

# **Informatics**

PATRON I.P.S. SETHI

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#### **ZONAL EDITORS**

**Kavita Barkakoty** Sushma Mishra **Nissy George Vinod Kumar Garg** 

#### **CONTENT SUPPORT**

Archana Sharma Hemendra Kumar Saini

#### **DESIGN SUPPORT**

Mukesh Bharti Rohit Maurya

**Sunil Kumar Amit Kumar Lodhi** Mohd. Pintu

**UXDT Division Publications Division** 

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#### **CONTACT ADDRESS**

**INFORMATICS** 379, A4B4, Floor-3, NIC A-Block, CGO Complex, Lodhi Road New Delhi-110003, INDIA Phone: 011 -24305363/65 Email: editor.info@nic.in

# **Editorial**

n a country as diverse and vibrant as India, culture is not just an identity—it is a living, breathing force. It is etched in temple walls, echoed in folk songs, woven into handlooms, and celebrated in every festival and fair. But in today's rapidly globalizing world, where digital platforms influence narratives and shape collective memory, India's cultural richness must not remain confined to museums, archives, or memory alone. It must be experienced, shared, and celebrated through the power of technology.



India, with its unmatched civilizational depth and digital ambition, stands at the unique intersection of tradition and transformation. From virtual tours of heritage sites to Al-powered translations of ancient manuscripts, from tribal archives available at a click to livestreamed folk performances—technology is no longer just supporting culture; it is actively enabling its rediscovery and reinvention.

Through initiatives like the Digital India Mission, INDIA CULTURE portal, e-Granthalaya, and the National Digital Library, platforms have emerged that make rare artifacts, regional histories, and traditional knowledge accessible to citizens across languages and geographies. Mobile apps and social media now connect young artisans with global markets. Local dialects are being preserved through crowdsourced language tools. What was once ephemeral and local is now documented, shareable, and global.

The National Informatics Centre has been at the forefront of this quiet revolution integrating digital systems, building inclusive platforms, and driving innovations that empower cultural governance. Technology today is not only preserving India's traditions it is also amplifying them to reach new generations, new regions, and new realms.

This issue of Informatics is a tribute to that vision—where culture meets code, and devotion meets data. It celebrates how technology promotes inclusivity-by enabling people of all abilities and backgrounds to experience heritage. It encourages innovationthrough AR/VR storytelling and gamified learning. It also fosters economic empowerment by connecting artisans, performers, and storytellers to wider audiences and sustainable livelihoods.

As a highlight, this issue brings you a special article on Maha Kumbh 2025, a landmark event where spiritual tradition and digital innovation converged at an unprecedented scale. With NIC at the helm, the world's largest gathering of pilgrims became India's first Digital Maha Kumbh, redefining how we experience culture in the 21st century.

Culture is not static. It evolves, breathes, and speaks the language of its time. Today, that language is digital. And India is showing the world that technology need not dilute tradition—it can deepen it. We are no longer telling our cultural story in fragments or footnotes. We are streaming it, coding it, visualizing it, and sharing it—so that every citizen becomes both a guardian and a storyteller of our timeless legacy.

Let this issue of Informatics be a reflection of that journey—from heritage to homepage, from oral tradition to cloud servers, from sacred rituals to virtual reality. In doing so, we reaffirm that our future readiness lies not in choosing between culture and code-but in blending both to shape a more connected, inclusive, and inspired nation.

-Editor-In-Chief

















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#### Disclaimer

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ttarakhand, the land of the Ganga and Yamuna, is not only known for its breathtaking landscapes but also for its growing digital infrastructure. Since its formation as a separate state in November 2000, Uttarakhand has embarked on a journey toward modernization, leveraging Information and Communication Technology (ICT) to enhance governance, public service delivery, and administrative efficiency.

Recognizing the pivotal role of technology in state-building, the NIC established its Uttarakhand State Centre in early 2001 within the Secretariat premises. Over the years, NIC Uttarakhand has evolved as the technological backbone of the state government, driving digital transformation through IT-enabled solutions, secure infrastructure, and datadriven governance frameworks. From laying the foundation of e-governance to automating key sectors, NIC has played an instrumental role in enabling seamless digital services, improving transparency, and fostering citizen engagement.

The government has been proactively aligning its initiatives with the broader vision of Digital India, ensuring that technology-driven governance reaches every district, from the high-altitude Himalayan regions to the Terai plains. NIC Uttarakhand has contributed to this vision by developing scalable IT solutions, building robust data centres, and enhancing



Ashesh Kumar Agarwal Dy. Director General & SIO ashesh.agarwal@nic.in



**Sanjay Gupta** Sr. Technical Director & ASIO sanjaygupta@nic.in

Uttarakhand, the Land Gods, is embracing digital transformation, leveraging ICT to enhance governance, transparency, and citizen services. Since NIC 2001. Uttarakhand has been the State's technology backbone, developing e-Governance solutions, secure infrastructure, and data-driven frameworks. Aligning with Digital India, NIC has bridged the digital divide districts, across enabling efficient service delivery. As emerging technologies like AI, cloud computing, and blockchain gain momentum, Uttarakhand is set for a tech-driven future.



connectivity to bridge the digital divide. Core initiatives include software development, digital infrastructure creation, secure data management, and innovative applications for governance. These efforts have significantly improved decision-making, service delivery, and resource optimization across departments.

As the state continues its digital journey, NIC remains at the forefront of driving emerging technologies such as artificial intelligence (AI), cloud computing, and blockchain into governance. The upcoming sections will explore the various e-governance projects, digital initiatives, and transformative applications that are shaping Uttarakhand's future as a technology-driven

#### **ICT Initiatives in the State**

#### **eCabinet**

#### https://ecabinet.nic.in

eCabinet, a flagship product of the National Informatics Centre (NIC), is an advanced digital platform designed to modernize Cabinet meetings for State Governments. By streamlining workflows, minimizing paper usage, and enhancing efficiency, eCabinet ensures seamless decision-making processes. Optimized for smart tablets, the platform offers a user-friendly interface replicating a traditional paper-based experience while incorporating robust security features for confidentiality.

#### **Key Components**

- eCabinet Portal: Provides Cabinet Ministers, Secretaries, and Departments with remote access to essential documents
- GAD Portal: A secure platform enabling the GAD Department to manage meeting-related tasks with high confidentiality
- Meeting Day Management System: Facilitates logistics coordination for smooth meeting oper-
- Waiting Lounge Information System: Manages waiting areas for officials and Secretaries before meetings

#### Launch and Adoption

Launched in January 2020, eCabinet has been deployed in over 120 Cabinet meetings in Uttarakhand. The solution has also been implemented in Uttar Pradesh, Arunachal Pradesh, Tripura, and Andhra Pradesh, with ongoing deployments in Maharashtra, Madhya Pradesh, Sikkim, Karnataka, and Delhi. Recognized for its excellence, eCabinet is part of NIC's 75 Best Digital Solutions Portfolio and has received the prestigious CSI Award of Excellence.

#### **Vehicle Location Tracking and Emergency Alert System (VLTEAS)**

Developed by NIC Uttarakhand in 2019, the VLTEAS system was initially designed to enhance public service vehicle safety. It has since evolved into a multi-sectoral solution for vehicle monitoring and operational efficiency.

#### Background

Under the Nirbhaya framework, the Ministry of Road Transport and Highways (MoRTH) mandated the installation of Vehicle Location Tracking Devices (VLTDs) and emergency buttons in public service vehicles. This initiative also required the establishment of Command and Control Centres (CCC) at the state level.

#### Implementation and Impact

- VLTEAS has been deployed in Bihar, Goa, Chandigarh, Mizoram, Andaman & Nicobar, Rajasthan, and New Delhi, with ongoing rollouts in Haryana, Gujarat, and Uttar Pradesh
- Over 100,000 vehicles and devices have been integrated, generating and monitoring over 4.4 million alerts daily
- · The system enhances public transport safety, particularly for women and children, while ensuring efficient fuel and device monitoring

#### **Android Apps**

- VLTS Admin App For transport and enforcement agencies
- Permit Holder App For vehicle owners
- VLT Fitness App For transport enforcement agencies
- Stop Emergency App For Command and Con-
- Track My Bus App For the general public using transport department buses

#### **Notable Deployments**

• Food Corporation of India (FCI): Real-time tracking of food grain transportation for im-



Fig 1.1: e-Cabinet portal was inaugurated by Shri Trivendra Singh Rawat Hon'ble Chief Minister of Uttarakhand

proved logistics efficiency

- Bihar Mining VLTS: Monitoring mining vehicle operations to prevent illegal mining and ensure regulatory compliance
- Gujarat Pollution Control Board: Hazardous waste transportation monitoring for environmen-
- STEMS Portal, Meghalaya: School bus tracking system ensuring child safety during transporta-

#### **StarBus**

#### https://starbus.nic.in

StarBus is a copyrighted software product of NIC, designed to digitalize bus ticket bookings for State Transport Corporations and Departments (STC/Ds). It streamlines operations, from search and booking to cancellations and refunds, ensuring a seamless public transport experience.

#### Features

- Online bus search and booking based on stations, journey dates, and bus types
- Secure transactions with robust payment gatewavs
- Live GPS tracking of buses
- Self-service dashboard for travelers
- Online bus pass issuance for long-term travelers
- · Management modules for vehicles, workforce, fuel stations, and booking counters
- Mobile app for travelers, ticket inspectors, and conductors
- Data-driven decision support system with comprehensive MIS reports

#### Implementation

Deployed in Uttarakhand, Arunachal Pradesh, Andaman & Nicobar, Jammu & Kashmir, with ongoing deployment in Manipur. The system integrates with NIC's NAPIX and other third-party platforms like RedBus and MakeMyTrip.

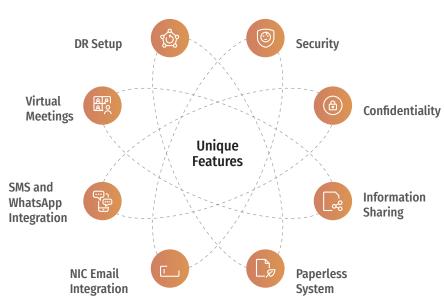
#### Raj Bhawan Secretariat Uttarakhand **Automation Project**

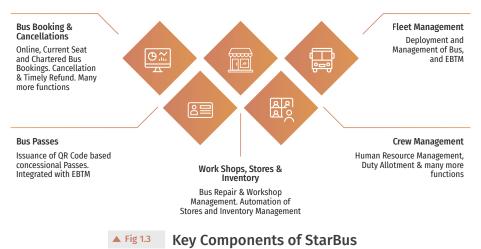
The Raj Bhawan Secretariat Uttarakhand Automation Project is a comprehensive e-Governance initiative aimed at digitizing and automating key functions of the Raj Bhawan Secretariat. This integrated web portal enhances operational efficiency by leveraging Artificial Intelligence (AI) and advanced automation technologies to facilitate seamless workflow management.

