government of India

A-Block, CGO Complex, Lodhi Road

New Delhi-110003, INDIA

CONTACT ADDRESS

INFORMATICS

379, A4B4, Floor-3, NIC

A-Block, CGO Complex, Lodhi Road

New Delhi-110003, INDIA

Phone: 011 -24305365

Email: editor.info@nic.in

Editorial

We are in a digital era, witnessing the pervasiveness and growth of mobile technology. The advancements have brought the internet within the reach of every human being. With the intense application of mobile technology, several mobile applications have been adding to the power and possible uses of the physical handheld device, be it in the form of as simple a task as looking up a phonebook, to staying connected with each other through audio & video calls. These mobile apps have been helping people to achieve even those tasks which were earlier done with the help of specialized devices such as cameras by allowing us to shoot instant pictures and recording the sights & sounds that surround us.

In government, the innate urge to discover and invent for delivering citizen-centric governance even at the grassroots level has been motivating us to constantly push the limits to what citizens or stakeholders can achieve with mobile apps! It is in this spirit that contests or hackathons are organized so that we can encourage developers of mobile apps to come forth for expanding the horizons of possibilities, and thus improve the quality of lives. Organizers, participants and audiences benefit from such contests by either being part of the journey to innovate and bring about quantum changes, or by getting inspired to do even better and keep surpassing past achievements.

Embracing the mobile first approach at the district level administrations, NIC has organised the **District Governance Mobile Challenge (DGMC)** recently. It is quite encouraging to see the overwhelming participation and responses received for this contest. The successful virtual event held for awarding its winners is yet another milestone achieved by NIC. DGMC aims at enabling mobile governance at the grassroots level. The virtual award ceremony is featured as the cover story of this issue of Informatics.

An array of interesting articles are covered in this issue. While **Maharashtra** and **Punjab** are the states featured this time, the three award winning districts covered are **Hisar**, **Kozhikode** and **Shimla**. The Technology Update section has **Web Application Firewall** and **Object Detection Technologies** as the featured articles. **Online Key Management System** for Driving License and Vehicle Registration and **Certificate Generation Module** through ServicePlus Framework are presented in the e-Gov Products & Services section. The regular feature, Appscape gives you brief of ten Apps introduced for citizens and stakeholders recently. The regular sections such as 'Accolades' and In 'News Update' have interesting updates on ICT advancements in Indian Government.

We continuously enhance the publication by improving the quality content and design. The reader's feedback and suggestions are valued most. It would be great if you could take out some time to write to us. Suggestions and feedback may be sent to editor.info@nic.in.

Wish you a happy reading. Please take care, stay healthy and safe.

Editor

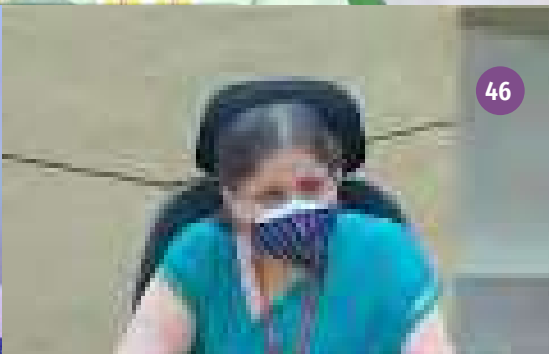


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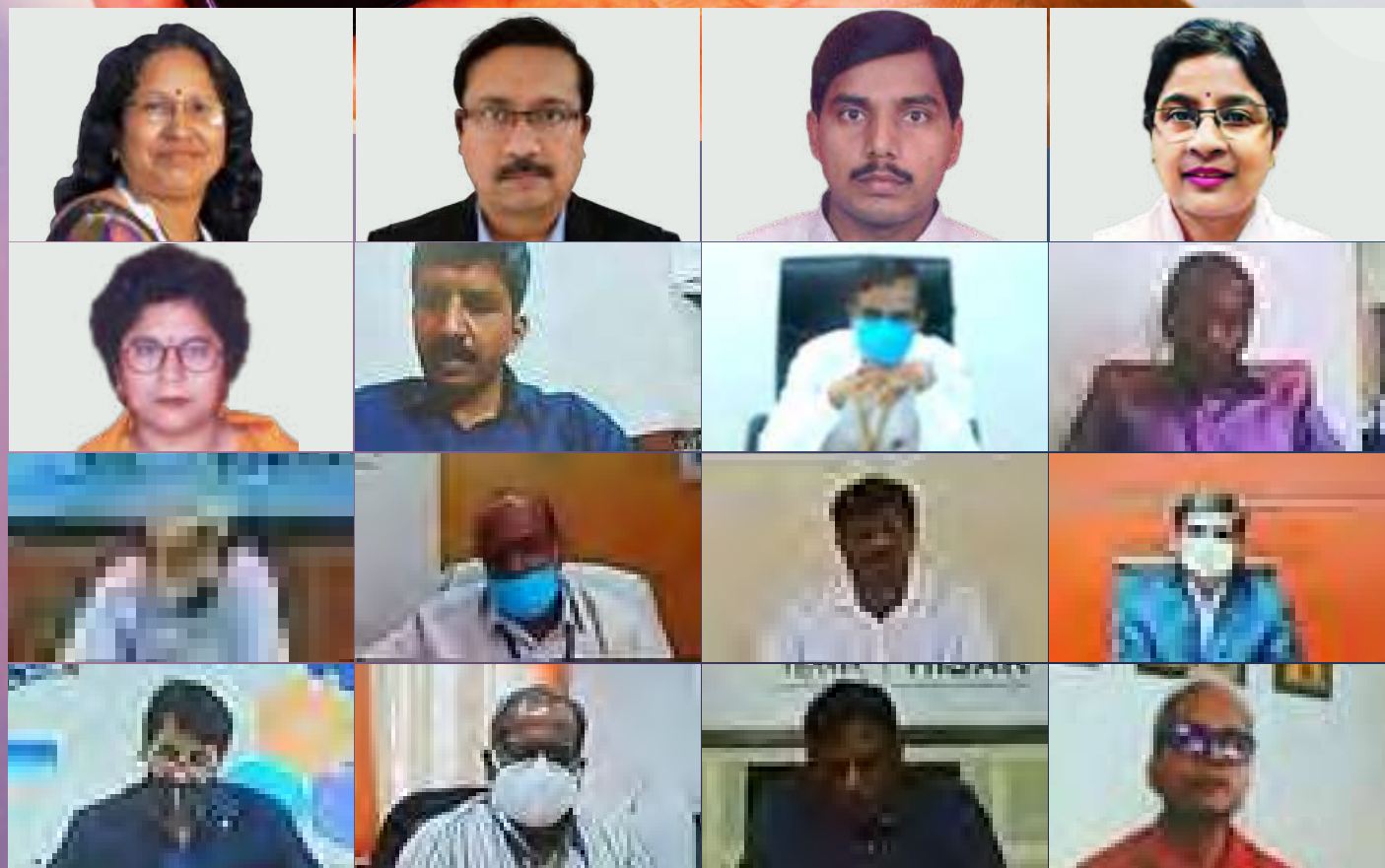
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District Governance Mobile Challenge Awards Virtual Ceremony

District Governance Mobile Challenge (DGMC) was launched in January 2021 for NIC District Centres with the objective to motivate DIOs to embrace mobile first approach in District Administration. 674 districts across the country took part and 374 mobile apps were developed under the challenge. Dr. Neeta Verma, Director General NIC conferred the District Governance Mobile Challenge Awards in the virtual ceremony held on 28 May 2021.







Best Mobile app

Gold

Nammude Kozhikode

Kozhikode District
Kerala



Silver

My Gram Panchayat

Hisar District
Haryana



Award

Bronze

m-Nivaran

Faridkot District
Punjab



Bronze

ePermissions

Shimla District
Himachal Pradesh



Shri Seeram Sambasiva Rao, IAS
Dist. Collector & D.M., Kozhikode, KL

Ms. Mercy Sebastian (DIO)
Shri Rolly T.D. (ADIO)



Dr. Priyanka Soni, IAS
Dy. Commissioner, Hisar, Haryana

Shri Mahendra Pal Kulshreshtha (DIO)
Shri Akhilesh Kumar (ADIO)



Shri Vimal Kumar Setia, IAS
Dy. Commissioner-cum- D.M.
Faridkot, Punjab

Shri Anil Katiyar (DIO)



Shri Aditya Negi, IAS
Dy. Commissioner, Shimla, HP

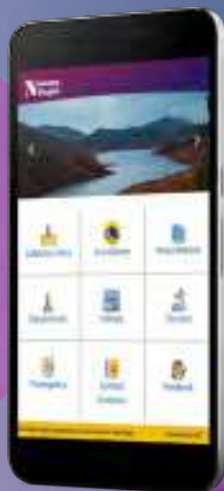
Shri Pankaj Gupta (DIO)
Shri Deepak Kumar (ADIO)



Best Mobile app with implementation of innovation



Mobile App As a Service for District Administration
Utagamandalam Dist.
Tamil Nadu



Open Data Collection Toolkit
Gumla District
Jharkhand

m-Nirikshan
Mainpuri District
Uttar Pradesh



Winners



Top States

Gold

NIC Himachal Pradesh



Mrs. J. Innocent Divya, IAS
District Collector, Utagamandalam District
Tamil Nadu

Shri K. Ganesh (DIO)

Silver

NIC Punjab



Shri Mahendra Bahadur Singh, IAS
District Magistrate, Mainpuri
Uttar Pradesh

Shri Mayank Lal Sharma (DIO)

Bronze

NIC Arunachal Pradesh



Shri Shishir Kumar Sinha, IAS
Dy. Commissioner, Gumla
Jharkhand

Shri Harendra Singh (DIO)

Maharashtra State

A pioneering Digital State

Edited by **AK DADHICHI**

NIC Maharashtra State Centre at Mumbai and 36 NIC District Centres of Maharashtra are successfully providing digital services to Maharashtra State in this challenging time. The focus and strategy are on sustaining the digital services as the number of users of online services are increasing. With a view to augment the web hosting services, mini cloud data centre is being set up at NIC Belapur, Navi Mumbai. The network services are also strengthened at NKN PoP NIC Belapur.



Moiz Husain Husain Ali
Dy. Director General
& SIO
hussain@nic.in

Maharashtra State is located in the western region of India. Vidharbha, Marathwada, and Konkan on the Deccan Plateau are a substantial part of Maharashtra. It is the second-most populous state in India and was formed on 1 May 1960.

The state is divided into 6 revenue divisions viz. Amravati, Aurangabad, Konkan, Nagpur, Nasik and Pune and 36 districts. Mumbai is the State capital and Nagpur is the winter capital. The Godavari and the Krishna are the two major rivers in the State. Marathi is the most widely spoken language and is also the official language of the State.

NIC Maharashtra State Centre, Mumbai was set up in 1986 on the 8th floor, Air India Building, Nariman Point Mumbai. Thereafter, as per the MoU signed with the Government of Maharashtra in June 1988, State Informatics Officer was appointed and NIC State Centre was set up at the 11th floor New Administrative Building, Mantralaya. NIC Maharashtra State Centre provides software development, internet, communication services, and Video conferencing via NICNET to State and Central Govt. departments in the State of Maharashtra.

NIC project offices are located at Secretariat, Bombay High Court at Mumbai, and its benches at Aurangabad and Nagpur. NIC district centres are located at the Collectorate office in 36 Districts, District Informatics Officer and Additional District Informatics Officers posted at each District are managing these district centres. These district centres provide informatics support to Collectorate offices, Zilla Parishad, District courts, and all allied offices of State and Central Government.

ICT Initiatives in the State

Major digital initiatives implemented in Maharashtra State are as follows

PM Kisan (<https://pmkisan.gov.in>)

NIC Maharashtra has successfully implemented PMKisan in the Districts of Maharashtra. More than 1.14 crore farmers of Maharashtra are beneficiaries of the scheme. Farmers are receiving the benefit through PFMS in their bank accounts directly.

eProcurement (<https://mahatenders.gov.in>)

The software is implemented in 2011 and enables the departments to publish tenders online. Payment gateway is integrated to receive Tender Fee and EMD. Till date, more than 11,59,944 tenders with an approximate value of ₹ 6,49,393 Crores have been published on the portal. NIC has also implemented eAuction (<https://eauction.gov.in>) software for the Government of Maharashtra.



National Informatics Centre Maharashtra has done excellent work in implementation of various e-Governance projects in Maharashtra State. NIC has provided IT driven solutions for the Government department in Maharashtra State.

I appreciate NIC for not only playing an instrumental role in ICT services but also for creating digitally enabled ecosystem for the government, which is providing data for various developmental schemes.

An important role is being played by the NIC Maharashtra State Centre in implementation of e-Governance projects. Application software system such as DBT (Direct Beneficial Transfer schemes) & Public Finance Management System (PFMS) for Rural development, e-Procurement, Driving License and Vehicle registration system, Manav Sampada Information System for more than 3 lakhs employee of rural development & Zilla Parishad, Property Registration Computerization are implemented successfully in Maharashtra. Our government is making extensive use of NICNET services for Video conferencing and Email at Mumbai and 36 Districts. The team led by SIO NIC Maharashtra state Centre and DIO/ADIOs at District Centres have done excellent work. NIC, Maharashtra is coordinating very well with State Government IT, Department for roll out of State level e-Governance projects.

I would like to place on record my appreciation for the ICT Support given to the department of Government and hope that similar efforts will continue in future for bringing government and Citizen closer by using digital technology.



UDDHAV BALASAHEB THACKERAY
Hon'ble Chief Minister
Government of Maharashtra



▲ Hon'ble Prime Minister interacting with farmer from Maharashtra on 14th May 2021 via NICNET

This Project received the Best G2B Initiative Award in 2013 and Best Performance Award for implementation of e-Procurement in January 2018.

Public Distribution System (ePDS) (<https://mahaepos.gov.in>) for Food & Civil Supply Department

Aadhaar enabled Public Distribution System is implemented across Maharashtra. All the Point of sales devices in the 52522 Fair Price Shops are Aadhaar enabled. 'One Nation, One Ration Card' scheme and inter-state portability are also implemented in the state. Maharashtra ePDS Project received the SKOCH Order of Merit Bronze award in 2018. The Minimum Support Price Scheme of Food and Civil Supplies Maharashtra is integrated with PFMS. 2.37 Crores Ration Cards have been computerized under this project. The total no. of transactions is more than 1.50 crore per month.

Consumer Forum Network (CONFONET)

CONFONET project has been implemented at State Consumer Forum, Mumbai, and all District Consumer forums in Maharashtra. Online Judgments, Online Case Status, and Case History are available on the portal. eDaakhil module enables the citizens to file the application from anywhere. Online payment integration with EGRAS (electronic Govt. Receipt System) is done. Total cases filed using the portal are 3,76,937 up to July 2021 and disposed of no. of cases are 2,64,266.

RAJBHAVAN

NIC has designed and developed the official website for Raj Bhavan Maharashtra (<https://rajbhavan-maharashtra.gov.in>). The website is developed using S3WAAS platform of NIC. An application for online registration of visitors is also developed for Rajbhavan. Visitors can book the available slots of visit online through the portal and receive confirmation through email and SMS.

District Websites on S3WAAS Platform

The websites of 36 Districts of Maharashtra have migrated to S3WAAS platform in Jan 2018 and all the websites have a uniform design and made accessibility complaints. S3WAAS is Secured, Scalable, and Sugamya Website as a Service of NIC.

Software for General and Assembly Elections

NIC Maharashtra designed, developed, and hosted a web application (<https://mahaelection.gov.in>) for the General Elections- 2019. The application has been developed as per the guidelines of the Election Commission of India. A Dashboard was provided to the Chief Electoral Officer to monitor the progress of the various activities during the Elections.

The software has 3 modules namely (i) Polling Parties Management System (PPMS), (ii) Poll Day Monitoring System (PDMS) and (iii) Counting Day Monitoring System (CDMS).

This application has been appreciated by Chief Election Officer (CEO) Maharashtra and General Observers from the Election Commission of India.

National Knowledge Network (NKN)

National Knowledge Network (NKN)/NICNET Point of Presence (PoP) is set up at NIC Belapur Navi Mumbai. This PoP was inaugurated on 12 Aug 2012 by then Principal Scientific Advisor (PSA) to the Government of India. This PoP is considered as Super core PoP in NKN/ NICNET topology and is connected to other super core/core PoPs of NKN/ NICNET through multiple 10 G links.

All the 36 NIC district centres in Maharashtra are connected to this PoP through 1Gbps/ 100 Mbps/ 34 Mbps links through NKN/ NICET approved service providers. 81 research & educational institutes are connected to NKN at this PoP either through 1 Gbps link or 100 Mbps link.



National Informatics Centre Maharashtra as a technology partner of the Government has provisioned IT driven solutions for the Government departments in Maharashtra State.

I am happy that NIC, with its core expertise to provide the ICT-enabled services, is playing an important role in the implementation of e-Governance projects. Through their range of digital solutions like Public Finance Management Systems (PFMS), e_PDS, e-Procurement, Land Record and Registration computerization, value-added services of Videoconferencing and Email, NIC is supporting the State Government at Mumbai and 36 Districts.

I take this opportunity to convey my hearty congratulations to the State Informatics Officer for the commendable ICT support given to the departments of Government. I am certain that the same will continue to strengthen the government in delivering the citizen services.

SITARAM KUNTE, IAS
Chief Secretary
Government of Maharashtra



▲ Hon'ble Governor of Maharashtra, Principal Secretary to Hon'ble Governor, SIO Maharashtra, and other officials during Rajbhavan portal inauguration

Some of the premier institutes like IIT Bombay, TIFR Mumbai are connected to this NKN PoP over redundant links of 10 Gbps. This PoP also caters to Internet Gateway Services to NKN/ NICNET users in Maharashtra as well as other states. The total internet bandwidth capacity from this PoP is 36 Gbps through various ISPs. Google cache servers, as well as Akamai cache servers, are also co-located here for the NKN/ NICNET users. This PoP is functional on a 24x7 basis.

Video Conference Services

NIC Maharashtra Video Conferencing Services facilitates Government departments for conducting meetings in a secured environment. Video Conferencing services are provided to Hon'ble Governor, Hon'ble CM Office, Hon'ble Deputy CM Office, Minister's Offices, Chief Secretary of Maha-

raashtra. NIC Maharashtra is also providing technical support and coordination to VCs conducted from The President House, PM Office, Central Ministers, Cabinet Secretary, and Ministries. VC Services are provided at 36 NIC Districts of Maharashtra. Hon'ble Chief Minister, Maharashtra has appreciated the Video Conference Services of NIC.

Web Hosting Services

NIC Maharashtra State Centre provides web hosting services to all State and Central Government departments in Maharashtra including 36 districts. Security Audit and VPN services are also provided to the users. More than 250 websites are hosted by NIC Maharashtra. Services such as installation of SSL Certificates, VPNs, the configuration of the content management system, eMail Relay & SMS Service, Patch Management, and

Antivirus are provided to Government users.

Email Services

More than 92,000 email accounts are provided to officers and staff State and Central Government departments in Maharashtra. NIC Delegated Admin Console has been set up for General Admin Department, DG Police, DIT, High Court, etc. for managing the email accounts.

Training Division

Training Division of NIC Maharashtra conducts training programs on emerging technologies like Blockchain, Big Data & NOSQL, Cyber Security, etc., as per the yearly training calendar for the officers and staff of various Central and State Government Departments.

eOffice

eOffice software has been successfully

▼ Hon'ble Chief Minister, Chief Secretary, and other senior officers during a Video Conferencing





▲ e-Quasi Judicial Courts web page

implemented in the Government of Maharashtra Departments, District Collectorates, Central Government Departments, State, and Central PSUs since 2012. The software is being used by more than 30,000 users in Maharashtra Government.

SPARROW (Smart Performance Appraisal Report Recording Online Window) and MahaPAR

NIC Maharashtra has implemented SPARROW

software in 2015 for IAS, IPS, IFS, services. This software has been customized as per the requirements of the Government of Maharashtra and implemented for State Government officials (MahaPAR). More than 37,000 officials of GoM are using the software and 1,51,437 Performance Appraisal Reports (PAR) are generated using the software.

Aadhaar Enabled Biometric Attendance System (AEBAS)

NIC Maharashtra has implemented Aadhaar

Enabled Biometric Attendance System in Central and State Government Departments. More than 500 Central Government offices and 227 State Government Departments are using this system in Maharashtra. More than 3.70 lakhs of employees in Maharashtra have onboarded the system.

e-Hospital and Online Registration System (ORS)

NIC Maharashtra has implemented eHospital software in 9 hospitals of Government. More than

▼ eOffice software demonstration to Hon'ble Chief Minister of Maharashtra





▲ Launch of the document verification software at Videsh Bhavan, inauguration function by the then Union External Affairs Minister in the presence of Shri Devendra Gangadharrao Fadnavis, Hon'ble Chief Minister (Former), MoS External Affairs and other dignitaries.