#### **Key Features**

- AI-Powered Face Recognition Ensures secure and hassle-free online appointment scheduling and gate-pass issuance
- Intelligent Virtual Assistance Incorporates NIC's AI Chatbot for handling FAQs, improving user interaction
- Al Saransh and Al Panini Integration Advanced AI modules under implementation to enhance automation and document processing
- WhatsApp Integration Enables real-time,

▼ Fig 1.2 **Features of eCabinet** 





event-based invitations and notifications for improved communication

- Automated SMS Alerts Provides status updates on applications at various processing stages
- Data-Driven Decision Support Implements advanced analytics for a real-time digital Raj Bhawan dashboard, aiding governance insights
- Mobile Application Android-based app offering on-the-go access to key functionalities and status tracking

This initiative exemplifies NIC Uttarakhand's commitment to harnessing AI and emerging technologies for efficient governance, secure automation, and enhanced administrative transparency.

#### Monitoring and Evaluation Portal for **State Water and Sanitation Mission**

The Uttarakhand Water Supply Program for Peri-Urban Areas, spearheaded by the Department of Drinking Water & Sanitation, Government of Uttarakhand, with advisory, technical, and financial assistance from the World Bank, is designed to enhance service delivery in transitional peri-urban areas. To ensure effective

monitoring and evaluation, a comprehensive digital portal has been developed, integrating advanced automation and IoT-based monitoring systems.

#### **Key Features**

- World Bank Compliance: Enables monitoring of water supply schemes in alignment with World Bank standards and performance benchmarks
- SCADA Integration: Seamlessly incorporates Supervisory Control and Data Acquisition (SCADA) systems, allowing real-time monitoring of water distribution networks
- Smart Data Analytics: Provides scheme-wise and date-wise monitoring of key SCADA parameters and pressure data, ensuring operational efficiency and timely interventions

By leveraging automation and IoT-driven analytics, the portal ensures transparency, real-time insights, and data-driven decisionmaking, reinforcing Uttarakhand's commitment to sustainable water management and efficient governance.

#### **Chardham Yatra**

a. Issuance of Green Card & Trip Card for

#### **Transport Department**

The Chardham Yatra Vehicle Registration Portal facilitates seamless vehicle registration and the issuance of Green Cards and Trip Cards for vehicles traveling to the revered Char Dham shrines-Gangotri, Yamunotri, Kedarnath, and Badrinath.

- Green Card: A mandatory document verifying vehicle compliance with transport regulations, including fitness certificates, permits, tax receipts, insurance, and pollution control certificates
- Trip Card: Records the driver's license details, passenger information, itinerary details, and trip start and end dates
- Passenger Data Integration: Data of passengers and pilgrims is automatically retrieved from the Uttarakhand Tourism Portal, ensuring verification and seamless management

#### b. BKTC Portal: Counter Automation and Online Puja Booking System

The Badrinath-Kedarnath Temple Committee (BKTC) Portal offers a comprehensive online platform for pilgrims, ensuring effortless access to religious services

- Services Offered: Online puja bookings, donation management, Yatra information, real-time updates on pilgrimage schedules, and automated receipt generation
- Automation & Transparency: Enhances transparency in temple donations and bookings, reducing manual intervention and administrative overhead
- Multi-Platform Accessibility: Available for booking via web and mobile, ensuring convenience for devotees worldwide

#### c. Online Booking Portal for Helicopter and **Ropeway Services**

NIC Uttarakhand developed a sophisticated online booking portal for Kedarnath Helicopter Services, which successfully operated between 2019 and 2022 before migrating to IRCTC.

- Replication & Expansion: The platform was later adapted for Shri Amarnath Yatra (SASB, J&K Government) in 2021
- Customization for Manipur: Currently being tailored for the Transport Department, Manipur, to facilitate digital ticketing for intercity transport services
- Integration with Payment Gateways: Secure digital transactions for seamless ticket booking and cancellations

#### **CM Suite**

NIC Uttarakhand is at the forefront of digital transformation, implementing a suite of innovative governance tools to enhance the operational efficiency of the Chief Minister's Office (CMO). This initiative focuses on modernizing government workflows, improving citizen service delivery, and enabling real-time decision-making.

#### **Key Features**

• Workflow Automation: Digitization of file movement, approvals, and decision-making processes, reducing paperwork and expediting government procedures

#### **Service Delivery Modes for Travelers**

· Search & Book Ticket

**Web Portal** 

- · Ticket Cancellation
- Wallet
- · Discounts
- · Track My Bus
- · Rating & Complaints
- Raise Alert
- · Instant Refund Status

#### **Mobile Apps**



- · Pathik for Travelers
- Device Independent ETM APP for Enroute Ticketing, Bus Inspection and Trip Chart
- · Counter/ Agent
- Booking

#### Agents



- · Online/Current Booking
- · Trip Chart Generation
- · Online Topup
- · Real-time revenue Sharing



- · Online Booking
- · Online Tonun
- Trip Chart Generation

- Real-Time Analytics & Decision Support: Data-driven insights assist policymakers in making informed governance decisions by providing a dashboard of key performance indicators (KPIs)
- Citizen Grievance Redressal System: Integrated e-Governance modules to handle public grievances efficiently, ensuring transparency and accountability
- Monitoring & Compliance Tracking: Implementation of monitoring tools to oversee project implementation, fund allocation, and policy ex-
- Multi-Channel Accessibility: The CM Suite is accessible via web portals and mobile applications, allowing stakeholders to interact with the system from anywhere

#### **Uttarakhand CM Dashboard**

Launched by the Hon'ble CM Pushkar Singh Dhami on 23rd Ianuary 2024, DARPAN 2.0 is a configurable, multilingual digital dashboard developed by NIC UP & NIC HQ to enhance governance through data-driven insights.

#### **Key Features:**

- Real-Time Monitoring: Tracks project implementation, performance metrics, and budget utilization across multiple departments, enabling better governance decisions
- Cross-Departmental Integration: Aggregates data from various government portals to provide a holistic view of state initiatives, ensuring interdepartmental collaboration
- User-Friendly Interface: Designed for ease of use, featuring intuitive navigation, graphical analytics, and interactive dashboards for policymakers and administrators
- Predictive Analysis & Early Warning System: Leverages artificial intelligence (AI) to identify project bottlenecks, anticipate delays, and propose corrective measures to ensure timely implementation of government schemes
- Public Dashboard for Transparency: Offers citizens an overview of key government projects, enhancing public trust and accountability

DARPAN 2.0 serves as a centralized digital governance platform, equipping the Chief Minister's Office with comprehensive insights into the State's development trajectory.

#### **Paperless & Virtual Property** Registration

This initiative digitizes property registration for transactions such as sales, gifts, loans, and other legal transfers.

- Complete Digital Process: Includes deed drafting, electronic signing, duty payments, validation, and real-time tracking
- Secure & Transparent: Eliminates fraud and enhances accountability
- Statewide Implementation: Being rolled out across all districts of Uttarakhand

#### **Department of School Education**

The Integrated Web Portal for Schools, Teachers & Students is a comprehensive

e-Governance platform designed to facilitate school administration, streamline processes for teachers and students, and provide stakeholders with real-time insights. The portal features multitier access, offering dedicated dashboards for teachers, students, parents, and administrators. Key advanced features include GIS & Web View Interfaces, a mobile app for real-time access, Al-powered data analytics and reports, and a Management Information System (MIS) for administrative oversight.

Additionally, the Online Lottery System for RTE Seat Allotment has played a crucial role in ensuring transparency in admissions. In 2024, a total of 4,149 schools registered on the platform, with 3,934 schools successfully verified. The system facilitated the allotment process for 35,140 available seats, processing 24,299 student applications, out of which 18,708 students were verified. Ultimately, 16,783 seats were allotted, leading to 14,681 students successfully enrolling under the Right to Education (RTE) scheme.

#### **Drinking Water & Sanitation** Department

The ICT solutions for the Drinking Water & Sanitation Department enhance efficiency and transparency in water resource management. The Uttarakhand Jal Sansthan Billing Portal, serving 9 lakh beneficiaries, facilitates seamless online bill payments, ensuring convenience and timely transactions. Additionally, the Pey Jal Nigam MIS provides real-time monitoring for over 150 drinking water infrastructure projects, enabling effective oversight and efficient management of water resources.

#### Elections

NIC Uttarakhand has developed robust ICT solutions to enhance the efficiency and transparency of election management. The Election Polling & Counting Personnel Deployment System (EPDS) ensures the randomized deployment of polling personnel to their designated assembly constituencies and

IC's contribution to various ICT is truly commendable. Projects like e-Cabinet, StarBus, VLTEAS and Heli Services have not only served its purferent States across the Nation. As the extended IT arm of the Uttarakhand cation between the Government and

Radha Raturi, IAS **Chief Secretary** Government of Uttarakhand

polling booths, minimizing biases and ensuring fair elections. Additionally, it facilitates the random allocation of counting personnel to specific assembly segments, halls, and counting tables, ensuring neutrality and accuracy in the counting process.

To further strengthen election monitoring, NIC Uttarakhand has implemented the Poll Day Monitoring System (PDMS), an SMS-based election management tool. This system enables the real-time collection of poll status updates from every polling station through the registered mobile numbers of Presiding Officers. Senior election officials, including the Chief Electoral Officer (CEO) and District Election Officers

Fig 1.5: Governor Lt Gen Gurmit Singh (Retd) launches the Al-powered Smart Automation System at Uttarakhand Raj Bhawan on 17 Oct 2023



(DEO) of Uttarakhand, have been provided with dedicated dashboards to monitor voting progress seamlessly. For the Lok Sabha General Elections 2024, a mobile application was also developed to enhance accessibility and streamline the monitoring process, ensuring a smooth and transparent electoral process.

#### Revenue

NIC Uttarakhand has successfully implemented several digital governance initiatives to enhance land and revenue management across the state.

- Land Record Management Software (Bhulekh) Implemented in all 117 tehsils of Uttarakhand, this system digitizes and centralizes land records, ensuring secure storage of digitally signed Record of Rights (RoR) documents in a unified database
- Land Use Management Software Designed to digitize the process of land use purchase and land type change permissions under the ZA and LR Acts, this workflow-based system allows applicants to apply online and track their application status in real-time. The software has been implemented across all districts of Uttarakhand, with a customized dashboard and reporting system catering to departmental requirements and Ease of Doing Business (EoDB) standards
- Revenue Court Management System (RCMS) This digital initiative modernizes the handling of land and revenue disputes by ensuring transparency, efficiency, and accountability in legal proceedings. The system facilitates case registration, progress tracking, and rectification status updates at various levels of the revenue court hierarchy, including Mandal, District, and Tehsil courts
- Survey of Villages and Mapping with Improvised Technology in Village Areas (SVAMITVA) - A flagship initiative of the Ministry of Panchayati Raj (MoPR), Government of India, SVAMITVA provides legal ownership cards (Property Cards/Title Deeds) to village household owners. The project has been successfully implemented across all 13

districts of Uttarakhand, empowering rural landowners with legal property rights

#### **Achievements**

- Drone surveys have been successfully conducted in all notified villages
- Over 3,85,636 property cards have been generated and distributed
- Nearly 7,457 villages across 115 tehsils have benefitted from the property card initiative, providing secure land ownership documentation to rural communities

These ICT-driven initiatives are revolutionizing land and revenue management in Uttarakhand, enhancing efficiency, accessibility, governance transparency across the state.

#### Pragati Portal

The Pragati Portal, a Project Performance Monitoring System (PPMS), has been designed and developed by NIC Uttarakhand for the Survey of India, Government of India. This versatile and intuitive platform enables real-time project tracking, ensuring efficient monitoring and management of ongoing initiatives. The system is equipped with early warning mechanisms to identify potential delays, allowing for proactive intervention and ensuring projects meet their milestones on time and within scope.

#### **Automation and Data Analytics Dashboard for the State Tax** Department

NIC Uttarakhand has been a key technology partner for the State Tax Department, providing comprehensive ICT solutions from end-to-end VAT computerization to the design and development of an advanced GST analytical dashboard. The GST-Prime system developed by NIC has been successfully implemented in the state, enhancing data-driven decision-making and compliance

Beyond tax analytics, NIC Uttarakhand has been instrumental in automating key administrative

IC Madhya Pradesh is playing a vital role as a trusted ICT provider helped the State improve the quality of service delivery and promote the IT ecosystem. I want to acknowledge the contribution of NIC in key eGov eTransport, eMarg, eAbkari, and eOffice, to name a few.

I am sure that NIC will continue to

I wish the entire



Secretary (IT) Government of Uttarakhand

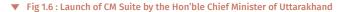
functions, including the annual transfer process of officers. Additionally, an AI-powered project is currently under development to detect cases where a proprietor's or partner's photograph is used under different names in GST registrations, strengthening fraud detection mechanisms.

To enhance security and access control, NIC has also developed a face recognition-based gate pass system for issuing secure digital gate passes at the State Tax Headquarters in Dehradun, ensuring streamlined entry management. These cutting-edge ICT initiatives reinforce the State Tax Department's commitment to transparency, automation, and efficiency in tax administration.

#### Rojgar Prayag Portal and Mobile App

The Rojgar Prayag Portal and Mobile App, developed by NIC Uttarakhand in collaboration with the Skill Development & Employment Department, is a flagship e-Governance initiative aimed at bridging the gap between job seekers and employers in both the government and private sectors. This platform enables unemployed youth to register and receive realtime vacancy notifications, while employers can efficiently find skilled manpower tailored to their

Launched in July 2023 by Hon'ble Chief Minister Shri Pushkar Singh Dhami, the portal has rapidly become a valuable resource for job seekers, service providers, and government departments. Currently, the platform has over 53,000 registered job seekers, around 100 service providers, and 30 state government departments onboarded. With an average of 400 beneficiaries leveraging this initiative, the Rojgar Prayag Portal is playing a crucial role in enhancing employment





opportunities and workforce accessibility across Uttarakhand.

#### **GPF Online Services**

The General Provident Fund (GPF) online services in Uttarakhand mark a significant step forward in digital governance, transforming how government employees manage and access their provident fund accounts. This integrated platform incorporates multiple essential modules, enhancing user experience, accessibility, and financial transparency, while ensuring seamless tracking and management of GPF transactions.

#### **UOAMS**

The Uttarakhand Online Audit Management System (UOAMS), implemented by the Finance Department of the Uttarakhand Government, is a ground breaking initiative designed to enhance efficiency and transparency in internal and financial audits. This comprehensive system facilitates audits across government departments, State Public Sector Units (PSUs), Government Societies, and all three levels of Urban Local Bodies-Nagar Nigam, Nagar Palika, and Nagar Panchayat. Additionally, it extends to the threetier Panchayati Raj institutions, covering District, Block, and Village Panchayats, ensuring robust financial oversight and accountability at every level of governance.

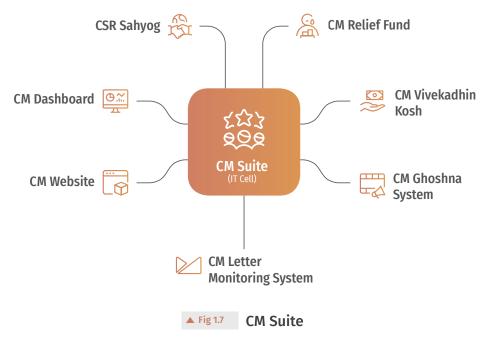
#### **RTI Online Portal**

The Uttarakhand Online RTI (Right to Information) Portal is a citizen-centric digital initiative that provides easy, quick, and transparent access to information under the Right to Information Act. This e-Governance milestone was inaugurated by Hon'ble Chief Minister Shri Pushkar Singh Dhami on 15 January 2024 at the Secretariat, along with the launch of the Online Second Appeal, Complaint, and Hybrid Hearing System. The portal empowers citizens by simplifying the process of filing RTI requests, ensuring greater government transparency and accountability.

#### MHA, Law & Judiciary

NIC Uttarakhand has successfully implemented several digital initiatives to enhance law enforcement, judiciary, and governance. These projects cater to criminal justice, evidence management, prosecution, and prison administration, ensuring transparency, efficiency, and security. Key implementations include:

- Interoperable Criminal Justice System (ICJS) - Integrating databases of law enforcement and judicial agencies for seamless data sharing
- Immigration, Visa, and Foreigners Registration & Tracking (IVFRT) - Enhancing border security and immigration processes
- e-Sakshya Revolutionizing digital evidence management for law enforcement agencies
- MedLEaPR Automating medico-legal and post-mortem reporting to improve forensic efficiency
- e-Summon and Warrant System Streamlining



issuance and tracking of legal notices and warrants

- e-Prison A comprehensive digital prison management system ensuring effective inmate record management
- eProsecution A prosecution digitization system to enhance case tracking and legal workflows • e-FSL - Modernizing forensic science laboratories with digital integration for faster and more accurate forensic analysis

#### **eCourts Services**

The eCourts Integrated Mission Mode Project is a National e-Governance initiative aimed at modernizing judicial processes across High Courts, District Courts, and Subordinate Courts. In Uttarakhand, the following implementations are transforming judicial service delivery:

- S3WaaS Platform for Court Websites Migration of all District Court and High Court websites to the S3WaaS platform for enhanced security and accessibility
- Case Information System (CIS) A unified case management application for District and High Courts
- Service Delivery Platforms:
  - · Live Streaming in three High Court courtrooms
  - · Digitization of case documents for a paperless judicial ecosystem
  - e-True Copy, e-RTI Portal, Leave Management System, and E-HCR Portal for efficient legal documentation
  - · Neutral Citation Number for case referenc-
  - ePayment, eFiling, and Witness Evidence/ Statement Recording Modules for seamless judicial operations

- · FASTER (Fast and Secure Transmission of Electronic Records) - Enabling speedy digital transmission of court orders and judgments to District Courts and Jails
- Integration with ICJS, Virtual Court, and Legal Aid Information System (LAIS) - Ensuring a connected, technology-driven judicial system

#### **Government Order MIS Application**

Government Order Management Information System (MIS) is a centralized digital solution designed to streamline the management and dissemination of Government Orders (GOs). The system automatically fetches all GOs from the eOffice Portal using web APIs while also allowing for manual uploads. This ensures efficient record-keeping, transparency, and accessibility of government directives.

#### **Statistics**

- Total Sections Registered: 161
- Total GOs Generated: 36,355
- Total GOs Published: 36,001
- Total GO Copies Downloaded: 632,424

These cutting-edge digital interventions Uttarakhand's commitment to reinforce e-Governance, judicial modernization, and administrative efficiency, driving better service delivery and governance transparency across the state.

#### **GMVN HR & HRPMS**

The Garhwal Mandal Vikas Nigam (GMVN) HR & Payroll Management System (HRPMS) is an integrated digital solution designed to streamline and automate human resources and payroll functions. This system enhances employee data management by digitizing records and automating financial transactions, including salary computation, allowances, deductions, gross pay, and net pay. By eliminating manual processes, HRPMS improves accuracy, efficiency, and transparency in GMVN's payroll operations.

#### **IFMS**

The Integrated Financial Management System (IFMS) is a web-based financial automation solution specifically developed for G.B. Pant University of Agriculture and Technology (GBPUAT). Designed to streamline university operations, IFMS enhances administrative efficiency by automating various financial processes. A key feature of this system is its dedicated Android application, which enables real-time meter reading input and on-site electricity bill generation for approximately 3,500 connections across different categories. The system includes 24 specialized modules, each designed to seamlessly manage university operations, ensuring financial transparency and operational efficiency.

#### **eSPAN**

The eSPAN (Social Security Pension Application), developed by NIC Uttarakhand, is a web-based platform aimed at facilitating the Government of Uttarakhand's social welfare initiatives. Available at http://ssp.uk.gov.in, eSPAN automates the entire pension disbursement process, ensuring timely financial support for vulnerable sections of society. The system efficiently manages three core social security pension schemes for Old Age, Widows, and Persons with Disabilities, promoting social inclusion and gender empowerment.