39 lakh patient registrations have been done using the software. Online Registration System (ORS) is also implemented in 39 hospitals in Maharashtra.

Jeevan Pramaan

Jeevan Pramaan is a biometric-enabled digital service for pensioners. The software facilitates pensioners to submit Digital Life Certificates using Aadhaar authentication. NIC Maharashtra has implemented Jeevan Pramaan software for the Government of Maharashtra in 2017. More than 1.90 lakh Digital Life Certificates have been generated from Maharashtra during 2020-21. The software is also implemented at Municipal Corporation of Greater Mumbai, NABARD, and Ulhasnagar Municipal Corporation.

Service Plus software

NIC Maharashtra has implemented the software for Rural Development Department. The software is being used at Gram Panchayat level.

eCourts

NIC Maharashtra has successfully implemented eCourts software at all District Courts. Software developed and implemented for Bombay High Court and its benches at Aurangabad and Nagpur.

e-Quasi Judicial Courts

Quasi-Judicial Courts System is a web-based application which deals with quasi-judicial court cases. It is used at State, Districts, SDO (Sub Divisional Offices), and Tehsil level. It is developed by NIC Kolhapur district centre and is implemented in all Districts of Maharashtra.

National Land Record Modernization Project (NLRMP)

Computerization of Land Records (eFerfar) Maharashtra (<https://bhulekh.mahabhumi.gov.in>). NIC Maharashtra has implemented the software in all 36 Districts of Maharashtra. More than 1.26

crores of online mutations and 2.53 crores of digitally signed Record of Rights (RoR) have been issued using the system.

eHRMS Software

NIC Maharashtra is implementing eHRMS software developed by NIC HQ, in 9 Departments at Mantralaya. Initially, Service Book, Personal Information Services, Leave, LTC, Tour, various advances, and reimbursements are being implemented.

NIC, Mumbai is developing, additional peripheral service modules viz. Recruitment, Statutory Compliances, Transfer & Postings, Training, Departmental Enquiries, etc. which will be integrated with eHRMS application, post implementation of the core service book module.

Manav Sampada (eHRMS) application facilitates monitoring of recruitments, postings, promotion, transfer based on employee skill set

▼ Hon'ble Chief Minister (Former) of Maharashtra, SIO Maharashtra, HoG GIS Division, NIC HQ, and senior officers from NIC HQ and Mumbai



and service history for the rural development department of Maharashtra.

Manav Sampada software is implemented at Zilla Parishad, Block Panchayat, and Gram Panchayat level for more than 3 lakhs employees. Service books have been digitized using the system.

NIC Maharashtra is also assisting in the implementation of e-Governance projects in the Enforcement Directorate, Home Ministry (Immigration, Visa and Foreigner's Registration Tracking (IVFRT)), Indian Customs, Indian Meteorological Department, Patent & Trademark Registry (TMR), and Press Information Bureau.

Key Initiatives in the State

Chief Minister's office computerization

NIC Maharashtra has developed and implemented software for CM Relief Fund (CMRF), Vishesh Karyakari Kaksh (ViKaK), MOOffice (Minister office letter management system on-lines of CMO ViKaK application).

Right to the Information portal

NIC Maharashtra has implemented the RTI portal for the Government of Maharashtra. This portal enables the citizens to file RTI application/ first appeal online. The payment gateway is integrated with the portal. A citizen can make the application fee payment through Internet Banking/ Debit Card/ Credit Card. Through this portal, RTI application/ first appeal can be filed by Indian citizens only for the Departments/Public Authorities of the Government of Maharashtra.

Geographical Information System (GIS) Services

Slum Rehabilitation Authority (SRA) is using GIS software services for conducting a survey of hutments. SRA software was launched by Hon'ble Chief Minister of Maharashtra in 2018 at CM Office.

Copy rights and certification

- NIC Maharashtra has received copy right for the Status Information Management System software (SIMNIC) in 2018
- NIC Mumbai Suburban district website is awarded the certificate of accessible website by STQC Directorate

Awards

- Maharashtra eProcurement project received Best G2B Initiative Award and Best Performance Award for implementation of e-Procurement system in Maharashtra
- ePDS project received SKOCH Order of Merit Bronze award for successful implementation of the software in the State
- NIC, Akola received SKOCH order of Merit award for the initiative "Framework for e-Governance of fundamental resources Electricity, Water"
- NIC Nandurbar District centre has received IMC Digital Awards for Aarogya Darshak software



▲ S3WaaS Portal Maharashtra

Way Forward

NIC-Maharashtra is committed to meet and exceed the user requirements by providing quality and reliable ICT services with the use of best practices. There will be a focus on creating mobile apps for data collection and use of emerging technologies will be the main input in all the project proposals being submitted to Government. Also effort will be made to create unified e-Governance infrastructure under NICNET for users in the form of IAAS, SAAS, PAAS and Software

Security as a Service (SSAAS). The above would be carried out along with the upgradation of skillsets of Officers and Staff.

For further information, please contact:

STATE INFORMATICS OFFICER
NIC Maharashtra State Centre
11th Floor, New Administrative Building
Mantralaya, Madam Cama Road
Mumbai - 400032
Email: siomsu@nic.in, Phone: 022-22046934

Punjab State

Diffusion of ICT Solutions for Sustainable Growth

Edited by MOHAN DAS VISWAM

Charting change from the cutting edge of knowledge, pursuing the frontiers of research to ever-widening horizons, NIC Punjab State has built a reputation as a leading state by implementing various eGovernance projects. The State of Punjab is moving ahead with its ambitious 'Digital Punjab' dream through the implementation of automated systems of key sectors. Furthered by SSO, the road ahead is enablement to deliver a plethora of applications through creating a single designated platform. To make the delivery of all services including DBT to the citizens, the state is making all efforts for the deployment of diverse ICT solutions.



Ajay Rampal
Dy. Director General
& SIO
ajay.rampal@nic.in

Originally called Sapta Sindhu, the Vedic land of the seven rivers flowing into the sea. Later Sanskrit name given for the region, as mentioned in the Ramayana and Mahabharata was Panchanada which means "Land of the Five Rivers", and was translated to Persian as Punjab after the Muslim conquests. The word Punjab is a compound of the Persian words panj (five) and āb (waters).

ICT Initiatives in Punjab

NIC Punjab State Centre has been instrumental in design, development and implementation of e-Governance solutions, which has resulted in digital transformation in the state at all levels.

During the pandemic times, unprecedented demand has been triggered for digital solutions like eOffice, networking, Web Hosting etc. Besides providing round the clock IT support to state and district administration during fight against Corona NIC Punjab State also developed and implemented various major applications like IFMS, iHRMS, RCMSPB, eCounseling, eAbkari, PAROS etc.

Following are some of the digital solutions in various sectors

National Generic Document Registration Systems (NGDRS) <http://igrpunjab.gov.in>

Punjab is the first state in the country to implement this ambitious project of DoLR, covering 174 sub-registrar offices. The system has been migrated to State Data Centre. Till date more than 18 lakhs documents of 37 types of articles have been registered. It has integration with SHCIL, Bank and Land Record System. It offers facility to book appointments by payment of requisite fee. The information of registered deeds is passed to land record system for mutations.

eOffice <https://eofficeportal.punjab.gov.in>

eOffice has implemented in 60 Departments, 104+ Directorates and field offices, 110 Boards and corporations and field offices, 22 Districts including all SDMs, Tehsil offices (Total 1086 offices), 4 Universities, 26 Engineering Colleges and 119 it is with more than 60,000 users on-boarded. Also, eOffice has been implemented in CBIC for 5 states and then replicated PAN India for 50,000 Users.

During the lockdown, Training sessions on eOffice were conducted for users which were attended by more than 40K+ employees. A YouTube channel has been launched for onsite training having 1.35 lakh views with 15000 watch hours.

8 eOffice instances are running and one shifted to SSO. Awarded with CSI Nihilent, Skotch, Digi Gov, eLets etc.



NIC Punjab is key partner in providing ICT solutions in the state for effective delivery of services through G2G, G2C, G2E channels. It has played a pivotal role in supporting various departments in the districts as well as at state level for automating their processes for bringing efficiency in their functioning.

During the COVID 19 Pandemic situation, continuity of services was ensured with specialized digital solutions such as Video-conferencing, eOffice, networking. With onboarding of new initiatives like Service-Plus, Single Sign On (SSO) etc., we hope to improve the user experience further.

I extend my best wishes to the entire team of NIC Punjab for future projects.



VINI MAHAJAN, IAS
Chief Secretary
Government of Punjab

iHRMS (Integrated Human Resource Management System) <https://hrms.punjab.gov.in>

It attempts to provide better services in the form of employee service record, salary, GPF, GIS, Leave, Income tax information, property returns, Annual Confidential Progress, Posting, promotion, arrears management etc. besides integration with IFMS, it also caters employees posted in PSUs, Boards and corporations, Medical Institutions comprised of 33,000 plus offices for 3.60 lakh employees. 24*7 Vani Chatbot availability ensures common queries replies in an automated manner.

An iHRMS YouTube channel is having 45 Plus videos with 8270 subscribers and 5.60 Lakhs views. iHRMS Mobile app (1.50 Lakh downloads) is developed for marking daily attendance.

Integrated Financial Management System (IFMS) Punjab <https://ifms.punjab.gov.in>

IFMS is designed to bring efficiency in financial planning and expenditure control. This platform has brought stakeholders like Department of Finance, Treasuries, Administrative Departments, Accountant General (AG), RBI, Banks and Citizens on a single platform. Smart Dashboards have provided a better Decision Support System. It also includes planning, budgeting, receipt, expenditure, bill processing and MIS. Government of Punjab successfully transition to new IFMS w.e.f. 1st April 2020.

Single Sign On <https://digital.punjab.gov.in>

Initiatives have started to place all independent software systems having different authentication mechanisms onto single designated



▲ National Generic Document Registration System (NGDRS)- Punjab



Implementation of various e-governance initiatives has been undertaken with a view to strengthen the management and monitoring activities of Revenue department with the objective of providing timely, transparent and effective services to the citizens. NIC Punjab has contributed significantly to this voyage.

with various state-wide citizen-centric applications like National Generic Documents Registration System (NGDRS), Revenue Court Management System (RCMSPb), Land Demarcation Application system (LDAS), Non-Encumbrance Certificate (NECIS) etc. along with providing technical support, as and when required.

I am happy to know that the forthcoming issue of Informatics is focusing on ICT initiatives of the State of Punjab for which I express my appreciation.

I would like to congratulate the NIC Punjab team for extending unstinting support to the Revenue department. I wish them the very best in their future endeavours.



RAVNEET KAUR, IAS
Additional Chief Secretary (Revenue)
Government of Punjab

platform through Single Sign On (Parichay). Some of the applications have been already registered on Parichay.

Revenue Court Management System (RCMSPb) <http://rcms.punjab.gov.in>

RCMSPb has been developed and implemented in all Revenue Courts. It captures General Case Detail, Petitioner details, Respondent Details, Land related details. RCMS has integration with Land Record application. It includes a dashboard and citizen interface module. Implemented in 444 Revenue Courts and 67281 cases captured.

eAbkari <https://excise.punjab.gov.in>

It is an online workflow-based solution for transformation of state excise ecosystems. The sourcing and distribution of spirits are being handled in real time. This has eliminated entire administrative layers involved in the processing of service requests. Issuance of online acknowledgement of service request has been incorporated to track the process status, Stock Inventory. Department can also monitor Enforcement Activity from preventive Raid Information System, Chemical Examination Laboratory Management, Excise Offender Information & Case Management.

District Governance Mobile Challenge (DGMC)

NIC District Centres of Punjab took the DGMC challenge. Some of prominent mobile apps developed are m-Nivaran, Conquer the Sky, Schemes Information, Gov. Contacts, Career Counselling, Yojna.

Business First <http://pbindustries.gov.in>

It is a user-friendly portal for investors of Punjab to obtain Regulatory Clearances & Fiscal Incentives for setting up and running businesses. Business First ensures conceptualization of the project till the commencement of commercial operations.

eLabour <https://pblabour.gov.in>

It deals with different wings of Department of Labour. It covers 100% Labour Reforms as



NIC Punjab has supported State Government in the most crucial times by development and implementation of IFMS during COVID times, to replace the legacy system implemented by a private agency, in a record time.

NIC as the technology arm of Government is catering to the ICT needs of all levels of governance and has also built several premier digital solutions, making the last-mile delivery of Government services to the citizens a reality.

I wish NIC Punjab team all the success and hope that focused and sustained efforts will be carried forward to leverage the power of e-Governance at all levels of society.



ANIRUDH TEWARI, IAS
Additional Chief Secretary
Department of Governance Reforms
Government of Punjab

suggested by the Department, GOI. It includes Online Services for employees, employers and law enforcement agencies, Online Services for Domestic Workers, Online Services for Punjab Labour Welfare Board, Online Services of Building and Other Construction Workers (BOCW).



▲ Launch of eOffice by Hon'ble Chief Minister Punjab

PAROS - Punjab Advertisement Release Order System for DIPR <http://dipr.punjab.gov.in>

This online release order system digitised the process of submission of advertisement requests by organizations and bill submission by print media. This initiative saves time & revenue and brings transparency besides ensuring real time tracking of Release Order by departments & DIPR. The application has been conferred with "Digital Technology Sabha Award 2021".

Vehicle Management System (VMS)

<https://vms.punjab.gov.in>

It facilitates a check on POL Bills of State Government vehicles. Every Govt. official Vehicle has a POL Limit assigned by the Department of Finance. VMS has saved more than 17 Crore rupees for the state government in the first year of its launch.

Government Property Management System (GPMS) <https://gpms.punjab.gov.in>

A tracking system for the Immovable Properties of Govt. of Punjab. Once a property is verified by authority, the designated officials can search for un-utilized Properties and allocate the same to needed offices/ departments. State Government can check the availability of vacant office space.

Punjab Sewa Portal (PSP)

<http://psp.punjab.gov.in/cui>

It facilitates the delivery of citizen-centric services of all the departments. It executes from Sewa Kendras in which online integration with eDistrict, PSPCL (Electricity Bill payment), BSNL (Telephone Bill payment) and Labor (Registration of workers), Housing (GMADA) application etc. It has dashboard and MIS module at state land district/sub-district level. PSP is also integrated with IFMS.

CONFONET (Computerization and Computer Networking of Consumer Forums) <http://confonet.nic.in>

CONFONET has been successfully implemented in 20 districts consumer forums and at State Commission.

E-Daakhil <https://edaakhil.nic.in/>

E-Daakhil portal which facilitates online filling of complaints by the Citizen/ Advocate, provision to pay case fee (online and offline), automatically marking of case filed by citizen to the concerned authority. It also facilitates citizens to file appeal, revision petition and automatic calculation of fee details depending upon the claim filed by citizen.

DISE (District Information System for Elections)

DISE was designed and developed by NIC Punjab for management of various tasks related to deployment of staff on polling duty covering all three levels of randomization process according to guidelines of ECI. The software is designed to handle Assembly, Parliament, Panchayat and Municipal Elections. Besides Punjab, DISE is being used in Himachal Pradesh, Karnataka, Delhi, Chandigarh and Manipur.

Portal for Mahatma Gandhi State Institute of Public Administration (MGSIPA)

<https://mgsipa.punjab.gov.in/>

It facilitates content management through authorized logins with in-built work-flow and roles. The portal offers online booking of accommodation of Conference Halls, Lecture Rooms, Hostel, and Training Labs with back-end enforcement of business rules like approval/cancellation, blocking, assignment of accommodation, Training calendar Management, Knowledge Management, Applying Online for Trainings, Resource Person Registration & Management.



DIPR's (Department of Information and Public Relations, Government of Punjab) initiative on the implementation of PAROS is a step towards good governance. PAROS (Punjab Advertisement Release Order System) has been a significant accelerator in connecting Government of Punjab with common man through print media. Using this system Government of Punjab is able to publish its advertisements transparently and expeditiously in print media which has resulted in considerable revenue savings. I would like to congratulate NIC Punjab team on behalf of Government of Punjab for devising, designing and implementing the project.

I wish NIC Punjab all the success in its endeavor to drive and implement many more e-governance solutions in Punjab.



GURKIRAT KRIPAL SINGH

Secretary (DIPR)
Government of Punjab

DARPAN

<https://pb.cmdashboard.nic.in>

It provides Analytical Review of Projects like eOffice, NSAP, MGNREGA, NRLM, Prime Minister Awas Yojna (Gramin), Swachh Bharat Mission (Gramin), RCH, SARATHI, VAHAN, Soil Health card, Jal Jeevan Mission, Invest Punjab, iHRMS, eLabour, Schools Info, Category-wise Building Progress, Scheme-wise Road Progress, Scholarship schemes etc.

Mukh Mantri Punjab Cancer Rahat Kosh (MMPCRK) <http://mmpcrk.gov.in/>

MMPCRK monitors the financial aid provided by Govt of Punjab to residents suffering from cancer. It is a work-flow based solution involving application/estimate submission by Hospital, approval by Civil Surgeon Office, District Committees & DHS and finally release of funds to the Hospitals on submission of Utilization certificate. MMPCRK Sahayak chatbot is developed and programmed to answer specific, frequently asked questions, offering an easy way to answer the queries of Visitors.



I feel a world of instinctive happiness to share that our university is the first university of Punjab to adopt, implement and having successfully run the e-Office. The espousal of e-Office is one of the leading initiatives taken by the university to be in line with the department of Digital India.

The execution of e Office has been instrumental in ensuring transparency and accountability in the working of various departments of the university. A multitude of benefits has ensued including an improved file management system/ speedy processing of files at every end, better handling of diverse problems that occur with physical files, prudent use of the human resource, time & space. coverage of distance between the main campus & constituent campuses. Making the offices paperless, the application is indeed saving the environment.

I acknowledge the sincere efforts and assiduous task performed by the team of IKGPTU in their positive acceptance. Successful accomplishment and effective realization of objectives of e Office. I also wish to recognize the dedicated efforts of the project team of NIC officers for developing such a user-friendly application. It is only because of their perseverance that e-Office could be implemented in PAN Punjab within a short period of time.

May Almighty bless us with the same amount of vigour, hard work and courage to come up with such brilliant enterprises like e-Office those would pave a way for developed and surprising India across the world

My greetings and best wishes to all.



Dr. AJAY K SHARMA

Vice Chancellor

I. K. Gujral Punjab Technical University, Jalandhar
Government of Punjab

PPSC-ISR (Integrated Solution for Recruitments for Punjab Public Service Commission) <https://ppsc.gov.in>

It automates the recruitment process with the creation of advertisements, Publishing/Closing of Advertisements as per defined schedule, on-line/offline registration, online generation of admit cards & roll numbers, Centre Wise availability a list of eligible candidates, allotment of exam Centre. More than 172 numbers of advertisements have been published inviting more than 5 lakhs candidates' registrations.

Court Cases Monitoring System - Punjab (CCMSPb) <http://ccmspb.punjab.gov.in>

It is a centralized state-wide application for departments/officers to manage and monitor court cases of varied kinds pending in various courts. It is integrated with Punjab and Haryana High Court enables automatic updation of court cases data for cases pending in High Court. CCMSPB offers dashboard and MIS reports and implemented in more than 110 departments.

Land Demarcation Application System (LDAS) <http://rcms.punjab.gov.in>

It provides services to the citizen to apply and obtain land demarcation certificates. It is also integrated with the Land Record application for fetching all property-related details and updation of property status as disputed. 8343 number of application requests has been captured.

Non-Encumbrance Certificate Issuance System (NECIS) <http://rcms.punjab.gov.in>

It automates the process of obtaining NE certificate. It is integrated with IFMS and with Land Record application for masters and property related details and for work-flow processing of the application.

▼ Integrated Human Resource Management System



The Mobile Based Citizen-Centric Solution, M-Nivaran was launched to provide an umbrella platform to touch every aspect of citizens needs starting from the panic button for the Citizens in danger, to all government popular schemes, grievances, suggestion, Janbhagidari to Covid crises management including vaccination, Covid dashboard, and real time updates to the citizens.

I appreciate NIC whose Technological prowess and sustained efforts have always being instrumental in Better planning and Decision-making for Citizen's Centric Services in District. This endeavour of NIC Faridkot has made Faridkot one of the Leading Districts of State in terms of Citizen Accessibility.



VIMAL KUMAR SETIA, IAS

Deputy Commissioner Faridkot
Government of Punjab



▲ Single Sign On

Punjab ITI eCounseling <http://itipunjab.nic.in>

It is online, off-campus counseling for automating process of admissions in ITIs includes admissions to engineering, non-engineering and vocational courses.