Since its inception in FY 2011-12, eSPAN has facilitated the disbursement of ₹249.29 crores to 4.85 lakh beneficiaries. In FY 2024-25, the platform now supports nine social security schemes, benefiting 9.32 lakh recipients, with a total disbursement of ₹1,468 crores, directly credited to beneficiaries' bank accounts. This transparent and efficient digital intervention ensures seamless pension distribution, reinforcing the government's commitment to social welfare and financial inclusion.

#### Other Initiatives in the State

NIC Uttarakhand has played a pivotal role in implementing key national e-Governance projects. driving digital transformation across various government departments. These initiatives enhance efficiency, transparency, and service delivery, strengthening governance in the state.

#### **eOffice**

The eOffice platform has been successfully implemented across Uttarakhand Secretariat, Raj Bhawan, CM Office, Vidhan Sabha, Police Headquarters, and Directorates. Extending beyond the state administration, eOffice has also been deployed in all 13 districts of Uttarakhand. Additionally, NIC Uttarakhand provides continuous ICT support to various Government of India (GoI) offices, including Survey of India (SOI), AIIMS Rishikesh, and LBSNAA.

#### eTransport

The eTransport project aims to digitize and streamline transport services, creating a transparent and citizen-centric ecosystem. It operates through two core applications:

- Sarathi (Sarathi.Parivahan.gov.in) Manages driving licenses and related services
- Vahan (Parivahan.gov.in) Oversees vehicle registration, permits, and transactions

#### Key Achievements in Uttarakhand

- Vahan-4, Sarathi-4, and eChallan systems are successfully operational across all 20 RTO/ARTOs
- Integrated Road Accident Database (iRAD) Project has been rolled out across all 13 districts, enabling accurate road accident data collection and analysis to improve road safety measures

Module	Total Since Inception
Sarathi (Driving License)	20,94,746
Sarathi (Learner License)	16,12,710
Sarathi (Conductor License)	14,488
Sarathi Revenue (Cr.)	197.67
Vahan (Registered Vehicles)	40,82,666
Vahan Transactions	2,39,34,152
Vahan Permits Issued	3,01,961
Vahan Revenue (Cr.)	8,42,482

#### **Development of Uttarakhand Websites** on S3WaaS Framework

The S3WaaS (Secure, Scalable, and Sugamya) platform enables government departments to develop secure, accessible, and customizable websites. A tripartite MoU was signed on November 26, 2024, between the IT Department of Uttarakhand, NIC, and NICSI, for the development of 100 government websites.

#### **Key Achievements**

- Orientation workshop and training for 216 participants from various government departments
- 93 websites onboarded, with 15 successfully launched on the S3WaaS platform

#### **IM-PDS**

The Public Distribution System (PDS) ensures

food security through digital integration of ration card management, fair price shops, and supply chain automation. Key modules implemented in Uttarakhand include:

- Ration Card & Fair Price Shops Management (RCMS)
- Online Food Grains Allocation & Supply Chain Management (FEAST)
- Fair Price Shops Automation (Dhaanyapurti)
- State Transparency Portal (FCS)
- Integrated Public Distribution System (IM-PDS)
- Food Grain ATM Scheme launched in Uttarakhand to enhance PDS efficiency

Key Metrics	Values
Total Ration Cards Issued	24,00,577
Total Beneficiaries	97,40,272
Monthly Fortified Rice Allocation (Qtls)	2,35,344
Monthly Wheat Allocation (Qtls)	1,83,822
Total Fair Price Shops	9,093
Monthly Transactions	19,89,871

#### NextGen eHospital

The NextGen eHospital application is a comprehensive hospital management system available to government hospitals nationwide through a SaaS (Software as a Service) model. It enhances patient care, digital record management, and hospital efficiency.

Metrics	Total
Total Hospitals Onboarded	8 (5 NextGen e-Hospital, 3 e-Hospital)
Total Patient Registrations	95,95,722
Total In-Patient Admissions	10,58,807
Electronic Health Records (EHRs) Created	26,60,756
Total Billing Transactions	43,67,586

#### NeVA

The National eVidhan Application (NeVA) is a Mission Mode Project under Digital India, aimed at making state legislatures paperless. NeVA was inaugurated in Uttarakhand on 18 February 2025 by Hon'ble Chief Minister & Hon'ble Speaker of Uttarakhand Vidhan Sabha.

Legislative Function	Total Processed
Questions Raised	5,005
Notices Issued	347
Government Bills Processed	503
List of Business Entries	345
House Proceedings Recorded	128

#### **Driving Digital Transformation in** Uttarakhand

These national e-Governance initiatives implemented by NIC Uttarakhand are revolutionizing governance, public service delivery, and administrative efficiency. From transport digitization and judicial reforms to healthcare automation and food security, these projects strengthen transparency, accessibility, and accountability, contributing to Uttarakhand's digital transformation journey.

#### **Infrastructure and Network Services**

#### National Knowledge Network (NKN)

NKN serves as the digital backbone for India's e-Governance, research, and education initiatives,



Fig 1.8: Visit of Shri Jitin Prasada, Hon'ble Minister of State, Ministry of Electronics and Information Technology, to NIC Uttarakhand Headquarters, Dehradun

providing secure, high-speed connectivity. It integrates R&E, Internet, and e-Governance traffic on a single network with a core bandwidth of nearly 1000G. In Uttarakhand, 42 institutions, including State Data Centre, SWAN, LBSNAA, IMA, ICFRE, FSI, CASFOS, IGNFA, Garhwal University, Kumaun University, and GB Pant University, are connected through NKN.

#### Video Conferencing

NIC Uttarakhand's video conferencing services are widely used for the Video Conferences with the Hon'ble Prime Minister, Union Ministers, Governors, Chief Ministers, Cabinet Secretary, Chief Secretaries, and other senior officials. NIC also provides web-based desktop video conferencing for various state and central government departments.

#### **Email Services**

More than 26,000 government email IDs have been created for official use in Uttarakhand.

#### **Capacity Building**

NIC Uttarakhand regularly conducts training

programs to enhance skills and knowledge. Officers participate in management, technology, and induction training, with knowledge-sharing sessions post-training. 12 training programs have been conducted for NIC officers.

#### **Key Events & VIP Visits**

- Hon'ble Minister Shri Iitin Prasad visited NIC Uttarakhand on 20th November 2024 and was briefed on key IT projects by State Informatics Officer Shri Ashesh Kumar Agarwal
- Safer Internet Day Workshops were held across all 13 districts on 11th February 2025, engaging 1,300 participants, including government officials, school children, and citizens

#### **Accolades**

NIC Uttarakhand has received around 40 prestigious awards, including Digital India Awards, CSI, WebRatna, SKOCH, for ICT projects in School Education, StarBus, CMS Websites, State Tax Department, CM Grievance System, eCabinet, and Treasury Computerization.

#### **Way Forward**

National Informatics Centre Uttarakhand has always been the backbone of the major technology initiatives in the State and has been its technology partner in rolling out many Projects. Looking ahead, the focus is on new paradigm shifts in terms of more efficient e-governance services delivery. We look forward to embracing emerging technologies such as Edge Computing, Deep Learning, Blockchain, AI and ML and using them effectively in future Projects.





**State Informatics Officer** NIC Uttarakhand State Centre Secretariat, 4, Subash Road Dehradun, Uttarakhand - 248001 Email: sio-ua@nic.in Phone: 0135-2713739

# Durg, Chhattisgarh

Accelerating e-Governance with ICT-Driven Innovation

Edited by SUSHMA MISHRA

estled along the Shivnath River, Durg embodies the cultural vibrancy, industrial dynamism, and social harmony of Chhattisgarh. The district, alongside its twin city Bhilai, renowned as Mini India, is a beacon of economic growth and infrastructural development.

Since its inception, the NIC Durg District Centre has actively facilitated key governance initiatives, ensuring a robust digital infrastructure for administrative efficiency. Flagship projects include Arms Licensing System, Vahan & Sarathi, Bhuiyaan e-Kosh, Janchaupal, MedLEaPR, PDS, Saarth-e, and Panchayat Inspection Portal. Moreover, NIC Durg provides video conferencing and round-theclock IT support for crucial events such as Lok Sabha, Vidhan Sabha, Panchayat, and Local Body elections.

#### ICT Initiatives in the District SAARTH-E: AI-Enabled Grievance **Redressal System**

This mobile application is an initiative by the District Administration Durg to streamline grievance submission and tracking for citizens. Through this app, users can submit grievances from anywhere and track their status using a system-generated unique grievance ID.

The app features an integrated dashboard for department officers and in-charge officials, allowing them to view and resolve grievances within a stipulated time frame. Citizens can submit grievances by uploading a photograph, video, audio message, or document for better clarity.



**Shweta Choubey** Scientist - C & DIO shweta.sharma@nic.in



**Gopal Kumar Singh** Technical Assistant-A & ADIO gopalk.singh@nic.in

NIC Durg District Centre drives the Digital India movement seamlessly integrating technology into governance. Committed to transparency, efficiency, citizen empowerment, it implements e-Governance initiatives at all levels. Through ICT-driven solutions, NIC Durg bridges the digital divide and enhances



public service delivery.

Department Heads can log in to the portal and directly address public grievances, while the District Collector can monitor the entire process in real time. This app enhances efficiency, transparency, and accountability, ensuring a faster and more effective grievance redressal system.

#### **Panchayat Inspection Portal**

A web-based application has been developed to streamline Panchayat inspections in Durg district, ensuring efficient data recording and management. This digital platform enhances accuracy and oversight, enabling seamless monitoring of Panchayat operations. Nodal officers input suggestions, guiding improvements at inspection centers. The inspections are conducted twice a month for continuous evaluation and enhancement.

#### **Election Management System**

The District Centre plays a crucial role in supporting the District Administration in conducting Parliament, Assembly, and Local elections. For Local Bodies and PRI elections,

NIC Durg has developed a web-based application to efficiently manage the data of officials from Central/State Government offices, banks, and PSUs. This system automates the formation, randomization, and order generation for polling officials, ensuring a transparent and efficient election process. Additionally, NIC Durg provides technical support at every stage, facilitating seamless election management.

#### **TL Online**

A real-time tracking tool designed to oversee government communications and departmental responses to ensure timely resolution of official matters. It can be accessed at https://eservices. durg.gov.in/TL.

#### **Durg District Website**

Powered by S3WaaS, the district's official website (https://durg.gov.in) is a one-stop digital repository, offering comprehensive information on governance, tourism, helplines, public services, and administrative resources.

#### **Other Key Initiatives**

The District Centre has effectively implemented and supports various State and Central Government flagship programs to advance e-Governance in the district. A few significant ones are highlighted below:

#### State-Level e-Governance Initiatives

- Janshikayat Portal: A statewide grievance redressal system, enabling citizens to directly file complaints with the District Collector's office
- Jandarshan: A citizen-government interaction platform where the Hon'ble Chief Minister personally addresses public grievances, backed by a real-time monitoring mechanism
- RTI-Online: A digital gateway for filing RTI applications, ensuring transparency in governance
- Chhattisgarh State Employment Portal: A centralized job portal for employment seekers and recruiters, facilitating career opportunities and workforce management
- e-Kosh: A statewide digital financial management system, ensuring streamlined fund utilization and fiscal accountability
- Bhuiyan: A comprehensive land records management system, providing citizens with instant



#### ▲ Fig 2.1 : SAARTH-E Mobile and Web Dashboard

digital access to Khatauni, Khasra, and land maps

- PDS Online: A technology-driven food distribution system, ensuring efficient paddy procurement and equitable resource allocation
- Vidhansabha: e-Prashna & e-Uttar application online portal for the questions asked and answers given in the Chhattisgarh Legislative Assembly. The site can be accessed at https:// vidhansabha.cg.nic.in
- KhanijOnline: It is a web based mines & minerals management system successfully implemented in Durg District. It can be accessed at https:// khanijonline.cgstate.gov.in

#### **Central Level e-Governance Initiatives**

- MedLEaPR: A pathbreaking initiative in forensic documentation, enabling efficient and standardized post-mortem report generation
- CPGRAMS: A 24x7 digital grievance management portal, fostering citizen empowerment and administrative accountability
- Integrated Road Accident Database (iRAD): Successfully implemented across 23 police stations, 40 hospitals, and 6 road agencies, iRAD has logged over 2300 accident cases, enhancing road safety planning and response
- Vahan & Sarathi: Supporting seamless vehicle registration and licensing services, this initiative integrates digital governance in transport administration

- NDAL-ALIS: A secure digital repository for firearms licensing data, reinforcing compliance and security
- National Disaster Management Information System (NDMIS): An integrated disaster response platform, tracking relief efforts and damage assessment in real-time
- Licensing System for District Authorities (LSDA) (Isda.peso.gov.in): A web-based system hosted at PESO Nagpur, enabling district authorities to issue licenses as per Explosives, Ammonium Nitrate, and Petroleum Rules
- National Disaster Management Information System (NDMIS) (ndmis.mha.gov.in): Tracks disaster losses, damages, and relief fund distribution by District Authorities

#### **Networking and Infrastructure**

- Video Conferencing (VC) Services: Provides VC support to the District Administration and other departments via VC Studio and Bharat VC
- NICNET Management: Expands NICNET connectivity for government offices and ensures swift resolution of issues through the Service Desk
- e-Office Implementation: Facilitates the digitization of office operations in Durg district by creating official email IDs, collecting organizational data, and conducting training for a seamless transition to e-Office

#### NIC Durg has been extending excellent support to Durg District Administration in the field of ICT and implementing related initiatives at the grassroots level. It has played a pivotal role in promoting ICT usage and executing both State and Central e-Governance programs. This includes facilitating information sharing through district websites, providing IT infrastructure, and implementing various applications of the Election Commission of India (ECI) and the State Election Commission (SEC) during elections. I wish all the best to NIC in its endeavor.

Abhijeet Singh, IAS Collector & District Magistrate

#### **Events organized**

NIC Durg District Centre provided ICT and VC support for several high-profile events, ensuring seamless digital execution:

- Provided ICT support during the Hon'ble President's visit to IIT Bhilai for the convocation ceremony on October 26, 2024
- Facilitated VC support for the Hon'ble Prime Minister's Rozgar Mela at Kala Mandir, Bhilai on October 29, 2024
- SVAMITVA Scheme Event: Delivered technical support for the Hon'ble Prime Minister's virtual
- Provided VC support for the Prime Minister's virtual Gaurav Divas event at BIT Durg on November 15, 2024

#### **Way Forward**

NIC Durg is driving the Digital India vision by delivering cutting-edge ICT solutions to the District and Divisional Administration. As a core pillar of governance, it has spearheaded numerous ICT-enabled initiatives, accelerating digital transformation. Committed to innovation, NIC Durg continues to leverage technology to enhance governance, streamline operations, and elevate service delivery standards.

#### ▼ Fig 2.2 : Panchayat Inspection Admin Dashboard



#### **District Informatics Officer**

NIC Durg District Centre Collectorate Building, Room No. 34, Ground Floor Durg, Chhattisgarh - 491001 Email: dio-durg.cg@nic.in, Phone: 0788-2211223

# Hanumangarh, Rajasthan

Digital transformation through advanced ICT solutions

Edited by SUSHMA MISHRA

IC Hanumangarh plays a pivotal role in leveraging technology to drive digital governance and streamline administrative processes. Aligning with the Government of India's Digital India vision, NIC has established a robust ICT framework that empowers various departments with innovative, technology-driven solutions.

A key focus of NIC Hanumangarh is the implementation of e-Governance initiatives that enhance service delivery and transparency. The district has successfully deployed E-Nahar, an advanced irrigation management system that optimizes water distribution, ensuring efficient resource utilization for the region's agrarian economy. Similarly, Manas E-Arogya is a comprehensive digital healthcare platform aimed at strengthening medical services and streamlining patient management.

NIC has also facilitated web-based grievance redressal systems, e-District services, and digital land record management, enabling seamless interaction between citizens and government agencies. These initiatives not only improve accessibility but also promote paperless governance, reducing bureaucratic delays.

Additionally, the District Administration benefits from GIS-based decision support systems, real-time data analytics, and integrated dashboards that provide actionable insights for planning and policy-making. With ongoing advancements in cloud computing, cybersecurity, and digital authentication, NIC Hanumangarh continues to drive technological transformation, making governance more efficient, transparent, and citizen-centric.



Shailendra Kumar Dhanwaria Scientist-C & DIO shail.kdhanwaria@nic.in



Savita Scientific/Technical Assistant-A payal.savita@nic.in

NIC Hanumangarh has been in instrumental driving e-Governance initiatives and fostering a technology-driven administrative ecosystem. The centre facilitates seamless G2C and G2G services, enhancing governance efficiency. The district unit provides essential digital resources, supporting initiatives in e-Governance services, and real-time data analytics for informed decisionmaking. With a commitment to innovation, NIC Hanumangarh continues to accelerate the district's digital evolution.

#### **ICT Initiatives in the District**

#### Manas e-Arogya

#### https://hanumangarh.raj.nic.in/drugspledge

MANAS e-Arogya is a secure, transparent digital platform for managing drug addiction treatment in psychiatric clinics and rehabilitation centres. It prevents prescription duplication, medicine overdose, and unauthorized use while enabling real-time stock tracking, centralized monitoring, and live photo-based identity verification.

Benefiting 18,000+ patients, 43 doctors, and 37 clinics, the platform supports government health and welfare departments with real-time data for better governance. Pledge participation has exceeded 1 lakh individuals. Its key features are:

• Role-Based Access Control (RBAC) for secure data management

- Automated reports for real-time medicine
- Centralized dashboard for seamless monitoring MANAS e-Arogya ensures efficiency, security, and accountability, transforming addiction control in public healthcare.

#### **Animal Husbandry Record Management** System (AHRMS)

#### https://hanumangarh.org/veterinary

streamlines animal husbandry governance by digitizing records, ensuring real-time data access, and improving service delivery, especially in remote areas. Successfully operational for eight years, it replaces manual processes with a scalable, reliable digital solution. Its key features are:

• 300+ logins across district, block, and institute levels

he District Informatics Unit l plays a vital role in advancing e-Governance and ICT portals in Hanumangarh. Web like E-Nahar, Manas e-Arogya and Animal Husbandry Management System (AHRMS) have set benchmarks, benefiting farmers, healthcare professionals, and citizens. NIC Hanumangarh continues to drive digital transformation with innovative solutions and strategic collaborations.

Hanumangarh for its success in driving and implementing impactful e-Governance projects across the district.



Kana Ram, IAS District Collector & District Magistrate Hanumangarh, Rajasthan

- Automates 17 Monthly Progress Reports (MPRs)
- Manages six vaccines, including stock and distribution
- · Graphical & analytics dashboards for rolebased insights

AHRMS enhances efficiency, accuracy, and transparency, making it a model for digital governance in the sector.

#### **Employee Management System (EMS)**

EMS revolutionized government employee data management for the Vidhan Sabha Election 2023, ensuring efficiency and accuracy. Developed at the district level for the State Election Commission of Rajasthan, it consolidated employee records from Shaladarpan and Pay Manager using a unique Employee ID. Its key achievements are:

- Managed 8,44,000+ employee records across districts, ACs, and blocks
- Created 29,000+ logins up to the state level
- Ensured seamless data integration for election

EMS set a benchmark in digital governance, optimizing workforce management for large-scale

#### Safer Internet Day 2025

To promote online safety and cyber hygiene, we collaborated with the District Administration and key stakeholders. Initiatives included:

- Training workshops for District and Block-level
- Specialized sessions for Education Department officials
- Awareness programs in district offices, schools, and communities
- Cyber safety banners displayed in urban areas via Nagar Parishad and Nagarpalika

These efforts empower citizens, especially students, to navigate the digital world securely.

#### Other Initiatives in the District

Several Mission Mode central and state government projects have been successfully implemented in the Hanumangarh district,



Fig 3.1: Shri Shailendra Kumar Dhanwaria (DIO) receiving an award from the District Administration for developing the Manas e-Arogya portal

enhancing digital governance and service delivery. These include the Digital India Land Records Modernization Program (DILRMP) for digitizing land records, the Integrated Financial Management System (IFMS) for streamlined financial administration, and Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) for direct income support to farmers. In the health sector, the Pregnancy and Child Tracking System (PCTS) ensures maternal and child healthcare monitoring, while the Integrated Road Accident Database (iRAD) strengthens road safety analytics. Transport services have been modernized through eTransport - Vahan and Sarathi, and public safety is reinforced via the Arms License Issuance System. Additionally, the Civil Registration System (Pehchan) supports identity management, Shaladarpan facilitates school administration, and the Public Distribution System (PDS) ensures efficient food grain distribution. Other key initiatives include Sanstha Aadhaar, ePanjiyan, and e-Gram, all contributing to a more efficient, transparent, and citizen-centric governance ecosystem.