E-Procurement / GePNIC eproc.punjab.gov.in

It is rolled out in Govt. Departments/Board and Corporations. 95 purchasing agencies, 2378 Tender Inviting Authorities (TIAs) are using the GePNIC platform. An average of 3100 tenders worth ₹ 1500 crores are published on the GePNIC platform every month.

eSamiksha <https://esamiksha.punjab.gov.in>

eSamiksha, an online Monitoring and Compliance to fast track the compliance of action-points/proposals/issues/Projects/schemes/targets etc. pending with or within various implementing agencies such as Ministries/Departments/Organizations.

Scholarship Portal of Punjab

<http://www.scholarships.punjab.gov.in>

It is a workflow-based system for SC and OBC

students to apply for the post-matric scholarship. It includes solution for application, verification, sanctioning and disbursement through IFMS directly to student bank accounts. 350 crores of scholarships to 3 lakh students are disbursed annually.

Automation of Economic and Statistical Organization of Punjab

<https://esopb.gov.in>

It includes various solutions like Village Directory, Consumer Price Index, Index of Industrial Production and Punjab State Data Accessibility Policy which contains 14823 resources in 510 categories.

MedLeaPR (Computerization of Medico Legal Reports and Post Mortem Report)

<http://medleapr.punjab.gov.in>

MedLeaPR is the computerization of MLR and PMR. The need of reports was felt as the courts, the prosecutions and the defense generally face problems in understanding and reading the Post-mortem and Medico legal reports during the trials as the MLR & PMR are more often penned down in

illegible handwriting. It has been implemented in all the Govt. and Private health institutions.

XLN- Xtended Licensing & Laboratory Node <https://xln.punjab.gov.in>

It enables online submission of applications by retailers and whole-sellers of pharmaceutical products, e-file movements from field offices to head office, inspections and monitoring of legal actions, sampling and laboratory testing, mass dissemination of sub-standard or spurious drug batches to end-users etc.

COVID19CC and RTPCR (Reverse Transcription and Polymerase Chain reaction) <https://covid19cc.nic.in>

RT-PCR app helps the sample collectors to fill SR-Form from the patient location or away from patient location, Sending SRF-ID and COVID19 reports to patients. Overall, it helps ICMR to integrate with ICMR data and contact tracing and identification of sensitive zones.

PMCARES-OC MIS (Oxygen Concentrator Management Information System)

<https://covid19cc.nic.in>

PMCARE OCMIS is implemented in Punjab for tracking and deployment of OCs in real-time.

Transport Department (Vahan and Sarathi) <https://parivahan.gov.in/parivahan/>

All the 92 authorities of Punjab have been computerised with implementation of all the modules of 'Vahan' and 'Sarathi'. Self-backlog implemented which allows the applicant to digitise his manual RC/DL to digital.

Prisoner Management System (ePrison)

<https://eprisons.nic.in/public/Home.aspx>

After Successful implementation in Central Jail Ludhiana, it has been replicated in all 27 Central, District & Sub-Jails with Total Prisoners (24998) till date.

S3waas

<https://punjab.s3waas.gov.in>

Website for 22 districts has been developed and migrated to S3WaaS framework. Information

▼ e-LABOUR Punjab Dashboard



▼ Integration Financial Management System



dissemination from these websites has been done for other department websites at districts.

India Code Portal indiacode.nic.in

Till now, 75 Department Nodal Officers accounts have been created. Total 260 acts uploaded with 219 rules, 33 regulations and 51 notifications etc. uploaded on India Code Portal for Punjab.

PM Kisan <https://pmkisan.gov.in/>

21 lakhs beneficiaries under the scheme have been identified by the State.

Cooperative Core Banking System (CCBS)

<https://pbccbs.nic.in/>

90 Primary Agriculture Cooperative Banks branches are using this software customized as per their requirement.

Central Inspection System

<http://pbinspections.gov.in>

It is a combined inspection portal for Department of Labour, PPCB and Director of Boilers. The system is randomizing and provides joint inspections to inspectors of above said departments.

eMPR

eMPR digitized the whole process of monthly MPR preparation, submission and compilation. The state in charge will further get the complete reports in a click away.

eProsecution <https://eprosecution.gov.in>

eProsecution has been rolled out in 22 District Attorney Offices of Punjab and mapped with the 167 lower courts and 420 police stations.

Arms License Issuance System

<https://alis.nic.in>

4.5 Lac legacy arms licenses of Punjab have been digitized and implemented in 28 arms licensing authorities and Home Department.

Indian Citizenship Online

<https://indiancitizenshiponline.nic.in>

Implemented in 22 DC offices, SSP offices and Home Department.

NIC Punjab State Data Centre

NIC Punjab SDC is equipped with 450 TB of storage and 6TB of RAM.

NICNET/ NKN Connectivity

Three core links 10Gbps, 1Gbps and 100mbps connectivity at INoC for providing Internet connectivity to GOP. Punjab SWAN/PAWAN has been integrated with NKN at the district level. All the 22 Districts and the SDC are connected with 10Gbps/1Gbps/34Mbps fiber with PB-SHQ. 33 Institutes of Higher learning connected to network speeds of 1GBPS/100Mbps. 89 Horizontal Links from SHQ to Departments and DHQ to Departments have been provided. More than 5000 nodes at both Secretariats, Police HQ and Kendriya Sadan are being managed.

Video Conferencing

70 plus VC studios have been set up. During Covid-19 Pandemic support was provided 24x7. Virtual VIDHAN Sabha sessions were covered where live proceedings of house were made

available for the news agency and other dignitaries during pandemic. Total 2192 VC sessions were held during pandemic.

Road Ahead

Online Service Delivery through

ServicePlus <https://eservices.punjab.gov.in>

eServices is the initiative for extending portfolio of services for consumption by the citizens. The first service for receiving the applications for various posts has been developed and launched for IISER Mohali, received 2500+ applications in a month. PoC has been done for four services i.e., Registration of Bed and Breakfast/Homestay Units, Registration of Tour Operator, Dogra Certificate, Income Certificate.

Electronics Deposits Management System

(eDMS) <https://edms.punjab.gov.in>

(eDMS) portal is being developed for Directorate of Institutional Finance Banking, Department of Finance for the placement of funds available with Government Departments using online bidding process. It is role based and responsive application. A Pilot run is going on for Technical education and Agriculture department.

eAwaas

This application caters to the allocation of Government Accommodation to Punjab Government employees as per entitlement and seniority, who desire Government Accommodation for residence from pool of Government houses, located in Chandigarh.

National e-Vidhan Application (NeVA)

<https://pvs.neva.gov.in>

This project includes hardware procurement, manpower, civil/electrical work and NeVA software rollout.

Punjab Water Regulation and Development Authority

To developed a digital solution for regulating groundwater usage and other modules like Portal & Online Permission for Grant of Ground Water Extraction, Grievances Management System Conservation Schemes etc.

Launch

- CM Punjab launched E-Daakhil portal on 7th January 2021
- CM virtually launched PAROS on 30-12-2020
- Launched First Service for recruitment for various posts in ServicePlus for IISER Punjab
- Various mobile apps developed by DIOs for District Administration have been launched

Accolades

- NIC Punjab won the Silver Award for overall performance and NIC Faridkot received Bronze Award for Design and Development of m-Ni-varan Mobile, an "Ocean in a Pot" by which citizens can have government services at their doorstep



▲ S3WaaS Portal Punjab

- PAROS application has been awarded "Digital Technology Sabha Award 2021"

Way Forward

Informational Communication Technology (ICT) is a tool of global development. The use of ICT in third world countries has witnessed a number of pitfalls, despite relevant efforts to savage the situation. NIC Punjab will serve as benchmark for providing solutions for ICT projects to make LIVE the dream of Digital Punjab more effectively. This part of the subcontinent will take the advantages of NIC ICT Solutions to yield its lantern benefit to diffuse Information technology in all directions.

For further information, please contact:

STATE INFORMATICS OFFICER

NIC Punjab State Centre
109, Punjab Civil Secretariat - 2, Sector - 9
Chandigarh - 160009

Email: sio-punjab@nic.in, Phone: 0172-2745776

Shimla District

The Queen of Hills Going Digital

Edited by **MOHAN DAS VISWAM**

District Shimla has tough terrain and most of the area is snowbound, the automation and computerization activities are tough to implement in far-flung areas of the District. The citizen service centres named SUGAM have been set up in the lower offices up to Sub Division and Tehsils. One such centre was set up at Dodra Kwar, which has very poor road connectivity, the hardware and all the infrastructure were transported by Helicopter from Shimla, and centre was set up after fighting all the odds. The Sugam centres are the single point of contact for the citizens to get any of the services being provided by the Administration.



Pankaj Gupta
Sr. Technical Director
& DIO
pankaj.gupta@nic.in



Deepak Kumar
Scientist - B & ADIO
deepak.kumar84@nic.in

Shimla, known as the Queen of Hills, was the summer capital of India during the pre-independence era and presently it is the State Capital of Himachal Pradesh. It is a famous tourist destination worldwide and every season of the year has something in store for the tourists. Shimla had been the centre of many historical events, which were held here before independence. The town has some marvelous buildings known for its Architect & Design. The District Centre of NIC was set up in the year 1988 and has witnessed how ICT has become part of life in offices and how it has brought changes in work culture. The advantage of digitization has benefitted the citizens in getting the services at their doorsteps.

ICT Initiatives in the District

Shimla District Website

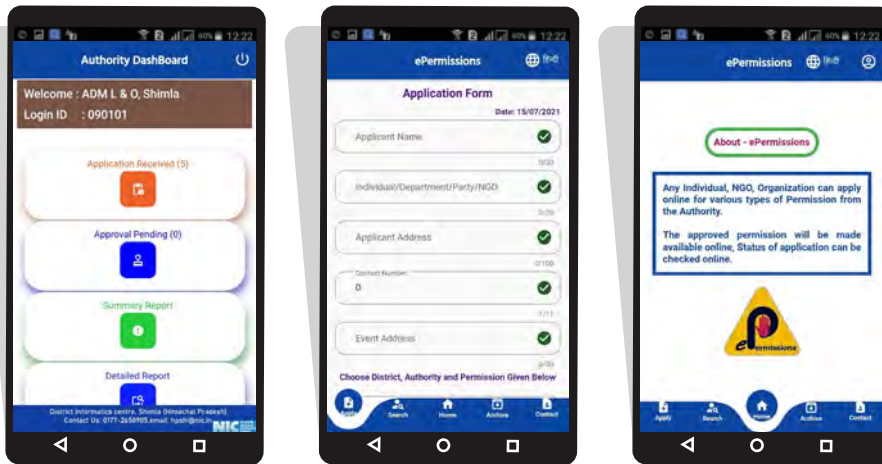
The website of District administration at <https://hpshimla.nic.in> covers various sections and emphasis has been given to G2C and G2G services. This website has separate sections such as Tourism, Citizen Services, Directory, Notifications, Events, etc. The Citizen Service section provides multiple services to the citizens. District web site is frequently visited by citizens and tourists for any type of authentic information. The website has been among the leading sites, which got migrated to the SWaaS platform. The website adheres to the GIGW guidelines and it has been awarded as Certified Accessible Website by STQC in compliance with these standards. The CAW logo is being displayed on the website.

▼ Shimla District Website



Citizens should get the benefits of digitization at their doorsteps and ePermissions mobile application is a step towards achieving this goal. I Congratulate the NIC District team for developing such an excellent mobile app. It gives me immense pleasure that the Informatics Magazine of NIC will be covering Shimla District in its next edition. District Centre of NIC is playing a major role in the spread of ICT in the District and their work is commendable.

ADITYA NEGI, IAS
Deputy Commissioner
District Shimla



▲ ePermission Mobile App Screens

NGDRS (National Generic Document Registration System)

The NGDRS Project has launched in District Shimla in two of its Tehsils on the Pilot basis by Hon'ble Chief Minister of Himachal Pradesh Shri Jai Ram Thakur, the software was successfully implemented in these two Tehsils and it was customized as per the local requirements. The successful implementation of NGDRS in these two Tehsils encouraged the District Administration to get it Rolled out in all the 25 Tehsils of the District.

Other Key Initiatives in the District/ Innovations Applied

ePermissions Mobile Application

The ePermission Mobile Application has been developed by NIC District Centre under the DGMC (District Governance Mobile Challenge). The District Administration is approached by various Individuals, NGOs, officials for grant of permission to hold Events, Functions, Rallies, plying of vehicles, Landing of Helicopter, etc. All this work was

done manually in DM Office and Police verification was also done manually, which resulted in a delay of processing the permission work.

The idea to develop the Mobile Application for automation of the Permission work was discussed with DC and ADM after the DGMC was announced, and after getting approval from the Administration, the development was started. The mobile app ePermissions is a Bilingual G2C application and it has been developed in Flutter Google UI Framework, DART as a development language. The backend is MSSQL 2008 R2 and the app has a proper user authentication mechanism built in it. The ePermissions Mobile App was awarded Bronze Certificate under the DGMC. The Mobile Application has helped the Administration in providing Faceless Service to the Citizens in a time-bound manner with standard procedures adopted and enforced in the application for granting the Permission.

Video Conference during Pandemic

The Covid Pandemic made it difficult for the officials to perform their duties, due to lockdown

and other restrictions as the movement was restricted. The Video conference system of NIC was used to its full capacity during this period. The Video Conference of the Deputy Commissioner and other Officers was conducted up to the Sub Division, Block, and Tehsils level by using the Vido Desktop facility of NIC. The VC studio of NIC remained fully occupied during this period as officers of Administration, Police, Health and other departments attended Video Conferences from NIC Centre, which were held with Hon'ble CM, Ministers, Chief Secretary and Other Department Heads of the State.

Sugam Centres

Sugam Centres are the single point of contact for the citizens, where more than 50 services are provided under one roof. These centres have been set up in Sub Divisions, Tehsils, and Sub Tehsils.

The major services provided in these centres are

- Vehicle Registration and allied services
- Issuance of 14 types of Certificates
- Issuance of New LL/DL and Allied services
- Issuance of eStamp papers
- Issuance of Nakal Jamabandi
- Issuance of Arms License and allied services

eProsecution

The eProsecution Module under ICJS (Inter Operable Criminal Justice System) was made operational in the State of HP as this project was coordinated from the District Centre of NIC. The hardware and manpower under the project have been provided to the District Attorney Office across the state. The training sessions were conducted over a virtual medium for the officers of the department. The Police Officials have started online submission of Challans and Draft Charge Sheet for opinion to the District Attorney.

Awards & Accolades

District Election Officer cum Deputy Commissioner gave appreciation letter during Parliament Elections for providing the ICT support for smooth conduct of Elections.

District Web Site has been audited and approved for certification by STQC for compliance to the GIGW guidelines and had issued CAW (Certified Accessible Website) certificate for District web site.

The Bronze Award is given for the mobile application ePermissions developed by NIC District Centre, Shimla.

▼ Launching of Mobile Application ePermissions by Worthy Deputy Commissioner Shimla Shri Aditya Negi

▼ Bronze Award



For further information, please contact:

DISTRICT INFORMATICS OFFICER

NIC- Shimla District Centre

District Collectorate

Shimla

Himachal Pradesh - 171001

Email: hpshi@nic.in, Phone: 0177-2658905

Hisar District

Signature of excellence in Innovative ICT at grass-root Informatics

Edited by **MOHAN DAS VISWAM**

NIC District Centre, Hisar has been extending its ICT enabled support and services to the District Administration and various departments of the State Government and Central Governments by commissioning State-of-the-art infrastructural including three Video Conferencing studios, IT lab and five numbers of Antodaya SARAL Centres (G2C) service delivery to the citizens by using Service Plus a meta database service delivery framework.

District Hisar, (Hisar is Arabic of Fort), one of the Divisional HQ of the State of Haryana is located at NH-9 with travelling distance 162 KM from National Capital Delhi and has a very glorious historical significance with the evidence of the pre-Harappan settlements; those were found during the excavation at different places.

District Hisar is an agricultural and education-hub with three prominent State universities, number of premier ICAR Institutes and Medical College. Ushering the ICT in the District, a number of flagship and innovative applications have now changed the face of governance and service delivery mechanism in the District.

ICT Initiatives in the District

Integrated Web Applications for District COVID Managements

Product Suit of web applications listed here-under was developed by NIC District Centre Hisar under URL <http://priharyana.nic.in/covidhsr/> to ease the health officials and to serve in COVID patients effectively and monitoring thereof. The portal is being supervised & updated by health officials.

- Web Portal for COVID test report & dissemination by SMS
- e-dashboard for COVID-19
- Integrated Portal for District COVID Call centres
- Mapping of containment zones on Google map



It gives me immense pleasure to put on record that NIC District Centre Hisar is delivering the exemplary ICT services in the District. Number of Web based applications and Mobile Apps, developed by NIC have been extending extensive support to the District Administration in serving the citizens. Apart from providing infrastructural support, all mission mode applications envisioned under Digital India, NeGP and State flagship applications have also been successfully implemented in the District.



Dr. PRIYANKA SONI, IAS

Deputy Commissioner, Hisar
Government of Haryana

▼ Hon'ble Chief Minister of Haryana Shri Manohar Lal presenting the citation of appreciation to Shri M P Kulshreshtha, DIO, Hisar



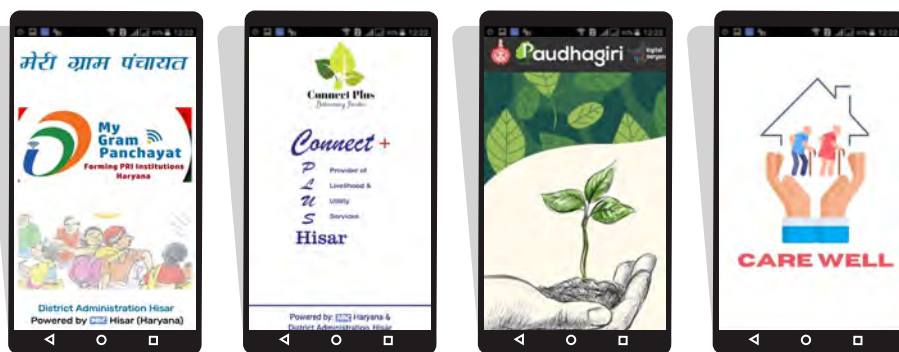
Mahendra Pal Kulshreshtha

Sr. Technical Director
& DIO
mpk@nic.in



Akhilesh Kumar

Technical Director & ADIO
akhil@nic.in



▲ MyGP Mobile App ▲ Connect Plus Haryana ▲ Paudhagiri App ▲ CARE WELL App

- Mapping of District Hospitals, COVID Care centres and COVID Hospital
- Mobile App – Connect Plus Haryana
- MIS for Contact Tracing
- Web link based Home Isolation Log Sheet

Mobile App (Meri Gram Panchayat-MyGP)

Mobile App (Meri Gram Panchayat- MyGP)

This app developed under the District Governance Mobile App Challenge (DGMC). MyGP app facilitates end-to-end solution to the State Election Commission Haryana in conduction of PRI Elections. Android version placed on Google Play store under <https://play.google.com/store/apps/details?id=com.mygp.haryana> ; Features enlisted here

- Know Your Candidate
- Know Your Booth (Search) with navigating feature
- Divyang to Register & cast the vote
- e- Dashboard - Poll Monitoring
- Communication Plan (Administering the Poll Process)

▼ Dr. Priyanka Soni, IAS, Dy. Commissioner, Shri M P Kulshreshtha, DIO and Civil Surgeon, Hisar during the launch of Connect Plus App



- Analytics on PRI Haryana (Result Dashboard)

Connect Plus Haryana Mobile App

During the COVID to serve the citizen an android based mobile App for the establishing connectivity between the various services providers/ vendors including enterprises, shops, essential commodities suppliers and the utility service providers with the intended consumers. The App facilitates the customer to find ward wise or Gram Panchayat wise vendors for calling and placing the orders using WhatsApp. On-board vendors may authenticate on the app and new vendors may register for on boarding. Authentication process is OTP based. There are two components – Vendors and Customers

- Mobile App available placed on Google Play store
- Simple Authentication process of the vendors/ utility service providers by OTP
- Registration of new vendors and authentication by OTP
- Updating or authentication of the 22000 vendors of all Districts
- Ward wise and Gram Panchayat wise listing of essential and utility services

- One touch calling feature
- Geo-tagged enterprise image
- Google Navigator tracks the enterprises/vendor

Analytical COVID Dashboard

E-Dashboard for the citizens of the districts developed and hooked on the Hisar web site. The dashboard facilitates to know the total swabs, total positive cases, deaths, total number of beds, health related infrastructural related details by depicting different graphs Dashboard also equipped with containment zones positions, hospitals and COVID care centres on Google Map.

CAREWELL Mobile App

To serve the senior citizen an android based mobile app 'CAREWELL' developed, the purpose of the app to conduct a survey to know the current status on various inputs which includes the demographic, health issues, law & order issues, Social issues, family disputes, issue with livelihood issues and government service (G2C) related issues. After capturing the various parameters the different officers as stakeholders shall accordingly to provide the help to the intended senior citizens.