#### **Events and VVIP Visits**

The district has successfully provided

▼ Fig 3.2 : Awareness programme on Safer Internet Day 2025 organized by NIC Hanumangarh



comprehensive ICT support during VVIP visits, including those of the Hon'ble Prime Minister and other dignitaries. This included:

- · Secure communication networks for real-time coordination
- Live monitoring systems to ensure seamless
- Technical integration for smooth execution of protocols
- ICT-enabled safe houses with enhanced security, connectivity, and information flow

These measures ensured a highly secure and well-coordinated environment throughout the visits.

#### **Accolades**

- 2025: Awarded to District Informatics Officer (DIO) by the District Administration for developing the Manas E-Arogya portal
- 2020: Awarded to DIO by the District Administration for outstanding ICT initiatives

#### **Way Forward**

The district's technological infrastructure is poised for significant advancements, with a strategic focus on expanding ICT-driven solutions across key sectors such as healthcare, agriculture, and public administration. These innovations will further streamline service delivery, enhance operational efficiency, and empower stakeholders with data-driven decision-making capabilities. Moving forward, NIC is committed to strengthening real-time monitoring systems, fostering mobile-first solutions, and ensuring seamless digital accessibility to improve citizen engagement and governance effectiveness.

#### **District Informatics Officer**

NIC Hanumangarh District Centre Collectorate, Hanumangarh, Rajasthan - 335512 Email: dio-hgh@nic.in, Phone: 01552-264400

# **Paschim Bardhaman**

The Industrial Hub of West Bengal

Edited by KAVITA BARKAKOTY

aschim Bardhaman is a predominantly urban mining-industrial district in West Bengal. With its headquarters in Asansol-often referred to as the "City of Brotherhood"—the district was carved out from the erstwhile Bardhaman district on April 7, 2017, becoming the 23rd district of West Bengal.

At the forefront of the district's digital transformation is NIC Paschim Bardhaman, a pioneer in leveraging science, innovation, and technology to enhance governance. Since its inception, NIC Paschim Bardhaman has played a crucial role in embedding technology into the administrative framework, streamlining public service delivery, and enhancing citizen engagement through various e-Governance initiatives.

#### ICT Initiatives in the District

#### **Paschim Bardhaman District Website**

#### https://paschimbardhaman.gov.in/

Developed using the S3waas framework, the bilingual Paschim Bardhaman District website serves as an official and comprehensive digital gateway for government services and information. It is regularly updated to ensure citizens have seamless access to crucial resources, including:

- District History & Cultural Heritage: Showcasing the rich legacy and traditions of Paschim Bardhaman
- Demographics & Administrative Setup: Offering detailed insights into population statistics, and administrative governance structure, hierarchy
- Tenders & Recruitment: Providing a transparent system for government tenders and employment opportunities



**Anil Kumar Choudhary** Scientist - C & DIO choudhary.anil@nic.in

NIC Paschim Bardhaman, the technological backbone of the district administration, drives digital transformation through innovative e-Governance solutions. From developing the district website and mobile application to implementing e-Office, iRAD, and Election Manpower Management Systems, NIC ensures seamless service delivery. It supports key state and national initiatives, conducts training, facilitates video conferencing for major events. Recognized for its excellence, NIC Paschim Bardhaman continues enhance governance, citizen engagement, and public service efficiency through ICT innovations.

- Citizen Services: Enabling access to various public services, forms, and guidelines
- Emergency Contacts & Helplines: Listing essential contacts for quick assistance in case of emergencies

This website acts as a vital bridge between the administration and the public, enhancing accessibility and transparency in governance.

#### **Mobile Application**

Responding to the evolving needs of digital

governance, NIC Paschim Bardhaman, at the request of the District Magistrate, developed an Android-based mobile application for the district website. This application extends the accessibility of government services by providing users with:

- Real-time notifications and updates related to government schemes, tenders, and emergency
- Seamless mobile-friendly access to district-related information
- Quick navigation and interactive features ensuring a user-friendly experience for citizens

By enabling citizens to access government resources on their smartphones, this initiative furthers the district's vision of a digitally inclusive administration.

#### Integrated Road Accident Database (iRAD)

#### https://irad.parivahan.gov.in/

Under the iRAD project, the district has conducted over 70 training sessions for more than 500 employees across 16 police stations, two RTO offices, and other stakeholder offices. This initiative enhances road safety through realtime data collection, integrating web and mobile applications for efficient data management and inter-departmental collaboration.

#### e-Office

#### https://paschimbdneoffice.wb.gov.in/

Introduced in 2020, e-Office has transformed District Administration by digitizing workflows. Currently, 64 departments and 350 users benefit from the system, ensuring paperless governance.

#### **Election Manpower Management System**

#### https://wbemms.nic.in/

NIC Paschim Bardhaman provides round-theclock support during elections (Parliamentary, Assembly, and Municipal Corporation). The "Election Manpower Management System" ensures seamless management of election manpower.

#### **Other Key Initiatives**

#### e-Inspection

#### https://ds.wb.gov.in/insweb/Portal\_Home.aspx

This online system schedules and conducts

inspections for government schemes, providing real-time data for social welfare programs.

#### e-Prosecution

#### https://eprosecution.gov.in/

A secure platform for public prosecutors to manage case proceedings, legal opinions on FIRs, and draft charge sheets filed by the state police.

#### West Bengal Just In Time System (WB JIT)

#### https://ifms.wb.gov.in/jit/

Implemented in two treasuries in the district, WB JIT streamlines bill preparation and payment for centrally sponsored schemes.

#### **Workshops & Trainings**

#### e-Tender Training

NIC Paschim Bardhaman has provided training sessions for government departments on e-Procurement through the e-Tender portal, ensuring a transparent and efficient online bidding process.

#### Government e-Marketplace (GeM) Workshops

Workshops have been conducted to equip government officials with the necessary skills to navigate the GeM portal for seamless procurement.

#### **Computer Proficiency Tests**

Regular computer proficiency tests are organized to assess and enhance the digital skills of government recruits, supporting the district's vision of a digitally literate workforce.

#### **Video Conferencing Facilitation**

Over the past year, NIC Paschim Bardhaman has successfully conducted approximately 150 video



▲ Fig 4.1 : Paschim Bardhaman District App

conferences, including sessions for the Election Commission, State & Central Government, and CIC meetings, ensuring smooth virtual collaboration.

#### **Key Events and VIP Visits**

NIC Paschim Bardhaman ensures seamless technological support for major district events. Notable contributions include:

- PM Vishwakarma Launch at CRPF Camp, Durgapur
- Rozgar Mela for the Department of Posts
- Bhima Sakhi Event inaugurated by the Hon'ble Prime Minister
- Observer Role in NTA examinations
- Safer Internet Day Workshop organization
- Swachhata Pakhawada (Cleanliness Drive) initiatives

▼ Fig 4.2 : Paschim Bardhaman District Website



 Support for key state-level projects like e-Nathikaran, e-Bhuchitra, Duare Sarkar, Lakshmir Bhandar, Jai Bangla, Kanyashree, Rupashree, OSCAR, Sabooj Sathi, and Swasthya Sathi

#### **Accolades**

NIC Paschim Bardhaman received a Certificate of Appreciation from the District Magistrate & District Election Officer for its dedicated services during the Parliament General Election 2024.

#### **Way Forward**

NIC Paschim Bardhaman has been pivotal in the district's digital transformation, delivering robust ICT solutions and streamlining state and central projects. The district centre envisions a smarter, connected where technology enhances every

aschim Bardhaman is one of the major contributors of ICT activities. The district has always tried to provide smooth and transparent ICT services to the people.

NIC, Paschim Bardhaman District Unit has been playing a pivotal role in its Endeavour to initiate more e-Governance initiatives through consultancy, infrastructure and capacity building, entailing Video Conferencing with high-bandwidth network installation and support, developing and implementing software solution, ICT support to government projects and conducting recruitment processes. The migration of the district website to the S3WaaS platform is also noteworthy.



Ponnambalam S., IAS

District Magistrate, Paschim Bardhaman

aspect of life, from governance to education to public safety. It aims to digitize more public services and introduce advanced analytics for better decision-making. Capacity-building programs and advanced training for officials will ensure sustained innovation, fostering inclusive growth and a seamless digital experience for citizens.

#### **District Informatics Officer**

NIC Paschim Bardhaman District Centre Kanyapur, Ramkrishna Mission, Asansol Paschim Bardhaman, West Bengal - 713305 Email: dio-psbdn@nic.in, Phone: 0135-2713742

# NIC at Maha Kumbh 2025

The Digital Framework Behind the World's **Largest Gathering** 

n the heart of Prayagraj, from 13 January to 26 February 2025, the Maha Kumbh Mela emerged as a monumental convergence of ancient tradition and cutting-edge technology. With over 66 crore pilgrims gathering for spiritual liberation at the Triveni Sangam-the confluence of the Ganga, Yamuna, and the mythical Sarasvati-Maha Kumbh 2025 became a global symbol of faith, unity, and innovation. For the first time in history, the event was designated as India's first "Digital Maha Kumbh", with the NIC at its helm, weaving the threads of spirituality and smart governance under the vision of Digital India.

Recognized by UNESCO as an Intangible Cultural Heritage of Humanity, the Maha Kumbh is not just a festival; it is a civilizational continuum. Occurring every twelve years, it reflects India's spiritual pulse—a place where millions seek moksha by immersing themselves in the sacred waters, transcending caste, creed, and borders. This year, the anticipated attendance of 45 crore was far exceeded as the event crossed 66 crore visitors in under a month, reaffirming its global magnetism.



**Sunil Sharma** Dy. Director General & SIO Sunil.sharma@nic.in



Raiesh Patel Scientist - D & DIO patel.rajesh@nic.in



Pratima Mishra Scientific Officer/ Engineer - SB & ADIO pratima.keserwani@nic.in

In Maha Kumbh 2025, Prayagraj became a global symbol of spiritual devotion and digital innovation. Over 66 crore pilgrims experienced India's first "Digital Maha Kumbh," powered by the NIC. From Al-driven crowd management to multilingual assistance via BHASHINI and smart surveillance systems, NIC transformed the sacred event into a benchmark of smart governance, inclusivity, and digital infrastructure under the vision of Digital India.

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Pilgrims, scholars, saints, and tourists from across the globe arrived not just to participate in rituals, but to witness a spiritual spectacle that was also a technological milestone. The convergence of ancient wisdom and 21stcentury infrastructure turned Prayagraj into a living, breathing case study of how innovation can complement tradition without replacing it.

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The sheer scale of the event required seamless cooperation among various government bodies, volunteers, religious institutions, and digital platforms. Behind the scenes, the NIC emerged as the backbonedesigning, integrating, and executing an array of digital solutions that not only empowered administrative efficiency but also amplified pilgrim experience.

The significance of the Maha Kumbh lies not just in the numbers, but in the stories shared,



the prayers whispered, the chants resonated across ghats, and the memories created by families and individuals who come from different corners of the world. In 2025, those stories were not only etched in the sands of Prayagraj but also digitized, streamed, and shared in real time. The event was a living embodiment of 'Vasudhaiva Kutumbakam'—the world is one family.

Through every act of digital service—from facial recognition for safety to multilingual chatbots for information-NIC's role reflected an understanding of faith's sensitivities and technology's possibilities. No code overshadowed the chants, and no drone hovered above without reverence for the tradition unfolding below. It was a balance delicately achieved, one that might set a precedent for mega-events across the world.

#### Digital Infrastructure: The Nervous System of the Kumbh

The Maha Kumbh Mela 2025 stood as a beacon of global spiritual unity, effectively marrying India's rich cultural heritage with its growing digital capabilities. From the very beginning of January, the event began to attract global attention. In the first week alone, the official Maha Kumbh portal recorded a massive 33 lakh visitors from 183 countries, signaling its expansive digital reach.

Users from more than 6,206 cities around the world accessed the site, with India, the United States, the United Kingdom, Canada, and Germany leading in online traffic. This unprecedented level of international engagement highlighted not only the spiritual magnetism of the Kumbh but also India's emergence as a global leader in e-governance and public digital infrastructure.

The Maha Kumbh digital platform, developed and managed by the NIC, became a global window into the sacred event. The website offered multilingual access to mythological stories, bathing schedules, logistics, transport



arrangements, accommodation options, and spiritual insights, all delivered in an intuitive, user-friendly format.

Through a blend of robust hosting, dynamic content, and responsive design, the site empowered devotees-both onsite and remote—to immerse themselves in the spiritual essence of the Kumbh from wherever they were. Daily traffic surged into the millions as users accessed event details, devotional media, and even virtual darshans (viewings) of key rituals and processions.

## Key Digital Assets Deployed During Maha Kumbh 2025

Platform	Purpose
kumbh.gov.in	Central info portal: schedules, rituals, updates
kumbhlostandfound.in	Lost-and-found service with facial recognition
E-Pass Portal & App	Movement regulation for vehicles and officials
FRB & Attendance System Apps	Management of personnel and volunteers
Kumbh Rail Sewa App	Real-time train and transit updates
Sanitation Monitoring Portal	Civic feedback for 25,000+ toilets
Tentage Monitoring System	Camp quality tracking
Land Allotment System	Transparent digital space allocation

#### **Smart Governance in Action**

Managing a crowd of over 66 crore devotees is a logistical marvel. For this, the Maha Kumbh 2025 relied on the seamless integration of smart technologies:

- Over 2,750 Al-powered CCTV cameras were deployed to monitor activities across the Mela grounds
- RFID wristbands allowed authorities to track entry and exit timings of pilgrims, enabling efficient crowd management
- Drone surveillance, including anti-drone and tethered drone systems, provided an aerial view to manage footfall in congested areas
- Mobile app tracking enabled real-time updates for on-ground coordination

The Google Maps integration added to the convenience, mapping over 300 key landmarks including ghats, akhadas, temples, and camps, allowing pilgrims to navigate the Mela with ease. Information kiosks and mobile help centers supplemented digital tools to guide on-ground visitors.

#### **Immersive Digital Experiences and** Visual Storytelling Storytelling in the digital age found a new

expression at Maha Kumbh 2025.

- Visitors experienced 360-degree virtual reality installations showcasing royal processions such as Peshwai, spiritual discourses, and traditional
- Drone shows lit up the skies narrating epics like Prayag Mahatmyam and Samudra Manthan, captivating audiences with light, sound, and animation

These innovative experiences created emotional and intellectual connections, especially for the younger generation and international visitors experiencing the Kumbh for the first time.

#### Real-Time Support and Digital **Assistance**

For an event of this scale, real-time support and digital help were crucial:

- Facial recognition-based surveillance ensured safety by instantly alerting authorities to anomalies
- A dedicated Digital Lost and Found Centre,



integrated with Facebook and X (formerly Twitter), reunited missing persons and helped retrieve belongings.

 Portals like kumbh.gov.in and kumbhlostandfound.in remained active 24/7 to assist pilgrims in navigating services and finding aid

Digital dashboards provided at control rooms allowed the government and local authorities to monitor the entire site, optimizing emergency responses and logistics.

#### **Multilingual Outreach with BHASHINI**

The BHASHa INterface for India (BHASHINI), an initiative by MeitY under Digital India, ensured inclusivity through multilingual access.

- Pilgrims could receive announcements, safety guidelines, and schedules in 11 Indian languages, eliminating communication gaps
- Speech-to-text and text-to-speech tools helped differently-abled and elderly devotees
- Integrated chatbots and kiosks translated user queries into the local language, bridging digital literacy divides
- The CONVERSE feature helped pilgrims access emergency services via 112 helpline in their mother tongue
- Lost and found forms were voice-enabled, allowing users to report or retrieve items without typing

# Kumbh Sah'Al'yak Chatbot: Your Virtual Companion

Launched by Hon'ble Prime Minister Shri Narendra Modi, the Kumbh Sah'Al'yak chatbot stood at the forefront of Al-enabled services.

- Built on advanced Llama LLM technology and seamlessly integrated with BHASHINI, the chatbot delivered information in Hindi, English, and 9 other languages
- It provided updates on event timings, safety alerts, nearest facilities, and navigation-accessible through both web and mobile apps



• Voice-enabled, multilingual, and available round-the-clock, it empowered users from all demographics to navigate the Kumbh with con-

#### Surveillance and Security Infrastructure

To ensure that the faith and fervor of the Kumbh remained undisturbed:

- A seven-tier security grid was established
- Underwater drones were deployed for the first time to monitor sub-surface river activity up to 100 meters deep
- Intelligence squads inspected hotels, dharamshalas, vendors, and transit points
- Cybersecurity experts from NIC and CERT-In collaborated to prevent misuse of digital platforms
- AI tools monitored real-time social media chatter, alerting officials about suspicious trends.

In the Integrated Command Control Centre (ICCC), a dedicated NIC team managed the security and digital systems in shifts, ensuring 24/7 vigilance

#### **Fortified Cybersecurity Backbone**

NIC ensured digital sanctity through advanced cyber protocols:

- A central monitoring team comprised of MHA, DoT, CERT-In, NCIIPC, IB, and NeGD's SeMT coordinated cybersecurity efforts
- Over 9,000 suspicious IPs and 100+ malicious domains were blocked via the ISRP (Information Sharing and Response Portal)
- All CCTV cameras were secured using IP, MAC, and Protocol Binding
- Network zones were isolated using segmentation and L2 port binding to minimize unauthorized access
- Public-facing applications were hosted in a DMZ to insulate critical systems
- Role-Based Access Control (RBAC) mechanisms ensured tiered user privileges

## **Infrastructure and Service**

The Mela's digital infrastructure was divided into two operational domains:

- Surveillance System: 2,750 AI cameras, 80 Variable Messaging Displays (VMDs), 206 Public Address (PA) systems. Around 150 personnel managed the helpline 1920
- Public Service Portals:
  - kumbh.gov.in, kumbhlostandfound.in, Maha Kumbh Mela App, and Kumbh Rail Sewa App served as digital gateways
  - Hosted on UP State Data Centre (SDC) and STPI Mohali, with Disaster Recovery at Nxtra Data Centre (Bangalore) and Oracle Cloud

Mobile towers were increased by 50 units to decongest networks and support high-speed internet access.

#### Government Engagements and VC **Integration by NIC**

#### **eCabinet**

On January 22, 2025, a special e-Cabinet meeting of the Uttar Pradesh Government, chaired by Hon'ble Chief Minister Yogi Adityanath, was held in the Mahakumbh area of Prayagraj with 54 ministers in attendance.

Developed by NIC, the e-Cabinet portal enables digital, paperless cabinet meetings via tablets. Key decisions included in-principle approval for the 320 km Vindhya Expressway and the 100 km Vindhya-Purvanchal Link Expressway, boosting connectivity to Prayagraj.

The NIC officers ensured seamless technical support for the meeting's smooth execution.



#### **Snan Parv Monitoring**

NIC established a secure IPSec VPN tunnel to stream live security footage from ICCC to the CM Office for Mauni Amavasya and Basant Panchami.

#### **Kumbh Global Summit 2025**

Held between 21-23 February 2025, the Kumbh Global Summit on Development & Sustainability brought global attention to climate-conscious governance:

- Key themes included net-zero growth, energy-neutral infrastructure, and LiFE (Lifestyle for **Environment)**
- Eminent voices like Shri Sher Bahadur Deuba and H.E. Arya Ali joined via NIC's video conferencing platform, set up by NIC Prayagraj in coordination with NIC HQ

#### **Landmark Events and Visits** Supported by NIC

 Inauguration by Hon'ble PM Shri Narendra Modi: Projects such as Shringverpur Dham Corridor, Bhardwaj Rishi Corridor, and Kumbh Sah'Al'yak were launched through NIC-supported VC setups.