Paudhagiri Mobile App

Under this initiative, the government of Haryana is distributing saplings to school students and motivating them to nurture the plant and ensure that it grows into a tree. Students are being awarded Rs 50/ every 6 months for upcoming 3 years for surviving sapling. NIC District Centres Hisar coordinated the state NIC Haryana State team in development of the mobile app, which facilitates the students to capture the picture along with the GPS and maintain the database of school and students.

Accolades

- **Gold Award** – DIO Innovation Challenge
- **Gold Award** – CollabDev (Digital NIC)
- **Silver Award** – District Governance Mobile App (DGMC)
- **President Award** – Deputy Commissioner Hisar on ICT applications developed by NIC during the Lok Sabha-2019
- **Certificate of Appreciation by DC Hisar** – As nodal officer for contribution in COVID management

For further information, please contact:

DISTRICT INFORMATICS OFFICER

NIC- Hisar District Centre
3rd Floor, Mini Secretariat
Hisar
Haryana - 125001

Email: diohsr@hry.nic.in, Phone: 01662-241000

Kozhikode District

effective citizen centric governance through citizen participation

Edited by **REUBAN K**

Kozhikode district played a key role during the Covid 19 pandemic not only in the district but also in the entire state of Kerala by providing real-time surveillance and health monitoring solution Covid19jagratha. Nammude Kozhikode Mobile App is a Technology Platform to facilitate Citizen Engagement, Citizen Participation, and Seamless Civic Service Experience, enhancing the capabilities of stakeholders and ensuring the best citizen experience in governance.

Kozhikode District was formed on 1st January, 1957, and situated between latitudes 11° 08'N and 11° 50'N and longitudes 75° 30'E and 76° 8'E. This coastal district has 2 Revenue Divisions, 4 Taluks, 7 Municipalities, and one Corporation. Kozhikode is a prominent trade and commerce centre and a popular tourist destination surrounded by charming coastal lands, beaches, waterfalls, rivers, and hills.

The district has top educational/research institutions like IIM, NIT, IISR, and CWRDM. NIC district centre started the journey in the district from 1988 onwards and has been dedicatedly engaged in implementing various central and state-level projects.

ICT Initiatives in the District

Covid19jagratha (<https://covid19jagratha.kerala.nic.in>)

Covid19jagratha information and management solution, conceptualized by District Administration and developed by the district is a simple and comprehensive pandemic management solution covering all aspects of a known solution for management of Covid Outbreak in an integrated workflow. It focuses on the approach of safe travel, safe quarantining, real-time surveillance and Health monitoring Contact Tracing and Treatment, Containment & Cluster zone Mapping, Human Resource Mobilization, Hospital & Ambulance management, Event & visitor registration as an integrated system of handling covid19 outbreak effectively.

This integrated real-time workflow is now used by all 14 districts across Kerala. Users from ward level to state level are fully integrated and have real-time dashboards with full statistics of the state.



Democracy encompasses effective and efficient structures that are inclusive and accountable which provide ideal support to citizens to lead a safe and productive life. Good governance embodies the core values of representation, responsiveness, transparency and accountability leading to legitimacy. Adopting Digital governance creates a platform for necessary systems and processes based on user focused services and real time feedback which is a key to successful functioning of democratic institutions.

Technological initiatives by the District administration with the support of NIC have been instrumental in implementing target based approach and result oriented work. Our digital initiatives improved the participation of citizens in governance and proactively tapped the potential of social capital and willingness of people to contribute to the betterment of society.



SEERAM SAMBASIVA RAO, IAS
District Collector and District Magistrate
Government Kozhikode (Kerala)

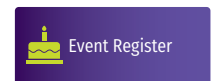
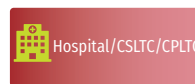
Public Dashboard of covid19jagratha portal



Mercy Sebastian
Sr. Technical Director
& DIO
mercy.s@nic.in



Rolly T D
Technical Director & ADIO
rolly@nic.in





▲ NIC Kozhikode District App

More than 2 lakhs eighty thousand active users and 3,55,34,573 user hits as on 16th July 2021.

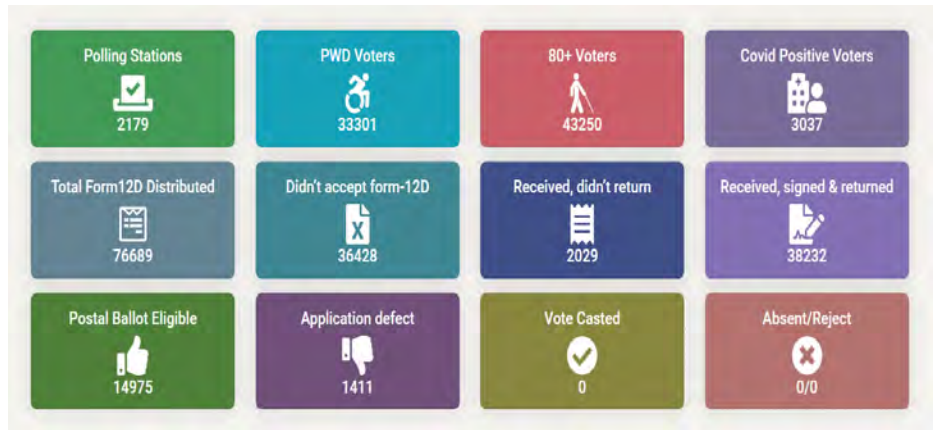
Oxygen Demand-Supply Chain Management Portal

A Comprehensive Total Oxygen Management Solution to handle the oxygen supply in real-time. This is used to monitor the supply of oxygen and to effectively handle emergency situations at various government and private hospitals treating Covid-19 patients. Hospital nodal officers will update the infrastructure, occupied patients in ventilators and ICU, Oxygen availability, usage, and the requirement on a daily basis and mapped with their suppliers. District and state-level war rooms are set up to manage critical situations and monitor oxygen availability.

Suppliers and manufactures will update their storage/ filling capacity, supply oxygen against the demand to the linked hospitals. They have the facility to map vehicles and drivers.

This workflow-based system is implemented in Uttarkhand state <https://pranvayujagratha.uk.gov.in> and Pondicherry UT <http://covid19oms.py.gov.in/>

▼ Kozhikode District website



▲ Statistics of COVID-19 Jagratha portal

Nammude Kozhikode Mobile App

Nammude Kozhikode Mobile App - an initiative by the District Administration Kozhikode with a vision to create a platform for the citizens to 'participate, co-design and co-create' in governance. Provision for the citizen to interact for effective delivery of services, implementation of programs, and participation in decision making. It features citizen-centric governance through prompt and effective service delivery, real-time responsive administration thereby enhancing citizen experience. It also features Citizen Participation through Open governance, communicating information about departments and feedback, launching and participation in campaigns and discussion forums for citizens. Co-creation of the future is another important feature wherein citizens can actively participate in the design of projects and services, Project delivery through social action and make contributions for the social cause. The application ensures transparency and quality in service to build a prosperous, vibrant, cleaner, greener, and happy district. Now it has been customized to roll out in the entire state of Kerala. Received Gold Award in DGMC.

Other Key Initiatives

Campus*Suite (<https://dme-ecampus.ac.in>)

A workflow-based application for catering to all needs of an academic institution having classroom studies and clinical postings. Initially implemented in Govt Medical College, Kozhikode and later rolled out in all Govt. medical colleges in Kerala. Modules-Student and faculty management, syllabus and timetable management, leave and attendance management, internal exams, assignments, and evaluation, stipend calculation for House sergeants and PG students, Confidential Report Uploading from the respective department, Generation of CRRI (Compulsory Rotatory Residential Internship) Certificate for House Sergeants, etc.

Computerization of Industrial Tribunals, Kerala (KITS) (<https://kits.kerala.gov.in>)

The main objective of KITS is to handle various industrial disputes related to employers and employees. In Kerala, Industrial Tribunal deals with dispute cases like Industrial Disputes, Insurance Cases, Insurance Case Appeals, and Employees Compensation Cases. Features: Filing of peti-

▼ Shri Pinarayi Vijayan, Hon'ble Chief Minister for Kerala inaugurating the Nammude Kozhikode Project through Video Conferencing





▲ Shri Rolly TD, ADIO Kozhikode receiving 18th CSI SIG eGovernance Special Recognition Award 2020 in Local Government project Category for Covid19Jagratha

tions and vakkalath, notice preparation, Counter petitions, Document marking, Witness statement, Court procedures, Compensation calculation, Judgment preparation, Compensation distribution.

AVAKASHAM (avakasham.kerala.gov.in)

Avakasham portal is developed during LAC Election 2021 to monitor Postal ballot distribution. During this Inclusive and accessible election, Govt decided to facilitate postal ballot options to absentee voters, Person with disabilities (PWD), a citizen of 80 plus age and Covid positive voters. The distribution and collection of postal ballot applications (Form 12D), verification, and final distribution of ballot to the eligible voters are done through this system. Distribution and collection of form 12D, its monitoring and verification, updation of voting status are managed using this portal. This system is used by the entire State to capture the photographs of all suspected and duplicate voters on poll day.

NEO CRADLE (<https://neocradle.kerala.gov.in>)

A comprehensive Newborn Care Management System is an initiative of NHM Kozhikode and developed by NIC Kozhikode. The health of the mother and the child depends on the quality of antenatal, natal, and postnatal care provided at delivery points. Expert adolescent and pre-consumption care also have an impact on maternal and neonatal health. Hypoxia, Hypoglycaemia

& Hypothermia are the most common causes of death or disability among neonates. All the delivery points (both public and private) will come under this network. Regular certified training to all categories of staff associated with maternal & neonatal care is also a part of this program. Standard transportation facilities will be ensured to prevent hypoxia, hypothermia, and hypoglycemia during the transportation of neonates. The scope of the program 'NEO CRADLE' has a wider platform as it covers all of these aspects of maternal & neonatal care in the entire Kozhikode district.

Strengthening District Hospital Infrastructure nationwide through Empaneled NGOs/ CSOs

Based on the oxygen demand-supply chain management solution done for few states, a request has come from NITI Aayog to develop a web portal for Strengthening District Hospital Infrastructure nationwide through Empaneled NGOs/ CSOs. A prototype web portal solution is designed, developed, and demonstrated to NITI Aayog CEO, Addl Secretary, and their team in a short span of time.

Demands for installing ICU/Ventilator beds in the hospitals raised by the district through the portal will be visible in the public domain for the NGO/CSO to make an offer and an MOU will be generated by the system between the hospital

▼ Smt. Mercy Sebastian, DIO & Shri Rolly T D, ADIO Kozhikode receiving Memento from Dr. Beena Philip, Hon'ble Mayor of Kozhikode in the presence of Shri Sambasiva Rao, District Collector, Kozhikode during the inaugural program



▲ Gems Digital India Award 2020 for Covid19Jagratha

administration and NGO based on the offer. Dashboards in public and private domains are provided.

Planning Suite

A complete workflow-based application for the MPLADS- starting from the project proposal from MP's till the final payment of work done is handled through this application. This project is developed and used in the district successfully for the past 8 years. The major stakeholders involved are the Planning department, District Collector, Finance Section of Revenue department.

Accolades

- 18th CSI SIG eGovernance Special Recognition Award 2020 in Local Government project Category for Covid19Jagratha
- Gems Digital India Award 2020 for Analyst's Choice for Covid19Jagratha
- Gold Award in District Governance Mobile Challenge (DGMC) for Nammude Kozhikode Mobile App
- National Awards for e-Governance 2020-21 Shortlisted in the category of Use of ICT in the Management of COVID 19(District level initiative)

Conclusion

The NIC District Centre has made a significant contribution in providing e-Governance solutions to the District Administration. It will continue to take adequate steps towards making the lives of the common citizen easier and simpler by providing citizen-centric services and products. Oxygen management system, an initiative of District Kozhikode has the potential to be scaled up to the National Level and may be taken up for replication across the country for better delivery of e-Governance services.

For further information, please contact:

DISTRICT INFORMATICS OFFICER

NIC Kozhikode District Centre
Collectorate Building
Civil Station, Kozhikode
Kerala - 673020

Email: mercy.s@nic.in, Phone: 0495-2370886

Online Key Management System

for Driving License and Vehicle Registration

Edited by **MOHAN DAS VISWAM**

A web-based KMS system was considered prudent to be developed for the implementation of specifications notified by the Transport ministry as per gazette notification of 1st March 2019 for Smart card based DL and RC. The new web-based KMS system is designed, developed, and implemented by the Smart Card Technology Group of NIC. This has resulted in better implementation of software and hardware resources.

The gazette notification No G S R 400(E) dated 31st May 2002 was issued by the Ministry of Road and Transport Highways (MoRTH) for the issuance of Smart Card-based DL/RC. Based on the notification, homegrown Operating system specifications (SCOSTA/ SCOSTA-CL) were developed which conforms to International Organization for Standardization (ISO)/International Electro-Technical Commission (IEC) standards. The gazette notification allowed each state to have separate processes for the issuance of the DL and RC Cards.

To bring uniformity across the country, the gazette notification of 1st March 2019 was notified. The technical inputs to the new Gazette notifications were given by NIC. The new format will bring in a unified system across the country. It also permits having more data stored on Smart Card Chip. The main objectives of the system are:

- To facilitate effective and time-bound citizen-centric service delivery
- To provide an affordable, accessible, cost-effective, and transparent system

- To increase productivity with efficiency through automation of processes

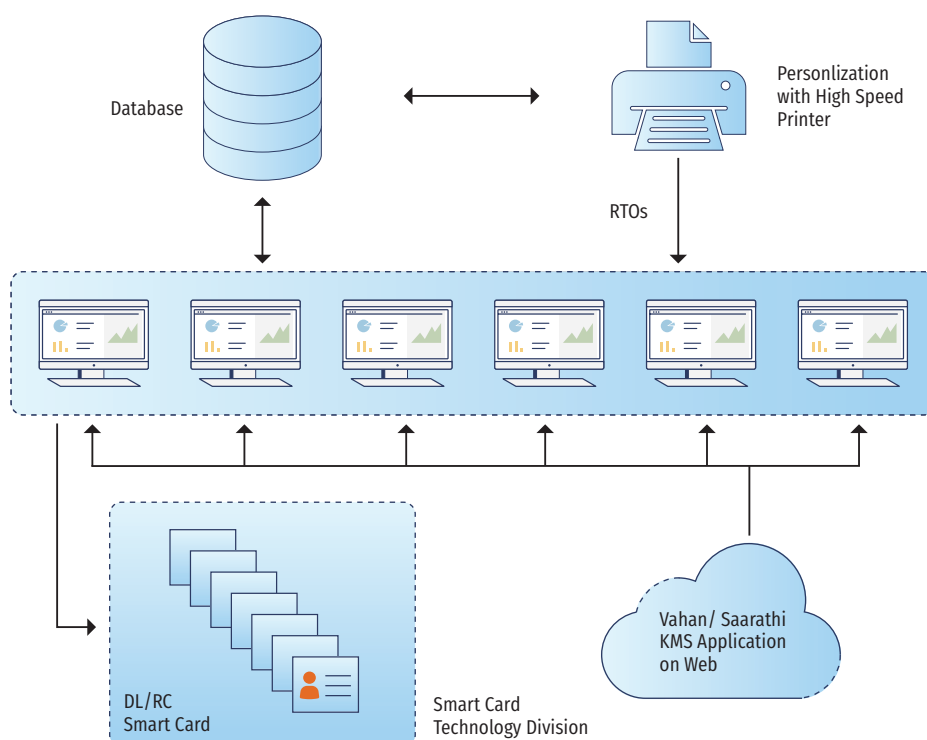
Features of the Product

- Security against fake Duplication/ Issuance
- Additional Pin Authentication
- Interoperability achieved across the country
- Secure data storage
- Secure communication
- Enhance Privacy protection
- Better Law enforcement
- Ease of handling

Technologies Used

- Client End Smart Card Manager, Browser
- Database PostgreSQL
- Operating System SCOSTA/SCOSTA CL, Windows
- Coding Language JAVA(JDK), JS, Spring-Hibernate, Tomcat
- Development Environment Eclipse

▼ Software Architecture (New DL/RC Web based Solution with Central database)



RamaKrishna Y
Sr. Technical Director
& HoD
ysrama@nic.in

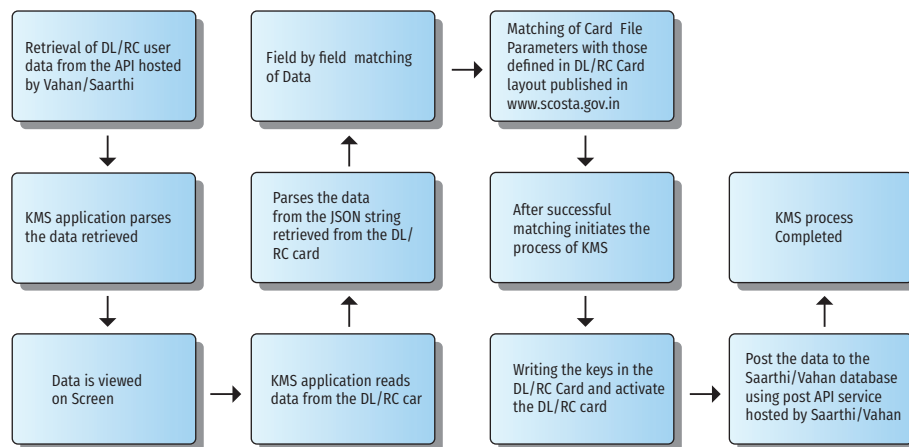


Rajdeep Choudhury
Sr. Technical Director
rajdeep.ch@nic.in



Jyoti Bhan Kaul
Technical Director
jkaul@nic.in

▼ The New KMS for Issuance of Smart Card based DL/RC Cards at RTO will follow as below



▼ Client screen shot for RC KMS

PARIVAHAN SEWA | Government of India
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
Ver 2.1

Vehicle Owner Information

Vehicle Registration Number: PB487125
Registration Date: 19-02-2021
Owner Name: SHREE SHYAM STEEL CORPORATION
Son/Wife/Daughter of: NA

Vehicle Details

Name of Manufacturer	Model No.	Engine No.	Vehicle Class	M-Cycle/Scooter
HONDA MOTORCYCLE AND SCOOTER INDIA (P) LTD	"ACTIVA 60" WITH SHEET WHEEL	3F91ED0131812	PETROL	0

Current Postal Address

MOTTA KHAN, HANOT GOSWAMIGARH, Fatehgarh Sahib, PB, 147301

Transport Details

Gross Vehicle Weight: 0

Number, Description, Size of Tyre: Registered Axle Weight

The portal (<https://kms.parivahan.gov.in/rcsmartcardweb/home>) has been developed for the issuance of RC Smart Cards

▼ Client screen shot for DL KMS

PARIVAHAN SEWA | Government of India
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
VER 2.0

Personal Information

Driving License Number: RJ01 2015000457
Name: [Photograph] [Signature]
Father Name: [Photograph]
Date of Birth: [Photograph]
Issuing Authority: RJ01
Valid Till (Transport): 21-09-2019
Valid Till (Non-Transport): 27-05-2033
Version: 1.00

Vehicle Information

S.No.	Vehicle Class	Test Auth Name	Test Auth Desig	Issue Date	Issue By	Category	Endorsement no	Badge No	Badge Issue By	Badge Issue Date
1	LMV			17-09-2015	RJ01	NT				00-00-0000
2	MCWG			22-09-2016	RJ01	NT				00-00-0000
3	TRANS	RTQAMER		27-09-2017	RJ01	TR	RJ01 / AED/0000004/2017			00-00-0000

The portal (<https://kms.parivahan.gov.in/DLSmartCardWeb/home>) has been developed for the issuance of DL Smart Cards

Benefits of Project Implementation

- With the introduction of a web-based system, the interaction of the application with the local database has been eliminated making the system work faster. In an older system, the data was stored locally first before pushing it to the central database thereby increasing the data redundancy
- The web KMS system has resulted in saving infrastructure at the local level
- In an older system, a setup was needed to be created and installed in individual RTOs. But with a web-based KMS system, using a single url the application and its supporting software automatically get installed without any additional efforts
- The Web-based KMS system also results in automatic updation at the client end
- The project has helped in saving the time and ease of use by RTO's officials for the issuance of DL/RC Smart cards
- All the benefits stated above have resulted in making the entire project cost-effective

Proposed solution for centralized Card Issuance management system with HSM Impact or benefits of ICT initiatives.

To enhance the security of online web services for the issuances of DL/RC Cards, it is proposed to use Hardware Security Module (HSM) to secure the key storage. It also provides cryptographic operation within a tamper-resistant hardware device. HSM has dedicated and powerful crypto processors which can simultaneously carry out thousands of crypto operations thereby making the KMS work fast and helping in bulk issuance. NIC has developed a smart card application using HSM in National Population Register (NPR), Fisheries, etc. HSM shall be used for secure storage and fast access of master keys for various projects. HSM provides enhanced security and flexibility in KMS operations. Every KMS system will act as a client and will be connected to HSM through a secure network. KMS of personalized DL and RC cards will be done on KMS client systems by invoking a centralized Vahan/ Saarathi KMS application. The application will use authority keys from HSM.

For further information, please contact:

RAMAKRISHNA Y

Sr. Technical Director & HoD

A3B3, NIC Head Quarters

A-Block CGO Complex, Lodhi Road

New Delhi - 110003

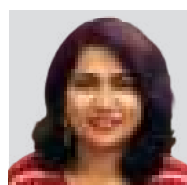
Email: ysrama@nic.in, Phone: 011-24305212

Certificate Generation Module

Using Service Plus framework

Edited by Dr. DIBAKAR RAY

A Certificate generation module was considered prudent to be developed where Gram Panchayat, Panchayat Samiti and Block Level Officials can process the service requests of citizen and deliver online certificates in an organized manner. Common services required by citizen include income certificate, legal heir certificate, completion certificate, etc. Here service Plus framework has been used to provide the solution to district administration which is a framework built on LowCode-NoCode (LCNC) architecture for delivering electronic-services to citizens which resulted in faster implementation, smooth delivery and better management of services.



Sulagna Bhattacharya
Scientist - C
DIO (Murshidabad)
sulagna.bh@nic.in

Eleven commonly used Services by Gram Panchayat(GP) and Block Offices were made Live through Service Plus based delivery of e-Services in 250 GPs under Murshidabad district of West Bengal. Murshidabad District is the pioneer in West Bengal for implementation of such e-Services successfully. Since inception 5,08,062 Applications has been processed and 4,04,253 certificates successfully delivered in the last 1 year. The e-Services introduced are as follow

01	Application for Issuance of Income Certificate
02	Application for Issuance of Residential Certificate
03	Application for Issuance of Legal Heir Certificate
04	Application for Issuance of Completion Certificate-GP
05	Application for Issuance of Age Certificate
06	Application for Issuance of Alias Certificate
07	Application for Issuance of Caste-cum-Income Certificate
08	Application for Issuance of Completion Certificate -Block
09	Application for Issuance of Completion Certificate -Panchayat Samiti
10	Application for Issuance of Electricity Permission Certificate
11	Application for issuance of Janani Suraksha Yojana Certificate

Background

On understanding the requirement of Gram Panchayat(GP), Panchayat Samiti(PS) and Block Offices, a workflow has been prepared for designing the services using Service Plus in consultation with the Sub division level officers. Service Plus team of West Bengal configured the services and user acceptance testing was done at the district level by the District Informatics Officer, Murshidabad and Additional District Magistrate, Zilla Parishad. On go ahead from District authority the piloting was done in Domkal Subdivision. Later the service was launched in all 26 blocks consisting of 250 GPs of Murshidabad district.

Present Status

Initially 4 services were made online on 10.6.2020. Since inception, the services are used vastly by the Gram Panchayats. Later on additional 7 services were implemented successfully on 24th August 2020. The use of online Services has eased the job of district administration to generate and disburse large number of certificates using minimal effort. Within a year Certificate Generation Module in Murshidabad district had successfully delivered 4 Lakh+ certificates.

Reporting Module

User friendly reporting module can be configured using Service Plus. Here in Certificate Generation module the following reports have been configured:-

- Dashboard report of particular GP-GP wise delivered, rejected, Pending and received application count
- GP Certificate Dashboard--Service wise delivered, rejected, Pending and received application count

Each Gram Panchayat Users (Computer Operator and Pradhan have dashboard where they can track the number of applications processed, pending and delivered

Access to eServices

User can access the service on the department's website through the below link:

Live application URL- <http://tathyasathi.bangla.gov.in/>. Alternatively, the service can be accessed through <http://serviceonline.gov.in> The type of this Service is Statutory. Application does not follow FIFO model for application processing. This service has no End date.

Coverage

This service is applicable for only Rural area. In Rural, the first government unit that will accept the application for this service is Gram Panchayat.

Deliverable(s)

The applicant will receive Output Certificate/ Report as the service deliverable(s). The certificate(s) will be delivered through In Person.

Appearance

The applicant is not required to physically appear during the processing of the application.

Beneficiary

Citizen and Business Units

Users

Two types of users in all GPs, Users in all GPs

will login with the login credentials shared with them with option for changing the password.

(a) Computer Operator: Computer operator will fill up and submit the Application Form of desired service and applicant's acknowledgement slip with ref-no: AIIC-GP/ 2020/ XXXXX respectively can be printed or downloaded as pdf.

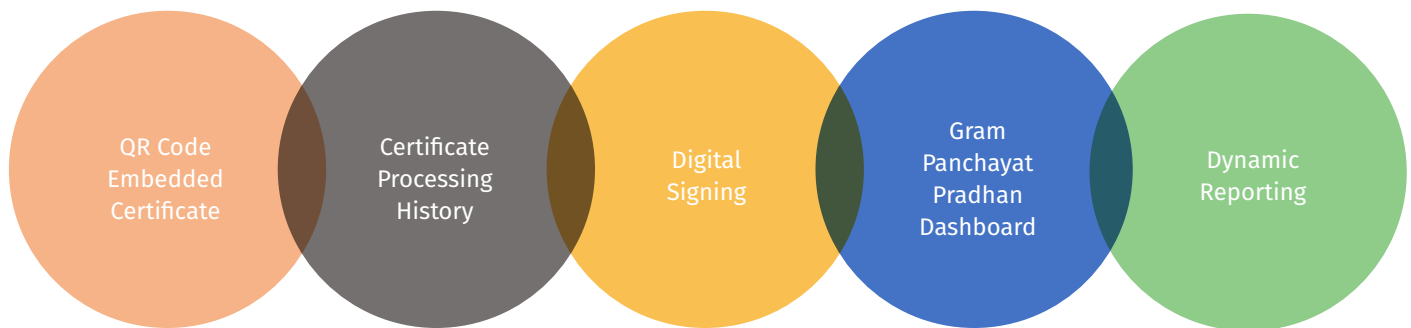
(b) Gram Panchayat Pradhan: On login GP Pradhan will be able to view the dashboard and select the pending application for processing. He can approve/ reject the application, view status, processing history etc. Certificates with unique ref. no. and QR code can be generated (option-

ally digitally signed) as below on approval by GP Pradhan. Sample certificate format shown on left.

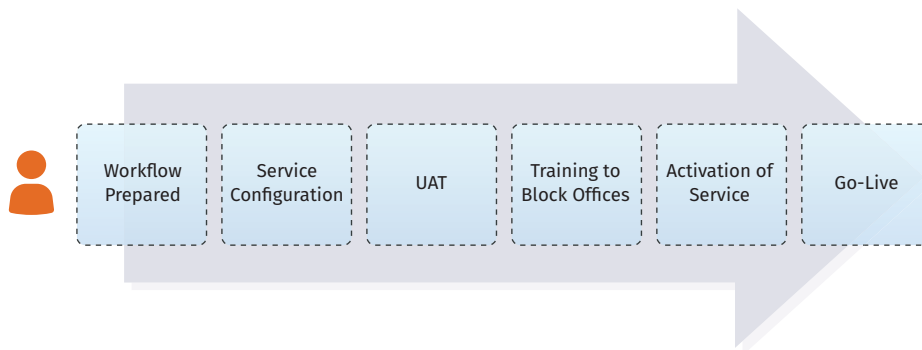
Future enhancement plans

Considering the huge response of Certificate generation module in GP Level a citizen interface has already been designed and configured. In the current pandemic situation online citizen interface is a necessity for the citizen where they can access the services online without gathering in Gram Panchayat or Block offices. We have plans for state wide roll out of the module. Workflow of the citizen interface is given in diagram.

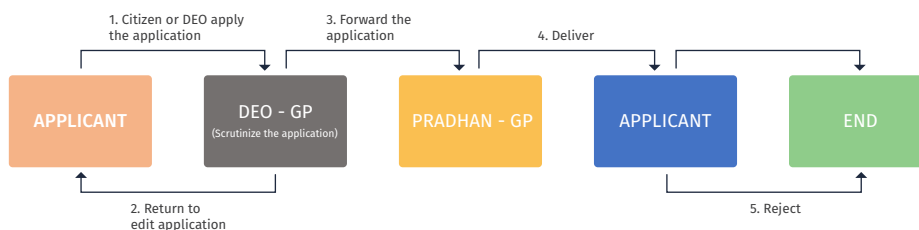
Salient Features



Bilingual Certificate introduced for Issuance of Income Certificate, Legal Heir Certificate and Residential Certificate.



▲ Launching a Service using Service Plus



▲ Workflow of the citizen interface



Amitava Bose
Sr. Tech Director & HoG
amitava.bose@nic.in



N. Paul Varghese
Technical Director
paul.mathai@nic.in



Vishal Kumar Sharma
Scientific Assistant - B
vk.sharma87@nic.in

For further information, please contact:
DISTRICT INFORMATICS OFFICER
NIC- Murshidabad District Centre
Office of the District Magistrate
New Administrative Building
Murshidabad
West Bengal - 742101
Email: dio-mrs@nic.in, Phone: 03242-251650

WEB APPLICATION FIREWALL

Defense against Layer-7 Attacks

Edited by **MOHAN DAS VISWAM**

The application layer (L7) is the hardest to defend. Hackers get direct access to the bounty they are seeking, by compromising layer-7. The need is to have a product with an understanding of the “real-world techniques” or “methods” hackers use. It is here that the Web Application Firewall technology delivers the promise. With the right WAF with right policies in place, you can block the array of attacks that aim to exfiltrate data.

Web Application Firewall (WAF) is the latest entry into the Layered Data Centre Security model. It forms an integral part of a multilayer security architecture and provides security at the topmost layer of TCP/ IP stack that is most vulnerable and most targeted in the current threat landscape. Web Application Firewalls examine the data payload beyond the simple IP and TCP header examination. They protect web systems against known and unknown threats and vulnerabilities. Customized inspections can detect and prevent several of the most dangerous application security flaws.

Next-Generation Firewall (NGFW) and Intrusion Prevention/Detection System (IPS/IDS) are powerless to tackle and handle modern web attacks. So here is where the Web Application Firewall fills the gap. Acting as an intermediary service between your website application and the visitor browsing your site, WAF intercepts and strips malicious requests before they can cause any damage. With application layer logic fundamental to its working, WAF can detect/understand unusual traffic activity with ease.

Internal Architecture

The internal structure of the Web Application Firewall is often complex and the interaction between components changes from one manufacturer to other. However, the resultant impact of deploying WAF is roughly the same. The below-given figure depicts a typical internal structuring of WAF.

While WAF is important, it is most effective with other security components. A comprehensive enterprise security model positions a WAF alongside IPS, NGFW, Scanner, SIEM, etc.

WAF Policies & Working Models

WAF analyses Hypertext Transfer Protocol (HTTP) requests and applies a set of rules to understand what parts of that conversation are benign and what parts are malicious. It employs various approaches/models to analyze and filter the content. WAF operates through a set of rules often called policies. These policies aim to protect against vulnerabilities in the application by filtering out malicious traffic.

WAF that operates based on a blacklist (negative security model) protects against known attacks. This model is appropriate for public websites where sources are unknown. However, the model highly resources intensive.

Conversely, WAF based on an allow list (positive security model) only admits traffic that has been pre-approved. It is highly efficient but may at times un-intentionally block benign traffic. Web Application Firewalls also offer a hybrid security model, that implements elements of both.

WAF Deployment Architecture

There are two main architectural considerations related to WAF placement: In-line or tap/span.

IN-LINE

In this architecture, the WAF is placed direct-

▼ WAF Architecture



Ratnaboli Ghorai Dinda

Dy. Director General
& HoG
ratnaboli@nic.in



Raj K. Raina

Sr. Technical Director
& HoD
rk.raina@nic.in

ly in the traffic path between the requestor (for example, a browser client) and the Web application server. Within the in-line model, WAF can be configured in a) routed b) Bridged or c) Reverse Proxy method to inspect and process the traffic. In-line WAFs actively block the requests that violate the rule sets. This architecture demands caution to ensure no service interruption surprises happen in production. Alternately, it is possible to run a WAF in-line, but keep it in a monitor-only (or passive) mode.

TAP/SPAN

This mode is also known as “passive” mode because the WAF is kept out of the traffic path and monitors traffic from a tap or span port. Tap/span WAFs are often used to collect data for use in investigatory or forensic analysis. This mode supports traffic blocking by communicating to another system (like a network firewall) and having that system perform the blocking.

Further, an Application Firewall can be network-based or host-based, or cloud-based. It is primarily deployed in the reverse-proxy mode and is placed in front of one or more websites or applications.

We can deploy a WAF appliance ON-Premise or have a hosted virtual appliance. An evolving architecture is Cloud-delivered WAF as-a-service.

Cloud and Virtualization are driving the need for new architectural models in Web Application Firewalls. Cloud-based WAFs intercept traffic before it enters the organization's network. Virtualized environments present a unique challenge because the VMs running on top of a hypervisor form their mini-network where traffic is passed from server to server without having to traverse the network. To prevent application attacks intra-VM, a WAF needs to be able to see the traffic. This can be accomplished by using an API to monitor activity via the hypervisor. WAF can fit in an organization's architecture easily with its various form factor choices. A host WAF is a software option where the software is installed on the same server that the Web application is running.

Detection Techniques

WAFs (most of them) use a blended approach of different techniques to ensure the most accurate detection coverage. These techniques are:

Signatures - Similar to the signatures for anti-virus and Intrusion Prevention Systems (IPS) WAF signatures match a pre-set string or regular expression (RegEx) to the traffic looking for known attacks. WAF ships with a set of signatures and these are updated by the OEMs regularly with the evolution of attacks.

Rules - Rules define how to inspect a web request and what to do when the request matches the inspection criteria. Generally, it links together a series of strings with logical operators like AND, OR, NOT and may contain nested statements at any depth. WAFs can also “learn” traffic patterns on the fly and look for anomalies on a set of baseline rules. This intelligence can be used for a new rule setting for the WAF or on a complimentary

protection device like an IPS or network firewall

Normalization - Attackers often manipulate an exploit payload to bypass WAF detection (for example by URL-encoding portions of the payload). WAFs normalize the requests to perform analysis and bust the evasion by attackers e.g. escaped and encoded characters, self-referencing paths, international character sets, etc.

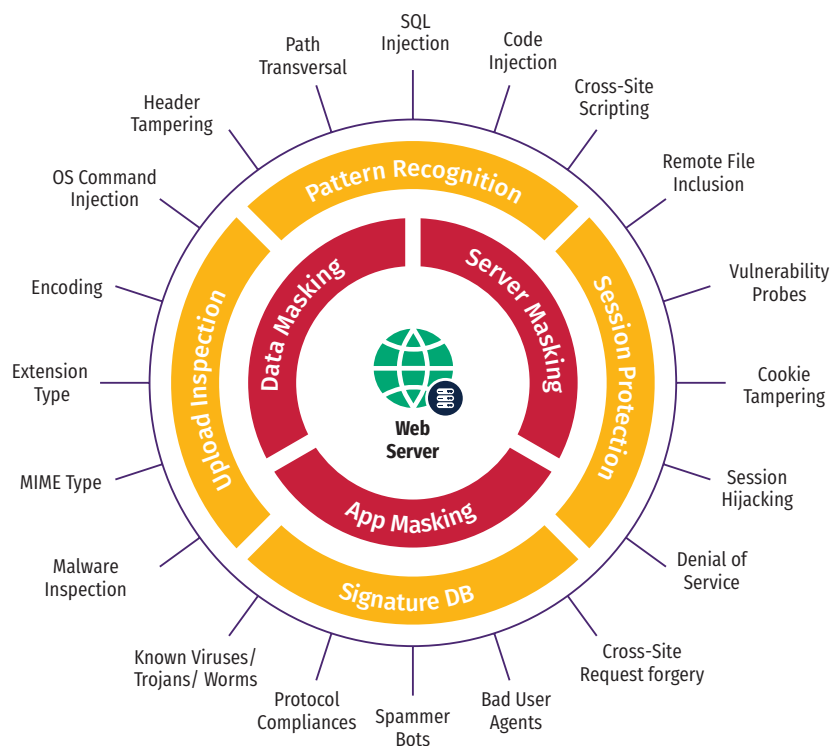
APIs - WAFs offer API support to build custom detection techniques or rules for specialized assessments, such as logic checks. These APIs are integrated with the WAF parsing engine

may have limited to no resources to build security controls into the application or fix vulnerabilities in source code

SSL & Weak Cypher Overrides

Encryption protects data in the traffic stream from prying eyes and the option here is to give the keys to the WAF so the stream can be decrypted, inspected, and processed. Additionally, WAF plugs the weak ciphers to prevent side-channel or down-grade attacks. When a client tries to use disabled/vulnerable SSL/TLS protocols or cipher suites, the request is redirected to specific error page/s. At

▼ Application Fortification



Special WAF Features

Virtual Patching

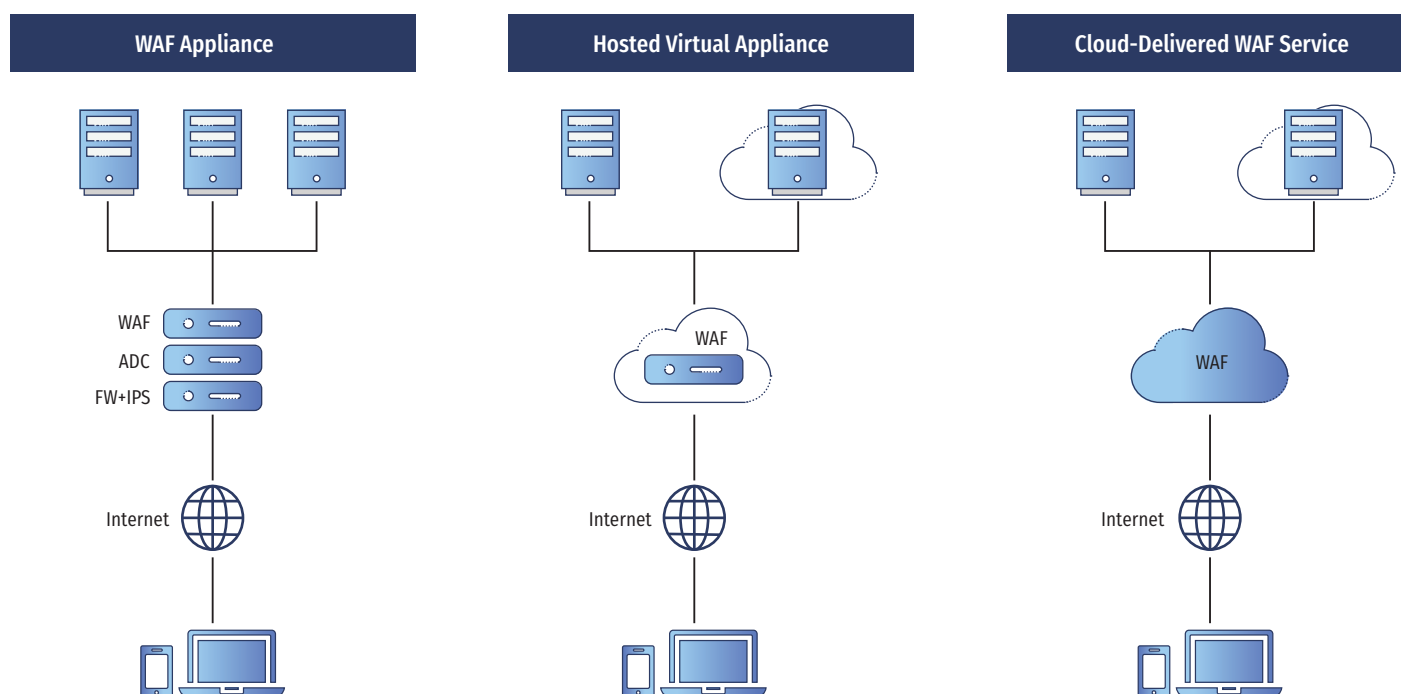
WAF helps to shorten the window of exposure to vulnerabilities. If your application is hosted on a platform that has a known vulnerability, but you have not had a chance to patch it yet, you can write a rule that looks for traffic attempting to exploit that vulnerability and block the traffic until you can get the vulnerable system patched. This is known as virtual patching. Virtual patches are a key component of a strong WAF, often requiring integration with a vulnerability scanner.

It is always difficult to keep pace with the number of vulnerabilities and updates on open-source servers that we commonly use today e.g. Drupal, WordPress, Joomla, etc. Their vulnerabilities can be taken care of by virtual patching. Virtual Patching helps to protect legacy applications that

the same time, a WAF can define cipher suite overrides for each version of the SSL/ TLS protocols.

Emergency Hosting (Audit Exemption)

Web Application Firewall is vital to enable emergency hosting as it dynamically models an application structure and its elements. It understands the expected application responses and usage. Accordingly, it profiles the URLs, Directories, Cookies, Form fields, URL parameters, HTTP methods, and Referrers. Having understood the application, it provides a Layer-7 shield around it. This protective shield, however, must not be construed as a replacement of necessary audit compliance which has to be met anyhow. WAF service essentially takes care of vulnerabilities that are either altogether new or are missed/uncovered via penetration testing or source code reviews.



▲ WAF architectural models

Data Protection Standards

WAF helps to achieve and meet data protection standards like PCI-DSS by protecting sensitive data (like credit card data or customer records or other personal details) stored in the backend databases and accessible through web applications. The attack-mitigation power of a WAF integrated with the data from scanning technology is the strongest bet.

Data Leakage Prevention

Web Application Firewall inspects outbound traffic and prevents leakage and theft of sensitive data by masking or suppressing the information. This includes server software information, credit cards numbers, social security numbers, PAN, Aadhaar numbers, etc.

BAD BOTS: The Advanced Behavior Analysis and unique device Fingerprinting helps to detect

bad bots in real-time. WAF also identifies bad bots by challenge-based approach say requiring client browser to perform a calculation and return the result to a webserver through a cookie.

API Gateway

As an API gateway (in reverse proxy mode), WAF offers robust security in a micro-services architecture. It creates an orchestration for the backend. It receives API calls from the clients, authenticates them, and routes each call to their respective backend.

HTTP Flood Mitigation

WAF prevents the HTTP flood attacks which pass through the Network DDoS devices unnoticed e.g. Slowloris, SYN flood, cache-bypass floods, etc. These requests which seem legitimate can be highly resource-consuming to the extent of bringing down the application.

WAF Service @ NICET

NIC is in the process of an ambitious plan of WAF-as-a-Service roll-out across NICNET. It is a scalable model envisaged to meet the application throughput requirements across all data centers as well as over the NICNET cloud. Presently WAF services are being provided in the National Data Centre at Shastri Park and National Data Centre, Hyderabad. Appliance-based WAF devices are commissioned to provide WAF Services to critical web applications. The ELK stack technology is used in conjunction with Zabbix and Grafana for monitoring and analyzing the WAF logs to find traces of malicious activities and their sources. The 24x7 monitoring ensures that the attacks are identified early and the intelligence is used to sanitize other security devices.

Surveillance of the health of WAF devices and the services is ensured through a Command-n-Control dashboard.

How effective a WAF can be!

This can be gauged from the very fact that NICNET has not witnessed any defacement in applications that are served by Web Application Firewall.

WAF requires constant tuning

WAF installation is not a one-time job. In the world of WAFs, two things are always changing; Web applications and the threat landscape. The fast growing threat landscape is amplified by the vulnerabilities present in the application. We need to constantly tune/ modify our WAF rules to effectively address both situations.

For further information, please contact:

Raj K. Raina
Sr. Technical Director & HoD
Application Security Technology Division
National Informatics Centre
CGO Complex, Lodhi Road
New Delhi 110003
Email: rk.raina@nic.in, Phone: 011-24305231

Object Detection Technologies

A simplified explanation of YOLO class of algorithms

Edited by **Dr. DIBAKAR RAY**

It is of the highest importance in the art of detection to be able to recognise out of a number of facts which are incidental and which are vital

- Arthur Conan Doyle

Object detection is the task of localizing as well as classifying objects of interest from an image or video. It covers a wide range of techniques, including image processing, pattern recognition, artificial intelligence, and machine learning. Object detection has a variety of uses, some of which are surveillance and security, traffic monitoring, video communication, image annotation, activity detection, face recognition, robot vision and animation.

Classes of Algorithms

The three prominently used techniques in Object Detection are

- R-CNN and its variations like Fast R-CNN, Faster R-CNN, Mask R-CNN etc.
- Single Shot Detectors
- YOLO

R-CNN

Girshik et al. first proposed R-CNN in 2013 wherein the system would make region proposals and then these regions would be passed to the CNN for classification and outputting bounding box. The problem with this approach is that it is painstakingly slow. Another version by the name Fast-RCNN was published by Girshik et al. in 2015 which used implementation of sliding windows convolution to identify all the proposed regions. However, it was still slow. It wasn't until the third paper came out by the name Faster R-CNN that this technique was used in practical applications. It replaced the use of an external algorithm like Selective Search with CNN to propose regions.

YOLO

YOLO is the acronym for "You Only Look Once", whose first version appeared in 2016 by Redmon et al. Unlike previous approaches, the image is passed only once to the network rather than using a pipeline for region proposals, classification etc. and it simultaneously predicts the co-ordinates of the bounding box and the class of object. This increased the task's performance. Subsequently, here has been many versions of it namely YOLO v2, YOLO v3, YOLO v4 and YOLO v5 with the most recent one being YOLO v5 published in 2021. The concepts of YOLO v3 forms the basis for all subsequent works.

YOLO v3

YOLO v3 uses only convolutional layers as the pooling layers are also simulated by convolutional layers. The training network's input is of the form $(n, X, X, 3)$, with n denoting the number of images, X denoting the width, height and 3 denoting

the number of channels. The number X is chosen such that it is divisible by 32. YOLO v3 has 106 layers, with 53 CNN layers (Darknet-53) stacked on top of each other. The predictions are done at three different layers corresponding to strides 32, 16 and 8. For each cell of the image, we predict 3 bounding boxes at every scale. The bounding boxes are predicted as offsets to the prior boxes also known as anchors.

Common Objects in Context (COCO) is the dataset containing 80 classes of commonly occurring real life objects and is the standard dataset to test object detection algorithms. For the COCO dataset, YOLO v3 produces a tensor of the shape $3 * (4 + 1 + 80)$, where 3 is for the number of the bounding boxes, 4 is for the offset location of bounding box, 1 is for the objectness score and 80 is for confidence probabilities of the number of classes. The offsets are given by t_x, t_y, t_w and t_h where t_x and t_y are the center co-ordinates and t_w, t_h represents the width and height. The objectness score represents the IOU between the predicted box and any ground truth box.

Image Grid. The Red Grid is responsible for detecting the dog

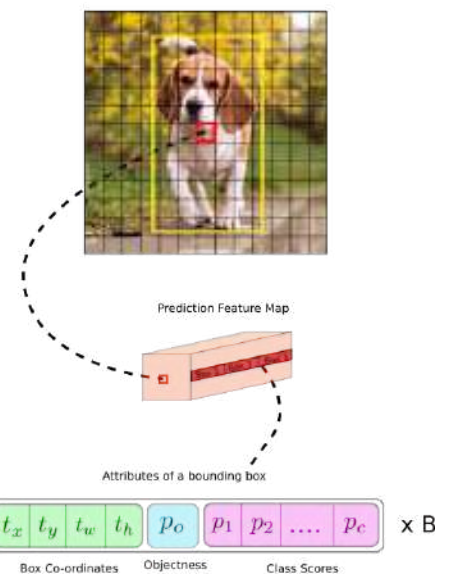


Image courtesy - <http://medium.com>

Each grid cell also predicts 80 conditional class probabilities, $\Pr(\text{Class} | \text{Object})$. These probabilities are conditioned on the grid cell to containing an object. At test time we multiply the conditional class probabilities and the individual box confidence predictions.



Dr. A.K. Hota

Dy. Director General
& SIO
ak.hota@nic.in



A.K. Somasekhar

Sr. Technical Director
som@nic.in



Shom C. Abraham

Scientific Assistant - A
shom.abraham@nic.in

Given the anchor has width p_w , height p_h and (c_x, c_y) represents the coordinates of the center cell measured with respect to the top left corner of the image, the bounding box co-ordinates are given by:

$$\begin{aligned} b_x &= \sigma(t_x) + c_x \\ b_y &= \sigma(t_y) + c_y \\ b_w &= p_w * \exp(t_w) \\ b_h &= p_h * \exp(t_h) \end{aligned}$$

where σ represents the sigmoid function.

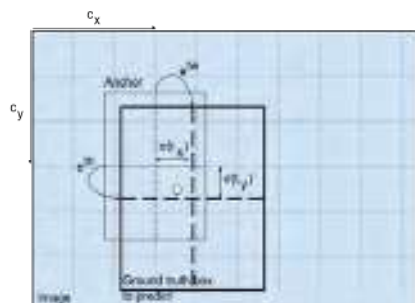
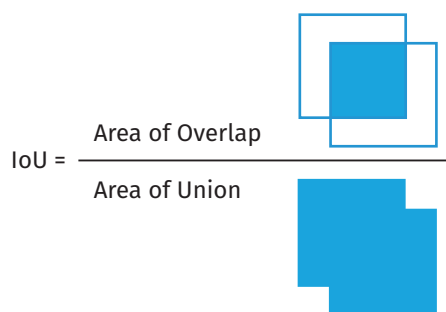


Image courtesy - <http://christopher5106.github.io>

The concept of IOU (Intersection over Union) is important here to do the post-processing tasks. IOU is simply a ratio.



In the numerator we compute the area of overlap between the predicted bounding box and the ground-truth bounding box. The denominator is the area of union, or more simply, the area encompassed by both the predicted bounding box and the ground-truth bounding box.

The network may output several bounding boxes. Hence, we need to do some post processing tasks to identify the right bounding box. We apply the Non-max Suppression (NMS) algorithm which is discussed below:

Step 1: Select the box with the highest objectness score.

Step 2: Then, compare the overlap (intersection over union) of this box with other boxes.

Step 3: Remove the bounding boxes with overlap (intersection over union) > 50%.

Step 4: Then, move to the next highest objectness score.

Step 5: Finally, repeat steps 2-4

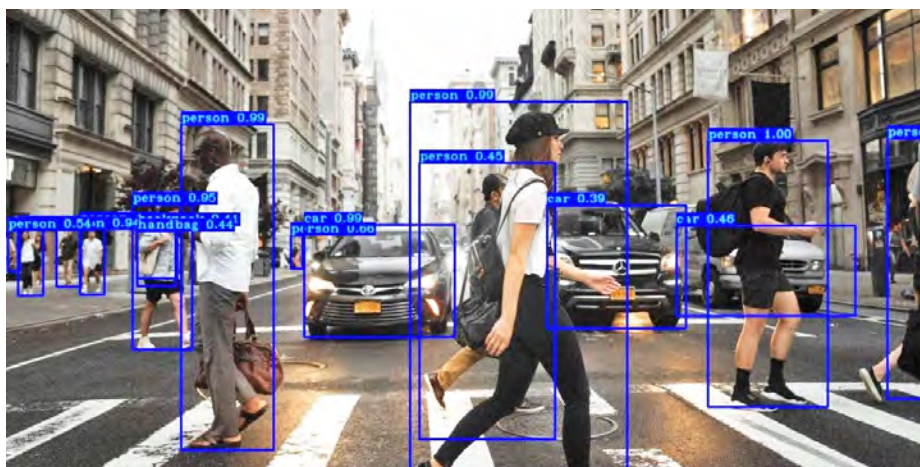
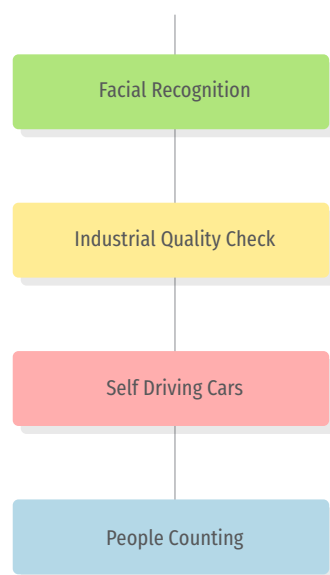


Image courtesy - <http://medium.com>

Applications of Object Detection



Disadvantages of YOLO

- Struggles to detect small objects
- Comparatively low recall and more localization error
- YOLO imposes strong spatial constraints on bounding box predictions since each grid cell only predicts limited number boxes

It struggles to generalize to objects in new or unusual aspect ratios or configurations
 "A single neural network predicts bounding Boxes and class probabilities directly from full images in one evaluation. Since the whole detection pipeline is a single network, it can be optimized end-to-end directly on detection performance."

— You Only Look Once: Unified, Real-Time Object Detection, 2015

Examples of Applications of Object Detection in Government

- Counting Trucks at paddy storage centres
- To power real-time availability of parking information
- In Traffic surveillance for detecting over-speeding vehicles
- Teacher taking class attendance by taking a frame of group of students
- To identify objects from images acquired via satellites
- In surveillance cameras to detect suspicious events or gather intelligence
- Security of Government buildings can be strengthened by detecting intrusions

How to use YOLO in projects

The official implementation of YOLO is available through Darknet (Neural Network implementation in C) at <https://pjreddie.com/darknet/yolov2/>. Subsequently, the Python version of YOLO has been widely available using both TensorFlow and PyTorch Deep Neural Network libraries. For detecting objects from the COCO dataset, we can directly use the pre-trained weights and do prediction by passing the video frames to the model. However, to perform custom object detection we do training with the dataset of annotated images on YOLO model.

Advantages of YOLO

- It's incredibly fast at the rate of 45 fps to 150 fps.
- Predictions are made from single network
- It outperforms other methods when generalizing from natural images

For further information, please contact:

A. K. Somasekhar
 Sr. Technical Director
 AD-2/14, Admin Block, Mahanadi Bhavan
 Nava Raipur Atal Nagar
 Chhattisgarh - 492002
 Email: som@nic.in, Phone: 0771-2221238

Kashmir Flood Alert

NIC J&K has developed 'Kashmir Flood Alert' mobile app for Real-time Monitoring of water levels of River Jehlum and its Tributaries. This app helps the Administration to monitor critical situations and alerts the general public about any emergency arising out of heavy rainfall, cloudburst or breach, etc.

The IoT (Internet of Things) based "Kashmir Flood Alert" Mobile App provides Real-time monitoring of water levels of River Jehlum and its Tributaries. Devices installed at various gauge sites are using Radar Level Sensor technology for Automatic Water Level Recorders (AWLR) which provide periodic (Hourly) data in real-time.

The operation of the radar level sensor is based on pulse radar technology. The transmitting antenna emits short radar pulses. The separate receiver antenna receives the pulses reflected from the water and uses them to determine the distance between sensor & water surface, the time taken by the radar pulses from the transmission to reception is proportional to the distance between sensor & water surface.

The actual water level of the waterway is then calculated automatically by the radar sensor. Approximately 16 individual measurements are conducted per second & averaged after 20 seconds to minimize wave influences.

Data can be viewed, analyzed & applied through various software solutions for data visualization, network management, modeling & decision support. Reliable data aids in identifying long-term trends, managing the risk of critical events like flooding. For crucial decision-making, threshold values can be programmed to transmit alarm messages to concerned departments & Administration.

 **Shri Farooq Ahmad** (ahmed.farooq@nic.in)

e-Committee

launched an e-Committee mobile app developed for NIC Ahmedabad District Unit, Gujarat - in coordination with Shri Sandip J. Sagale (IAS) Collector & District Magistrate Ahmedabad.

As per URS, e-Committee Mobile App forms a part of a Mobile Application comprising committee information and tracking of a particular committee that runs on a flutter, Android Studio, and .Net based API for designing, data access, and reporting purpose and MS SQL as back end. Mobile app administrator may initiate Master data entry, schedule of the meeting, share agenda and MoM to concerned departments/ offices. Concern departments/ offices may be able to know the committee in which they are part as administrator/ chairman/member secretary/ member, assigned agenda, and shared MoM. If the meeting is postponed/canceled, concerned departments/ offices may be intimidated.

The main purpose of the e-Committee Mobile App is online management of various committees/ meetings at the district level through mobile. It is designed for the master entry of the intended audience and tracking of a particular committee. Thus, the product gives comprehensive information of · Committee along with time, date, priority, and venue. · Departments/ offices going to attend the meeting. · Agenda of the meeting and status whether it is shared with concerned departments/ offices or not. · MoM of the meeting and status whether it is shared with concerned departments/ offices or not. · Status of the meeting i.e., postponed/ canceled/ completed.

 **Amit Dinkerbhai Shah** (amit.shah@nic.in)

For NIC apps related query, please contact:

Android

Sandeep Sood

Email: sood.sandeep@nic.in

Phone: 0177-2880890

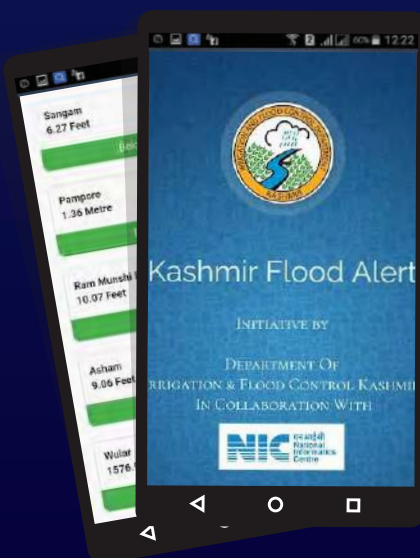
iOS

Andrews Varghese

Email: kerkan@nic.in

Phone: 0497-2700761

Visit the Mobile App Store at
<https://egovmobileapps.nic.in>



<https://play.google.com/store/apps/details?id=in.nic.nicjapps.kashmirflood&fbclid=IwAR0jYOWv96J5Gbcagu04R80yJ780MTWBL4dqs4GBi6Ux1q-uHpPd0VWc>



<https://play.google.com/store/apps/details?id=gujarat.ahmedabad.ecommittee>

SAMADHAN

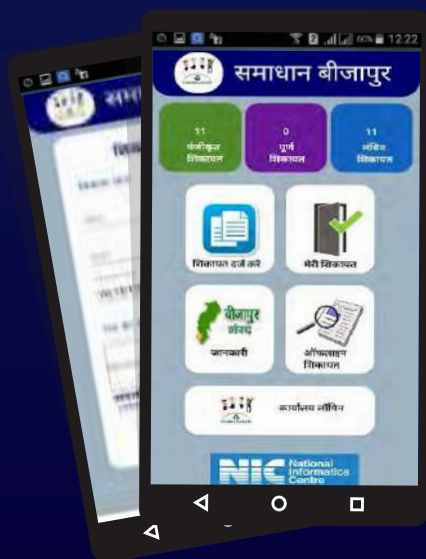
NIC Bijapur, Chhattisgarh developed 'Samadhan' Mobile App facilitates citizens to register complaints & track the status until final redressal by the concerned Department. The Reports are reviewed by District Administration for quick redressal.

Every responsive Government offers its citizens methods of recording their grievances for compassionate hearing and redressing purposes. We have thus seen citizens, writing letters, registering on websites, and reaching the officials personally to narrate their problems. It is a general practice for the Administration to record all such complaints from the citizen and to resolve.

Samadhan is almost a single reference point for registering grievances of citizens. Citizens are encouraged to register their complaints in Samadhan centre specially brought up in the district either by physically visiting the centre or through Phone Calls to the toll-free number of the centre, or through Whatsapp Messages (to the designated mobile number), or through Samadhan Website, or through Samadhan Mobile App. All such complaints are collected and are marked to the concerned departments for speedy redressal, and the status of such letters is monitored by the collector during the weekly meetings. Once a complaint is reported to be resolved by the concerned department, the Samadhan team will also make a confirmation call to the applicant and will take the applicant's feedback.

Administration can communicate with a large number of citizens in a short span of time and can provide verified news and information.

Aditya Singh (aditya.singh15@nic.in)



https://play.google.com/store/apps/details?id=com.nic.samadhan&fbclid=IwAR2-8mUgF-6fYIMgZbNnfdJa4jH2leIRLj6W0aioVF4x6_ek0HrUaIAUOUo

Household Tap Survey

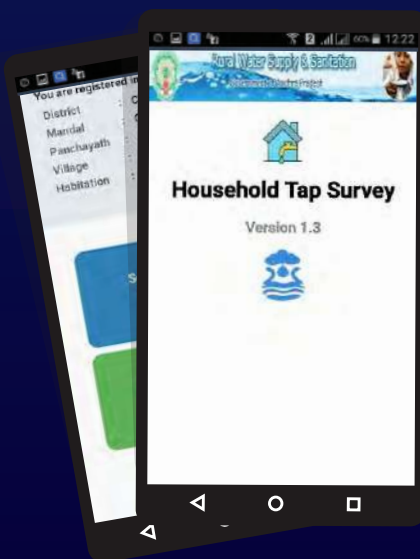
NIC Chittoor has developed a Household Tap Survey mobile app for the Department of Rural Water Supply & Sanitation (RWSS), Andhra Pradesh. This workflow-based app is integrated with the RWSS database and automates the process of inspection of household tap connections at District, Mandal, Panchayat & Village Level. It enables departmental officers to access connection details with tap images & location etc.

Rural Water Supply and Sanitation, Government of Andhra Pradesh, is the nodal agency in the State for providing drinking water Supply and Sanitation facilities in rural areas under the RWS sector, at the state level. Household water tap connections are being provided by the concerned department under some schemes.

The details of the District, Mandal, Panchayat, Village, Habitations are available in RWSS Database. Through API the details of the district will be downloaded and visible in Mobile App. The Inspector from the District Administration may visit that particular house and capture the image of the household tap connection through Mobile App using Smart Phone Tab etc.

User registration for using this App can be done through the "Registration form" which is available on the RWSS Web site. At present this facility has been provided to RWSS Department officials only. The District administration may contact the concerned department for their registration. This App helps the District Administration, to gain the trust of the public easily.

B.K. Sudhakar (bksudhakar@nic.in)



<https://play.google.com/store/apps/details?id=com.nic.householdtapsurvey&fbclid=IwAR0mUj8-J2euh2j8m5NpXSIKdC5b50KvKJ2aMzme16CwyNqaxZkQQOZ-w>

Career Counselling

NIC Kapurthala developed 'Career Counselling' App is a handy solution for students of the region. Through this app, users can search a variety of information related to jobs and all aspects of career counseling guidance.

Career counseling app that answers career & education-related questions from professionals at District Bureau Kapurthala. Students, Parents & working professionals can seek career counseling regarding any aspect of their career. This app will cover all aspects of career Counseling which will help to seek guidance to choose the right career.

This app will cover the following aspects of career counselling:

- What career should I choose as a student?
- Where do I study to achieve my career goals?
- What is the scope of my career & Education?
- Which career stream should I choose after the 10th?
- What to do after the 10th or 12th?
- What are career options which are right for me?
- Am I a right fit to pursue a science education or should I choose commerce/arts education?
- Should I follow the career advice from career counselors & Teachers?
- What competitive exams and tests should I prepare for?
- What Psychometric Tests are good for me?
- What are the best institutes for further education?
- What is the starting salary of working professionals?
- What is the scope of different competitive exams after the 12th?
- Is doing MBA good after B.tech & other graduate degrees?

Sanjeev Kumar (sanjeevkr1490@nic.in)



<https://play.google.com/store/apps/details?id=com.dbeekapurthala.careercounseling>


Help The Needy

NIC Kurukshetra developed a 'Help The Needy' mobile app that enables citizens to report about needy children & elders, road accidents, and injured/ dead animals lying on roads. When a user takes a picture, this app automatically captures the geo-location and forwards it to the concerned department/organization for necessary actions.

In our everyday monotonous routine, we all came across a lot of things for which we have sympathy, and being part of the society we want to show it feasibly. For eg: Any person lying on the roadside especially during the winter season, children working in Dhabas/ Restaurants, Dead animals lying on roads, beggars found wandering at chowks, highways, religious places, etc we want to help them. However, many Government Departments and the private organization works on them. But, due to a lack of timely available information, concrete help could not be provided. Therefore, to assist the needy and provide vital information in time, a system is in need.

Whenever a person spots someone in need, all he has to do is simply he has to take a photo of that person, the system will capture the demographical information i.e. location (Longitude, Latitude), Place Name, etc and flash on a page visible to all concerned. Concerned authorities/ Private organizations have the option to take the decision to help the needy.

We have used Flutter Framework for this Mobile App Development and Firebase as Backend.

 Vinod Kumar (vksingla@nic.in)



https://play.google.com/store/apps/details?id=com.nic.samadhan&fbclid=IwAR2-8mUgY-6fYIMGzbnfndJa4jH2leIRLj6W0aioVF4x6_ek0HrUaIAUOUo

Aarogya Sathi

NIC Chittorgarh, Rajasthan developed 'Aarogya Sathi' Mobile App facilitates Citizens to avail Medical Assistance such as the requirement for Blood, Ambulance & Medical Services. This App also enables Citizens to register themselves as Volunteers for providing Medical Services.

Any Citizen may require Medical Help in illness and emergency disease, surgery, accident case like Blood, Ambulance, Urgent phone calls to nearby relatives/ family doctors and Search Medical services at any time 24x7. (Also in the present time, many families, old age couples, students, workers, etc. are residing as lonely in the towns or cities). So, anyone login into this App with his location address and mobile number. It includes Blood Help, Ambulance Help, Emergency Contacts, Medical Services. Also, any Citizen can register himself as a Service Volunteer like a Blood Donor, Ambulance provider, Medical Service provider, etc.

Features

- Blood Help facilitates to find Blood donors on the requirement and also to register voluntarily as a Blood Donor
- Ambulance Help facilitates to call for Ambulance in Emergency from 108 services, private hospitals, or other personal ambulances
- Emergency Contacts facilitates the registration of contacts of 3 relatives and a Family doctor, which will be used or called by the citizen in any Emergency
- Medical Services facilitates to find out nearby Medical stores, Hospitals/Clinics, Para-Medical staff, Health workers, etc.

 Ashok Kumar Lodha (ashok.lodha@nic.in)



https://play.google.com/store/apps/details?id=com.chittorgarhAarogya&fbclid=IwAR2oCJ-GsgRdon0hKvrtKwA3NdVc51DWrtIpMda_WDaiK2wM1ApN3GHA


Bijnor JanSamwaad

NIC Bijnor, Uttar Pradesh has developed 'Bijnor JanSamwaad' mobile app for citizens to interact with Government officials for their local issues and get information on Government schemes. This app provides the contact details of Govt. Officers and press releases issued by the Information Department, UP.

1st Screen will show the purpose of this mobile Application. Information shall be collected by the government from citizens about the various local issues like Swach Bharat Abhiyan (Requirement and use of Izzat Ghar, motivation of citizens to achieve ODF, cleaning, water lobbying, etc.), development (Road, drainage, construction of panchayat, samudayik Kendra, etc.) issues. The user shall be asked to register to provide his mobile number. The application will verify the number through OTP and the application shall be installed. Information about user district, Block, Gram Panchayat, the village is asked. This mobile shall be fixed for this village only. The user shall be asked to provide his personal information like his name, father name, Age, education qualification, profession, photo, etc. The user shall be asked to set one four-digit PIN so that no one other than him can use this mobile to upload any issue.

After installation of the application, the user can use the application using his 4 digit PIN. He may change his PIN using options given by him at the time of setting his mobile either through OTP, email, or any security question-answer option.

After getting installed the mobile application, the user can upload his issue related to above mentioned issues (selection through combo box) along with text message and photograph.

 Nand Kishore (nk.agrawal@nic.in)



https://play.google.com/store/apps/details?id=com.bijnorjansamwaad.simplifiedcoding&fbclid=IwAR1MBWTR8XnUMHf5Va2_5lxHsYmUz24kCUFTuCb_wLcRgJUN-XXE


Matritva

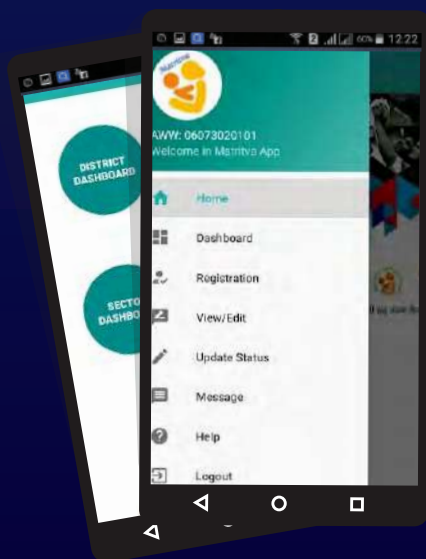
NIC Kaithal, Haryana developed 'Matritva Mobile App' facilitates the Anganwadi Workers to register pregnant women in the region for their health/immunization schedules till childbirth. This app acts as a single point of contact/information amongst the workers, their Senior officers, and the Woman & Child Development/Health Department to monitor the activities.

Matritva mobile app is helpful in the health/immunizations of pregnant women. Anganwadi workers register the pregnant women and further communicate/ counseling them about their Immunization/ Ante Natal Checkup on scheduled dates till childbirth. Matritva Mobile App will act as a single point of contact/information among Registered Women/ Anganwadi workers/ Supervisor/ WCDPO/ DPO as well as Woman & Child Development/ Health Department to cover all the above activities.

The mobile app will cover the following aspects:

- Online Registration of pregnant women by Anganwadi workers (AWW)
- Accessibility of App only to registered Women on registered mobile numbers through OTP-based login
- Online view of Immunization / Ante Natal Checkup schedules at any time on a single click
- Updation of Immunization/ Ante Natal Checkup/ Childbirth status details by registered Woman/AWW.
- Dashboard for Anganwadi workers/ Supervisors/ WCDPO/ DPO to monitor the Scheduled/ Active case/ Closed case/ Sex Ratio in their sector
- Two-way Instant Messaging feature among registered Women/AWWs/Supervisors
- IEC activities on Schemes of Women and Child Development Department

 **Deepak Kumar** (dk.khurana@nic.in)



https://play.google.com/store/apps/details?id=in.nichryktl.matritva&fbclid=IwAR2oCJ-GsgRdon0hkrKsSTwwA3NdVcs1DWrtPmDA_WDaiK2wM1ApN3GHA

Aama Odisha Aama Zilla

NIC Balangir, Odisha developed 'Aama Odisha Aama Zilla' Mobile App is a Bilingual G2C (Government to Citizen) Android-based single application for all Districts of Odisha. This app also acts as a digital platform for showcasing Handloom, Art & Craft of the State.

The app aims to integrate and bring under the umbrella, the social, the service, and the traditional aspects of Nayagarh, Odisha. With the revolution in digital technology and the boom of smartphones, the requirement to easy access to information and staying updated with local news and happenings is a necessity. The app contains a total of seven sections- Agriculture, Revenue, Tourism, Law & Order, Transport, Health, Education. It aims to be a one-stop solution to the problems currently faced by the members of our society. The app can be used by tourists and travelers to navigate their way through the city, catch up on local happenings, This app can also be used for local announcements to draw attention to important events being held in the city. The additional benefit of this would be the easy access of all information with a single tap.

Features

- Integrated App - Officials of state & Districts can post text & media messages for citizens
- Digital Platform-Promotes Handloom, Art & Craft of the Local Districts
- Urgent Announcements -Emergency broadcast for compliment areas, medical camps & weather alert
- Covid Dashboard-Covid statistics, infection summary, hospital helpline & vaccination coverage

 **C.V.K. Maruti Rao** (cvk.maruti@nic.in)




<https://play.google.com/store/apps/details?id=in.nic.aamaodisha&fbclid=IwAR02WznAqJLWQzI9z4jz-g-PcGefaTGtu-QnHcA1MhzzE9VvM3HXycrg>

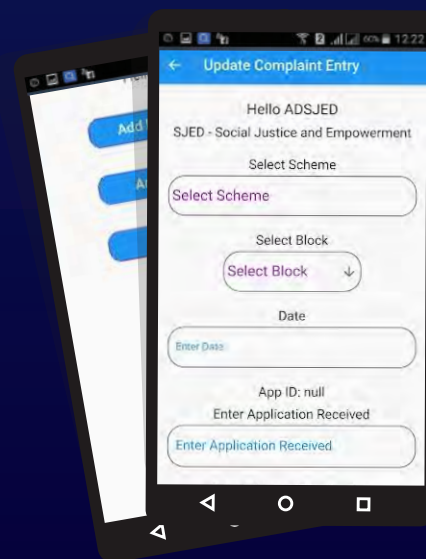
Flagship Monitoring System

A Mobile App for District Administration (G2G) to monitor the Flagship Programme/ Schemes related to various departments of the district through Mobile Governance. Using this App, District Collector can know and Monitor - the status of No. of Applications received by the concerned district-level department under Flagship schemes and its disposal, so that any such pendency reported to State Government/ Hon'ble CM/ Grievance Portal can be minimized or nullified.

Admin can add the User, Department, Schemes and Map the Scheme with the Department through the App while District Level User department will perform Flagship Scheme-wise data entry of No. of Applications received in respective blocks of the district on a specific date and afterward user can update No. of Applications disposed of, against that entry. Hence, Applications that are still not disposed of by the department will be shown in Reports with Red Indication for specified Number of Pending Days and this will help district administration to Monitor and take follow up action for such pendencies.

Various MIS Reports will be provided through the App for effective monitoring purposes. Hence, when the pendencies are effectively monitored through Mobile App then such cases will not be reported to State Government on Grievance Portal or CM Helpline and will enhance the performance of the district administration, minimizing the citizen grievances of the district. Presently, App is configured for the State of Rajasthan and Gujarat with their districts and blocks using LG Directory Code.

 **Hemant Mehta** ((hemant.mehta@nic.in)



https://play.google.com/store/apps/details?id=banswaraflagshipmonitoring.banswara_flagship_monitoring

Chhattisgarh becomes first implementing state of Vahan & Sarathi faceless services

The Chhattisgarh Transport Department is going to deliver the Smart Card-based Driving License (DL) and Registration Certificate (RC) to the citizens of Chhattisgarh at the address registered by them on the Transport portal. On 1st June 2021 Hon'ble Chief Minister of Chhattisgarh, Shri Bhupesh Baghel launched this new facility in virtual mode. The event was chaired by Shri Mohammed Akbar, Hon'ble Transport Minister of Chhattisgarh. Shri Kamal Preet Singh, Secretary & Transport Commissioner, Shri Deepanshu Kabra, Addl. TC and Shri Shailabh Sahu, Asst TC (Core team members) were present at the launching site.

The Addl Transport Commissioner highlighted the salient points of the project and a two-minute beautiful and informative video was also played depicting the entire process of the door delivery system of Smart Cards.

Later in the press conference Mr. Mohammed Akbar, HTM exclusively thanked the NIC team comprising Shri Joydeep Shome, Shri B.V. Reddy,



Hon'ble Chief Minister, Shri Bhupesh Baghel launching the services in virtual mode

Dr. A. K. Hota, SIO Chhattisgarh and Shri MSV Subrahmanyam and Shri Y.V.S. Rao for their untiring efforts in realizing the project in a short period of time.

- Y. V. Shreenivas Rao, Chhattisgarh

Hon'ble CM Uttarakhand launches Integrated Portal for Around 200 Websites of Uttarakhand Government Schools covered under Atal Utkrisht Vidyalaya Scheme

The school websites of around 200 Government schools in Uttarakhand selected under the Atal Utkrisht Vidyalaya scheme were inaugurated by Hon'ble Chief Minister of Uttarakhand Shri Tirath Singh Rawat on 9th June 2021 at Dehradun. The School Education Minister Hon'ble Shri Arvind Kumar Pandey, Secretary (Education), Director General (School Education, GoUK) and other senior officers of School Education Department were present in the launch event. Shri Sanjay Gupta, Scientist-F and Smt. Pushpanjali, Scientist-C coordinating the project from NIC Uttarakhand also attended the event.

With the goal of making quality education accessible to all, the Government of Uttarakhand has launched the Atal Utkrisht Vidyalaya



Hon'ble Chief Minister, Shri Tirath Singh Rawat launching Integrated Portal

scheme for Government schools. Under this scheme, around 200 schools, comprising two government schools from each block of every district in the State, have been selected. These schools are given affiliation with CBSE board with the objective to improve pattern of study, quality of education and availability of facilities etc.

- Dr. Jagjeevan Bist, Uttarakhand

Launch of Mobile App "Lawngtlai Certificate" under DGMC challenge for Lawngtlai District, Mizoram

In a view to promoting m-Governance in district administration under DGMC (District Governance through Mobile: Challenge for District Centres), NIC Lawngtlai District, Mizoram – in coordination with Shri V. Lalruatlana (MCS) SDO (Sadar) Lawngtlai District launched the mobile app for citizens on 12th April 2021.

The Mobile app "Lawngtlai_Certificate" is developed to provide effective and fast services to the citizens of the district. Through this app, citizens can apply for an Income Certificate online after registering and submitting all required data. We shall update the app for Tribal, Residential, and other Certificates according to District requirements. To access the services users need to register first and then after signing in they can select the services and enter the data. From the Admin side, they have access to view all requests for services and after getting Certificates from the e-District portal they will upload the Certificate for



Launching "Lawngtlai Certificate" Mobile App by Shri V. Lalruatlana (MCS) SDO (Sadar) Lawngtlai District, Mizoram

a particular user and the user will be able to view or download it. This app is available on the Google play store at the following link:

https://play.google.com/store/apps/details?id=com.lawngtlai.fresh_flutter

- Lalmachhuani, Mizoram

Hon'ble Chief Minister Assam, reviews KRITAGYATA (Online Pension Sanction and Payment Tracking)

K on 26th June 2021, Dr. Himanta Biswa Sarma, Hon'ble Chief Minister of Assam reviewed the activities of the Pension & Public Grievances Department, Assam. During the review, Hon'ble Chief Minister also reviewed NIC developed portal "Kritagyata", an online pension sanction and payment tracking system which aims to reach pensioners and bring them under a 'one-stop solution' digital platform.

Earlier on 1st October 2020, during pilot launching, the then Hon'ble Chief Minister of Assam Shri Sarbananda Sonowal had flagged off Kritagyata. The objective of the Kritagyata Portal is to ensure timely and accurate payment of pensions and all retirement dues to pensioners. Pensioners can access this online system and submit their data online and after processing by Departmental officials, the pensioners can also view & download their PPO online.

During the review meeting in his conference hall on 26th June 2021,



Hon'ble Chief Minister Assam, Dr. Himanta Biswa Sarma, appreciated the online System and suggested that all other pension cases apart from superannuation should also be shifted in a phased manner to Kritagyata Portal, along with SMS Alerts and directed the Department to take necessary measures in this regard.

- Kavita Barkakoty, Assam

Hon'ble Minister, Shri Samir Ranjan Dash inaugurated the online learning management portals "E-Pathashala" and "E-Mulyankan"

S hri Samir Ranjan Dash, Hon'ble Minister of School and Mass Education inaugurated the online learning management portals "E-Pathashala" <http://epathashala.odisha.gov.in/> and "E-Mulyankan" <http://emulyankan.odisha.gov.in/> on thursday, 17 June 2021. Amid the second wave of COVID-19 pandemic and closure of schools, Government of Odisha launched these two online portals for the students under School & Mass Education Department (S&ME) in the State of Odisha to provide digital content, online teaching and assessment (both online & offline).

Shri Satyabrata Sahu, IAS and Principal Secretary, Department of School and Mass Education said the students who dropped out due to the COVID-19 pandemic and also the migrant students would find the portal useful and their assessment can be done online.



Shri Bhupendra Singh Poonia, IAS, State Project Director (SPD), OSEPA spoke about the steps initiated to provide teaching through the portal to the students from June 21 across the State.

- Hara prasad Das, Odisha

Launch of CGHS convergence with PMJAY scheme and Rashtriya Arogya Nidhi and Health Minister's Discretionary Grants (HMDG) through National Health Authority (NHA)'s IT Platforms

H on'ble Dr. Harsh Vardhan, Union Minister of Health and Family Welfare on 1st June 2021 launched the revamped Central Government Health Scheme (CGHS) and the Umbrella schemes of Rashtriya Arogya Nidhi (RAN) and Health Minister's Discretionary Grant (HMDG) in the presence of Shri Ashwini Kumar Choubey, Minister of State for Health and Family Welfare. The Union Health Minister was delighted to inform everyone present that this was a solid step towards the digitalization of healthcare services: "It was one of my dream initiatives and I have been waiting to see the launch of these schemes. This will enable seamless delivery of health-



care services to eligible beneficiaries under these schemes by making the whole process paperless."

The hospital's processing of the application, submission of claims, CGHS team's sanctioning, and release of payment would be done online on the platform henceforth. The NIC CGHS team has developed a software solution to provide e-referral and pensioners' data through web services.

- Piyush Gupta, Ayushman Bharat and NDHM Division

Hon'ble Chief Minister, Himachal Pradesh launches Himachal Covid Care Mobile Application

Shri Jai Ram Thakur, Hon'ble Chief Minister, Himachal Pradesh launched the Himachal Covid Care mobile app on 22 April 2021 at Shimla to enable better interaction of home isolated patients with the HP Health Department. Shri Suresh Bhardwaj, Hon'ble Minister for Urban Development, Dr. Rajiv Saizal, Hon'ble Minister for Health and Family Welfare, Shri Amitabh Avasthi, Secretary of Health and Family Welfare was present at the virtual function which was made available to a large number of Asha workers, Panchayati Raj representatives, etc.

"Himachal Covid Care mobile app" enables Covid19 positive patients, who are under home isolation to download the mobile app and self-register in the App using their mobile number and name. The patients select their District and Health Block and enter other required details. Then the concerned Block Medical Officer assigns a Medical Officer to interact with the registered patient. The Medical Officer prescribes medicines, home isolation guidelines, etc, which are also available as part of App. The patient enters daily temperature, Oxygen level, pulse, and other symptoms so that the MO can prescribe or modify treatment till the patient is fully recovered. Lots of MIS data is available in the App as per user role for higher authorities too and all data is sent to



the National Health Mission through email twice so that all patients are contacted through the App.

This App has been developed by the Centre of Competency for Mobile App Development, Shimla, NIC Himachal Pradesh on Android platform initially and will be available on Google Play store under NIC Account. Presently, the App is available through the Mobile Apps section of the Himachal Government portal at <https://himachal.nic.in> and State National Health Mission website at <http://nrhmhp.gov.in>.

- Ajay Singh Chahal, Himachal Pradesh

Dr. Neeta Verma, DG NIC presided over the launch of Mobile App for Payment of Property Tax

Dr. Neeta verma, DG NIC presided over the launch of the Mobile app by Shri Gyanesh Bharti, Commissioner, SDMC. The app has been designed & developed by NIC MCD for Payment of property Tax by the citizens of Delhi under the jurisdiction of 3 MCD's. DG NIC along with the commissioner also reviewed 15-16 applications developed & implemented by NIC for 3 MCDs.

This mobile app enables citizens to pay their property tax online. Property Tax is one of the online citizen services available to the public for paying taxes on time which is cashless, paperless and faceless for ease of the taxpayer. For the convenience of Citizens, a Mobile Application is launched available for Android and IOS devices where Citizens can pay the property tax using this Mobile App.



Launching of Mobile app "Payment of Property Tax" by Shri Gyanesh Bharti, IAS, Commissioner, SDMC & presided by Dr. Neeta verma, DG NIC

- Informatics News Desk, NIC-HQ

Hon'ble Minister of Manipur, Shri Awangbow Newmai launches the Website for Sericulture, Manipur

Hon'ble Minister for Sericulture, Manipur Shri Awangbow Newmai launched the newly developed website (<https://serimanipur.nic.in>) for Department of Sericulture, Govt. of Manipur on 16th April 2021 at the inaugural function of Cocoon Buyers and Sellers Meet cum Exhibition 2021 held at Project Management Complex, Sangaipat, Imphal-East.

The website is developed and hosted by NIC, Manipur. The Hon'ble Minister stated that this newly developed website will help in the dissemination of information to the general public about the various schemes taken up by the department. He further added that since Manipur's geographical area consists of both hilly and plain, informa-



Hon'ble Minister launching the Website of Sericulture, Manipur

tion dissemination during this pandemic is very difficult. This website will surely facilitate providing information to the beneficiaries.

- Chhatrajit Pangambam, Manipur

NIC VC Service covers Inauguration of the new Court Building by the Hon'ble Chief Minister of Tripura

Hon'ble Chief Minister of Tripura, Shri Biplab Kumar Deb inaugurated the new Court Building of Sub-Divisional Judicial Magistrate and Civil Judge (Jr. Division) at Sabroom under South Tripura District through NIC's Video Conferencing System in the august presence of Hon'ble Shri Justice Akil Kureshi, Hon'ble Chief Justice, High Court of Tripura on 22nd May 2021 at 11.30 AM.

Hon'ble Minister of Law, Shri Ratan Lal Nath, Hon'ble Judges of the High Court of Tripura, Hon'ble Shri Justice S. Talapatra, Hon'ble Shri Justice A Lodh, Hon'ble Shri Justice S. G. Chattopadhyay and Shri Sankar Roy, Hon'ble MLA, Sabroom were also present to grace the occasion.



- Arnab Pal, Tripura

Soft launch of M-Nivaran Mobile App By Deputy Commissioner Faridkot

Shri Vimal Kumar Setia, IAS, Deputy Commissioner Faridkot has officially launched Mobile App M-Nivaran- Accessibility on Mobile on 7th April 2021. In this event, Shri Anil Katiyar, DIO, NIC; Shri Amirk Singh; DPRO Faridkot; Shri Sukhraj Singh DRO Faridkot and media persons were present on the occasion.

The Deputy Commissioner said that Due to the COVID-19 Pandemic situation it is a very hard time for citizens. To overcome this we try to provide citizens a tool to make accessible to everyone including DC/ SSP/ MP/ MLA's and other nodal officers of various schemes launched by the Government of Punjab.

The peculiar features of this app help citizens to seek immediate help when their life is in danger with just one click. Girls can seek immediate help using the panic button. Geolocation-based tracking will



help if Citizen is in danger. In addition, Citizens can lodge complaints, suggestions, and feedback to any office with or without disclosing their identity.

- Parminder Kaur, Punjab

Hon'ble Chief Minister, Himachal Pradesh launches HP Water Bills Mobile App

Shri Jai Ram Thakur, Hon'ble Chief Minister, Himachal Pradesh launched the HP Water Bills mobile app on 22 March 2021, at Janjeheli, District Mandi, on the occasion of World Water Day, in the presence of Hon'ble Jal Shakti Minister Shri Mahender Singh. On this occasion, a presentation was given, by Shri Sanjay Thakur, Technical Director from the software development team, from NIC, HP State Centre, Shimla, explaining the functionality of this mobile app. Hon'ble Chief Minister, Himachal Pradesh also interacted with the Panchayati Raj representatives and citizens of four panchayats belonging to different districts, via videoconferencing, regarding Jal Jeevan mission and took the feedback about the benefits, this mobile app will provide to the Citizens.

HP Water Bills app enables the citizens to pay their water bills issued by the State Jal Shakti Department, from time to time as well as to pay the water bills amount in advance, using the e-Challan payment gate-



way of HP State Treasuries, Accounts, and Lotteries Department. This app facilitates consumers to get information readily about water bills and download it to keep a record. Presently, out of 13.5 lakh consumers, about 9 lakh consumers will be able to use the services of this App for making water bill payments.

- Ajay Singh Chahal, Himachal Pradesh

The Chhattisgarh Education Minister releases CGBSE 10th Board Final exam 2021 results

The Chhattisgarh School Education Minister, Dr. Prem Sai Singh Tekam released the Secondary Education (CGBSE) High School Main Examination 2021 results through video conference on Wednesday, 19th May at 11 am in the presence of Dr. Alok Shuka, IAS, Chairman, Chhattisgarh Board of Secondary Education (CGBSE); Prof. V.K. Goyal, Secretary, CGBSE, Raipur and the officials of NIC.

Within 6 hours 1.9 Cr+ hits have been received. Maximum 2673 requests have been received per second. For result publication, the Network Load Balancing (NLB) and Nginx Cluster architecture were set up. No delay was reported from anywhere.

In VIDIA (Vidyalaya Information through Digitally Integrated Application) portal, school-wise results have been provided in school login.

Various combinations of application and database technologies have been used to provide uninterrupted output for students, parents,



and schools. Virtualization has been used in State Mini-Cloud Setup to maximize resource utilization and management. Open-source technologies used are MariaDB - Database Server, CentOS - Operating System (OS), Nginx - Load Balancer.

- Y. V. Shreenivas Rao, Chhattisgarh

Hon'ble Chief Minister, Manipur launched e-Government Receipt Accounting System (eGRAS)

This is a simple & quick payment method that enables the public to pay taxes by making payments anytime & anywhere.

The Finance Department (FD), Government of Manipur, has decided to receive payments electronically. e-payment is a mode of payment in addition to the conventional methods of payment offered by the Government of Manipur. The acceptance of online payment of Manipur State's Taxes through the internet portals of various banks have been developed, without having any implication on the existing procedure of the executive and accounting agencies of the Department. To avail of this facility, the taxpayer is required to have a net-banking account with any of the banks listed by the government on this site. The facility of Payment Across the Bank Counter is made available (with



limited Banks) for those who do not have a net banking account with the banks participating in GRAS.

- Chhatrajit Pangambam, Manipur

Hon'ble Revenue Minister of Bihar Shri Ramsurat Kumar inaugurated the Suo Mutation in Bihar

Hon'ble Revenue Minister of Bihar Shri Ramsurat Kumar inaugurated the Suo Motu Mutation in Bihar on 1st April 2021 from his chamber with all COVID precautions. Shri Vivek Kumar Singh, Additional Chief Secretary, Department of Revenue & Land Reforms were also present during the event. Senior officers of Revenue Department, Registration Department and Media persons of all renowned channels/Dailies were also present during the inauguration function.

NIC team has successfully implemented Suo Motu under the leadership of Shri Rajesh Kumar Singh, SIO & Deputy Director General, Bihar. The team is led by Shri Somesh, HoD & Sr. Technical Director, Project Coordinator Shri Sanjay Kumar, Technical Director, and team members Shri Md. Jawed Manzar, Technical Director, and Shri Sanjeev Kumar, Scientist-C.



- Rajiv Ranjan, Bihar

e-Payment Of Court Fees and e-Filing Inaugurated at Orissa High Court

The eCourts project in Odisha achieved another milestone by the launch of 'eFiling' portal (<https://efiling.ecourts.gov.in/or/>) for online filing of cases in 244 Court establishments across the State and 'ePay' portal (<https://pay.ecourts.gov.in/epay/>) developed by NIC for online payment of Court fees in the High Court & District Courts on 5th April 2021.

Chief Justice of Orissa, Hon'ble Dr. Justice S. Muralidhar launched the above services and inaugurated a Facilitation Centre for e-Payment of Court Fees in the High Court complex, Video Conferencing cabins in every District Court complex, and e-Sewa Kendras in 78 Taluka Court complexes and offered these services for the benefit of the litigants and advocates.

Addressing a gathering at more than a hundred and fifty Court locations comprising District Judges, Judicial Officers, and lawyers working in the District and Subordinate Courts across the State of Odisha who was joined in the ceremony through video conferencing in the presence of Hon'ble Judges of the High Court, the Advocate General, Odisha, the



Chief Justice of Orissa, Hon'ble Dr. Justice S. Muralidhar inaugurating a Facilitation Centre for e-Payment of Court Fees

President of the High Court Bar Association and Officers of the Registry, Chief Justice emphasized upon the objectives behind launching these e-services and called upon them to embrace the new technology to enhance the efficiency of the State's judicial system

- Hara Prasad Das, Orissa

eSAJAG Mobile App launched by District Collector, Jaisalmer, Rajasthan

The Mobile App eSAJAG designed and developed by NIC, Jaisalmer, Rajasthan and launched by Shri Ashish Modi, IAS, District Collector & District Magistrate, Jaisalmer. The app is available on the Play Store at the following link <https://play.google.com/store/apps/details?id=nic.rajjai.esajag>

eSAJAG Mobile App, a News Clips Surveillance is designed for district administration as an initiative for the quick response of the public. It provides an easy way to submit various issues, suggestions, and appreciations published in the newspaper along with pictures. The same is forwarded to the concerned department's officer to take action and respond. The concerned officer checks news clips and replies to facts and actions taken by the department. App provides facility to the district administration to monitor department wise reply and action



District Collector, Jaisalmer, Rajasthan launching eSAJAG Mobile App

taken on various issues, suggestions, and appreciations. The use of the eSAJAG mobile app will provide a prompt response system to various issues of the district.

- Amit Agarwal, Rajasthan

Anemia free Balodabazar Mobile App launched in Balodabazar district, Chhattisgarh

The Mobile App "Anemia free Balodabazar" under District Governance Mobile Challenge (DGMCC) was launched by Shri Sunil Kumar Jain (IAS) Collector Balodabazar – Bhatapara. Dr. Faria Alam Siddiqui (IAS) CEO Zila Panchayat, Shri Khemraj Sonwani CMHO Balodabazar, Shri L R Kachchhap Program Officer WCD, Smt. Shrishti Mishra DPM NHM, Shri Satyanarayan Pradhan Scientist C & District Informatics Officer NIC Balodabazar, Public Relation Officer Shri Munudau Patel, and Shri Nitesh Chakradhari were also present during the occasion.


During the launch the app was demonstrated by District Informatics Officer, Collector Shri Sunil Kumar Jain appreciated the NIC Team of Balodabazar for developing the app in a short duration.



Mobile app Anemia free Balodabazar launching in Balodabazar district, Chhattisgarh

- Ashok Maurya, Chhattisgarh

Virtual Appointment Mobile App launched by District Collector Dungarpur, Rajasthan

 irtual Appointment for Citizen mobile App developed by NIC District Centre, Dungarpur was launched by District Collector, Dungarpur, Shri Suresh Kumar Ola. Mobile App is available on google play: https://play.google.com/store/apps/details?id=in.nic.raj_dungarpur

Mobile App is a smart appointment booking system that provides Citizens an easy way of booking an appointment with the District Administration online. This is a Mobile-based application that overcomes the issue of managing and booking appointments according to the user's choice or demands. Users can view various booking slots available and select the preferred date and time. At the scheduled time video call was established with citizens from the Collector Office. This system helps to



reduce the waiting time of the Citizens. Users can select the appointment time according to their preference.

- Amit Agarwal, Dungarpur Rajasthan



NIC Celebrated International Yoga Day (IYD) 2021

June 21st is celebrated as International Yoga Day (IYD) all over the world since its inception in the year 2015. National Informatics Centre is celebrating the 7th International Day of Yoga, with several activities such as familiarizing employees with Common Yoga Protocol (CYP), Online Quiz, Awareness Campaigns, Workshop by Yoga Expert & much more.

At the outset Ms. Savita Jain, NIC HQ welcomed Director General Dr. Neeta Verma, and all the officers of NIC by extending warm wishes in greeting all

a happy Yoga Day. During the program, DG NIC, Dr. Verma addressed the NIC fraternity on the importance of Yoga. She mentioned that Yoga practice provides a comprehensive approach for the well-being of the body & mind, improves concentration, and also increases strength & resilience.

Afterward, a Yoga Instructor from the Morarji Desai National Institute of Yoga spoke about Yoga practices to boost immunity and improve respiratory function. She explained Yoga in daily life and during Covid19 with a demonstration of various Yoga postures for living a healthy life.

The event concluded with a Vote of Thanks to all participants by Shri Virender Tyagi, yoga coordinator of NIC.

- Virender Tyagi & Savita Jain, New Delhi



NIC receives many Awards at the APAC India Digital Empowerment Awards 2021

APAC INDIA DIGITAL EMPOWERMENT AWARDS' seeks to recognize the innovative initiatives, products, and solutions that are making an impact. 'APAC INDIA DIGITAL EMPOWERMENT AWARDS' is virtually held on 8th July 2021, over National Network NICNET. Dr. Neeta Verma, Director General, NIC was the keynote speaker on 8th July 2021 in the meet.

1. The Project "Andhra Pradesh Minerals Vehicle Tracking System (APMVTs)" of Andhra Pradesh Space Applications Centre (APSAC), ITE & C Department, Government of Andhra Pradesh received the Indian Digital Empowerment Award 2021 under the category Star State Department for Using New Age Technologies – Geospatial & IoT based Vehicle Tracking Solution.

2. The Project "Odisha One and Mo Seba Kendra Facilitation of all State Government services through digital platform" of Electronics and Information Technology Department, Government of Odisha received the Indian Digital Empowerment Award 2021 under the category Digital Empowered State of the Year For The Project.

3. The project "Communication Facilitation over National Network NICNET" of National Informatics Centre, Akola (Govt. of India Organization) received the Indian Digital Empowerment Award 2021 under the category "Excellence in Government Process Re-engineering for Digital Transformation"



IMC Digital Technology Awards 2020

The IMC (Chamber of Commerce and Industry) Digital Technology Awards for recognizing and rewarding the accomplishments of the IT industry innovation and digital transformation of organizations across a varied spectrum.

MIS portal for Jan Shikshan Sansthan Scheme (JSS) has been awarded the IMC Digital Technology Awards 2020

MIS portal for Jan Shikshan Sansthan Scheme (JSS) developed by NIC for Ministry of Skill Development & Entrepreneurship (MSDE) has been awarded the IMC Digital Technology Awards 2020 as the Best Project within the End User Company - Government through the Virtual award function held on Thursday, June 17, 2021.

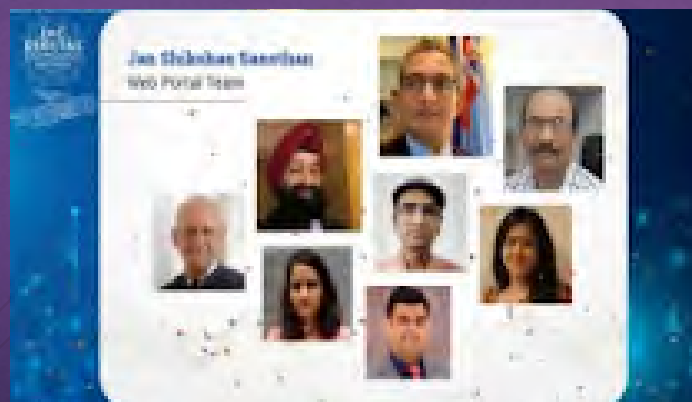
NIC developed MIS Portal for Jan Shikshan Sansthan Scheme, an initiative of the Ministry of Skill Development & Entrepreneurship, awarded with 'IMC Digital Technology Awards 2020', as the Best Project within the End User Company-Government. Jan Shikshan Sansthan (JSS) is a scheme for conducting skill up-gradation vocational training in the areas of Non-formal, Adult, and Continuing Education programs in both industrial/ urban and rural areas especially for the underprivileged. The portal is aimed at bring-

ing in transparency, accountability, providing quality and timely information to all the stakeholders of the Skill Ecosystem.

IMC awarded Arogya Darshak Maps - GIS Mapping of Containment Zones and Hospitals.

IMC awarded Arogya Darshak Maps - GIS Mapping of Containment Zones and Hospitals with IMC Digital Technology awards 2020 for best digital implementations in Government Sector In June 2021. During the Covid-19 pandemic situation, the Arogya Darshak map was one of the initiatives taken by NIC Nandurbar Centre with help of the GIS Delhi Team in collaboration with district administration and district health officials. The project has been recognized by various Technology awards and replicated in many districts across India.

Following are the team members who have been recognized and appraised are -Shri Dharmendra Jain, DIO & STD, NIC Nandurbar District Centre, Shri Surendra Patil, ADIO, Shri Dhruvajyoti Sarma, PSA, GIS division NIC New Delhi, Shri Sumit Bhavsar, FMS Engineer, NIC Nandurbar, Shri Neeraj Patil, FMS Engineer, NIC Nandurbar.



World Summit on the Information Society Prizes 2021, ITU, Award for NIC's ServicePlus Platform



NIC's **ServicePlus** Platform has awarded the 'World Summit on the Information Society Prizes 2021, ITU, Champion & Winner Award' under the Category-8 WSIS, 'ICT Applications'. The prize ceremony is conducted on Tuesday 18 May. This achievement marks an international recognition for ServicePlus, which is an open-source & multi-tenant architecture-based configurable service delivery framework.

ServicePlus is a metadata-based eService Delivery Framework that acts as a framework for ensuring integrated eService Delivery. It offers exclusive platforms for service definition and service consumption. Being a low-code/no-code (LCNC) development platform, it allows the service owner to dynamically generate various forms, processes and combine them together to generate an end-to-end service. ServicePlus reduces the gap between service providers and service seekers by facilitating information exchange wherever required. The platform promotes transparency and accountability in the working of service providers as well as service seekers. ServicePlus strengthens good governance and empowers the citizen to avail services online.

Dr. Ranjna Nagpal, DDG receives Agriculture Today Group's Agri-Extension Award 2021 for Excellence in Extension Project Design at a virtual event

The Agri-Extension Award 2021, instituted by Agriculture Today Group, presented the Excellence in Extension Project Design Awarded to Dr. Ranjna Nagpal, HOG & DDG along with officials from the project team, Ms. Pratibha Lokhande, DDG, Ms. Mala Mittal, HoD & Sr. Technical Director, Shri Aseem Gupta, Sr. Technical Director, Shri Shailendra Saxena, Scientist-D and Shri Ajay Sharma, Scientist-C for the exemplary contribution in agricultural extension for farmers' empowerment in India. The event was held virtual on 9th April, 2021.

The initiatives for which the award was considered are Kisan Suvidha, Kisan Rath Mobile App, Agri-Clinics & Agri-Business centres and the Agriculture Technology and Management (ATMA)

Kisan Suvidha is integrated Web Ap App which aims to bring all Agricultural Schemes and Services under one umbrella for access by the farmers via a single interface, obliterating the need for multiple apps / web portals. Kisan Rath Mobile App is developed to resolve the transportation issues of Farmers, FPOs and Traders. Agri-Clinics and Agri-Business centres scheme supplements the public extension system through committed private extension services by educated and trained candidates in a self-employment mode. The Agriculture Technology and Management (ATMA) scheme aims to make the extension system farmers driven and facilitate technology dissemination up to field level.

Facility has been provided to update the extension activities details and physical and financial targets and achievement of the extension activities which have been performed at village level by the states and



district extension officials. The portal is integrated with Agriculture DBT portal, Kisan Suvidha app for sharing the details of beneficiaries under the scheme. The SMS based feedback system in local language enables the farmer to give feedback on training and extension services.