- Immigration Services at Prayagraj International Airport: NIC facilitated real-time implementation of the IVFRT system
- Hon'ble PM's Holy Dip: NIC coordinated digital security and logistical setup for the Hon'ble Prime Minister's ceremonial visit on 5 February
- Ministerial Visits:
  - Shri Jitin Prasad, MoS, MeitY 7 February 2025
  - Shri Rajesh Singh, JS & FA, MeitY 25 February 2025
- NIC Camp Office: A functional base with accommodation was set up for NIC officers and families
- Kumbhvani Channel Launch: Hon' CM Yogi Adityanath virtually launched FM 103.5 – Kumbhvani and KumbhMangal Dhwani, using NIC's video conferencing tech

#### **NIC Prayagraj District Team**

- Shri Lal Chand Yadav, Senior Technical Director, ASIO, NIC UP State Centre
- Shri Rajesh Patel, DIO

IC has played a pivotal role in the successful organization of the Mahakumbh Mela 2025, the largest spiritual congregation in the world. The team's exemplary dedication, unwavering integrity, and commitment to duty reflect the highest standards of public service. Their technical expertise and operational excellence have significantly contributed to the seamless execution of this grand event.

NIC's sincere and wholehearted involvement is deeply appreciated and deserves special recognition. Team Members Recognized: Shri Lalchandra Yadav (Sr. Technical Director), Shri Rajesh Patel (DIO, Prayagraj), Sushri Pratima Mishra (ADIO, Prayagraj), Shri Sumit Srivastava (Network Engineer), Shri Ajit Yadav (Network Engineer) and Shri

Sagar.

convey heartfelt my appreciation and best wishes for vour continued success



Vijay Kiran Anand, IAS Mela Adhikari, Mahakumbh, Prayagraj

- Smt. Pratima Mishra, ADIO
- Shri Manoj Yadav, Scientist-C
- Shri Rahul Yadav, STA-B

#### **Bridging Tradition and Technology**

Maha Kumbh 2025 was a testament to the harmonious coexistence of heritage and innovation. With NIC's robust leadership, this sacred event became a benchmark of digital transformation, cultural preservation, and global inclusivity.

It was not only about the sacred dip—it was about plunging into a future where tradition flows through fiber optics, where devotion is guided by digital maps, and where India's soul finds new resonance in a connected world.

This was not just the Maha Kumbh. This was Digital Dharma in motion.

#### Contact for more details

#### Raiesh Patel

Scientist - D NIC Prayagraj District Centre DM Camp Office, Collectorate prayagraj, Uttar pradesh - 211002 Email: dio-alb@nic.in, Phone: 0532-2640657



he rapid urbanization of Indian cities has brought with it an urgent need for smarter traffic management and enforcement mechanisms. To address this, the Ministry of Road Transport and Highways (MoRTH) launched the One Nation One Challan (ONOC) initiative—a nationwide drive to digitize and streamline the process of traffic rule enforcement. Gujarat, a leading state in digital governance, has emerged as a pioneer in this space with the implementation of the eChallan system across all its 38 Police Districts.

Launched in 2023, the eChallan initiative in Gujarat is a transformative step in creating a transparent, accountable, and citizen-centric enforcement system, leveraging real-time technologies. surveillance mobile-enabled enforcement tools, and seamless integration with national databases such as VAHAN, SARATHI, and Virtual Courts.

Recognizing the challenges of traditional, paper-based traffic enforcement, the Gujarat government has adopted eChallan as part of its larger digital transformation journey. The system empowers traffic officers with mobile-based tools to issue fines on the spot, provides real-time notifications to violators, and offers multiple digital payment options to citizens.



**Pramod Kumar Singh** Dy. Director General & SIO pk.singh@nic.in



Himanshu P Mehta **Technical Director** hp.mehta@nic.in



Neeraj Nama Scientist - C neeraj.nama@nic.in

The eChallan system, implemented across all 38 police districts of Gujarat the "One under Nation Challan" One initiative MoRTH, is a comprehensive digital platform for traffic enforcement. Integrated with VAHAN, SARATHI, and Intelligent Traffic Management Systems, it enables real-time detection violations, issuance challans, and multiple payment options. Citizens receive instant notifications and can pay fines via mobile apps or web portals. Unpaid challans are forwarded Virtual Traffic Courts after 90 days. The initiative enhances transparency, efficiency, and accountability, while empowering citizens with grievance redressal mechanisms and access to digital justice through virtual court proceedings.



Importantly, Gujarat is now in the process of setting up Virtual Traffic Courts under the ONOC umbrella, further strengthening the legal and administrative backend of traffic enforcement. This will allow cases to be adjudicated digitally, reducing the burden on physical courts and offering citizens a more accessible legal route.

#### Overview

The One Nation One Challan initiative is a flagship project of MoRTH, aiming to:

- Bring all enforcement and regulatory agencies—including the Traffic Police, Regional Transport Offices (RTOs), and Judicial Authorities—onto a single digital platform
- Ensure seamless exchange of information, automated enforcement, and centralized grievance redressal
- Enable a uniform implementation framework across states, allowing for better policy planning and traffic analytics

At its core, ONOC is a vision for interconnected governance—where technology bridges the gap between enforcement agencies and citizens.

#### System Architecture and Workflow

The eChallan system in Gujarat integrates with the Intelligent Traffic Management System (ITMS), using cutting-edge tools and applications to monitor and enforce traffic rules.

#### 1. Detection and Data Acquisition

Traffic violations are detected through a network of:

- Closed Circuit Television (CCTV) Cameras
- Automatic Number Plate Recognition (ANPR) Systems
- Interceptor Speed Guns
- Red Light Violation Detection (RLVD)
- Stop Line Violation Detection (SLVD)

These tools automatically capture images and videos of violations. The vehicle's registration details are then fetched from VAHAN, while driver license data is retrieved from SARATHI, ensuring a verified and tamper-proof trail of information.

#### 2. Digital Challan Generation

The system then:

- Generates an eChallan with detailed information about the violation
- · Attaches geo-tagged and time-stamped photographic evidence
- Assigns the applicable sections of the Motor Vehicles Act
- · Sends the challan to the mobile number linked to the vehicle

In cases where mobile information is unavailable, physical challans are dispatched to the registered address.

#### 3. Real-Time Notifications and Payment Options

The violator is notified through SMS and email. and is offered several convenient digital payment options:

- Credit/Debit Cards
- Unified Payments Interface (UPI) with Dynamic QR Code scanning
- eChallan Web Portal: https://echallan. parivahan.gov.in
- NextGen mParivahan Mobile App These multi-channel touchpoints enhance user accessibility and foster timely compliance.

#### **Virtual Traffic Courts: Enabling Accessible Justice**

A major highlight of Gujarat's eChallan initiative is the upcoming Virtual Traffic Courts, which are designed to:

- Eliminate the need for physical court appearances
- · Allow violators to view their cases online
- Enable them to pay fines digitally and get cases marked as disposed

If the eChallan is not paid within 90 days, as per Rule 167(5) of the Central Motor Vehicle Rules (CMVR), the system automatically forwards the case to the Virtual Court, where adjudication

proceedings begin. Violators may also opt to contest their case in a regular court if they prefer a physical hearing.

#### Grievance Redressal Mechanism

To ensure fairness and transparency, the eChallan system provides a robust grievance redressal facility. Citizens can:

- · Raise concerns or disputes regarding issued
- Use the Complaint option on the eChallan por-
- · Expect responses and resolutions from the competent traffic authority

This system ensures that every citizen has a voice in the process and can seek recourse in case of erroneous challans.

#### Compliance and Enforcement Measures

To enforce timely compliance, Rule 167(7) of CMVR states that if a challan remains unpaid beyond 90 days:

- The Licensing Authority and Registering Authority shall not process applications related to the driving license or vehicle registration
- · Applications related to permits, fitness, and taxes of vehicles will continue to be processed

This clause serves as a compliance nudge, encouraging violators to resolve outstanding challans promptly.

#### **Key Features of Gujarat's eChallan System**

End-to-End Digitization: Replaces manual challans with digital issuance and online payment

- Real-Time Notifications: SMS and email alerts on challan issuance
- Evidence-Based Enforcement: Geo-tagged, time-stamped photos attached with challans
- Multi-Agency Integration: Connected with VAH-AN, SARATHI, and Virtual Courts
- Multiple Payment Channels: Online, mobile, and point-of-sale (PoS) devices
- Transparent Grievance System: Centralized complaint mechanism with timelines
- Automated Legal Escalation: Unpaid challans forwarded to Virtual Courts after 90 days

#### Impact in Numbers (As on 20 March 2025)

Metric	Value
Total eChallans Generated	66.79 Lakh
eChallans Forwarded to Virtual Court	38.25 Lakh
Total Penalty Recovered	₹497 Crore

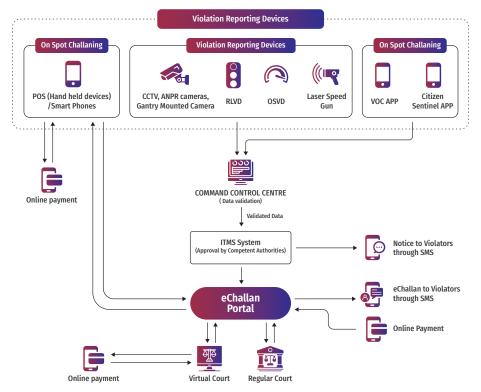
These numbers reflect not only the scale of implementation but also the success of the system in improving enforcement efficiency, revenue collection, and citizen participation.

#### Conclusion

The eChallan system in Gujarat stands as a model of modern digital governance—a system that is transparent, data-driven, and citizenoriented. It represents the potential of technology to reimagine public service delivery, particularly in domains that directly impact everyday life.

With the integration of Virtual Traffic Courts. the state is further simplifying the path to justice and making the traffic enforcement process fair, efficient, and inclusive. As more states adopt the ONOC framework, Gujarat's experience offers a valuable roadmap for building a uniform, scalable, and citizen-first enforcement ecosystem across the country.

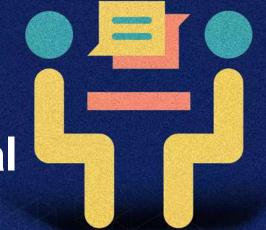
#### eChallan Process Flow



#### **Pramod Kumar Singh**

Deputy Director General & SIO Block 13, 2nd Floor, Sardar Bhawan Gandhinagar, Gujarat - 382010 Email: sio-guj@nic.in, Phone: 079-23252946

# Grievance Appellate Committee (GAC) Portal



Edited by VINOD KUMAR GARG

he Grievance Appellate Committee (GAC) is a transformative initiative established under the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, aimed at ensuring a Safe, Trusted, and Accountable Internet for Indian users. It provides an efficient, transparent, and user-centric online dispute resolution mechanism for citizens of India aggrieved by decisions of Grievance Officers of social media and other Intermediaries. The project digitizes the entire appeal process, right from filing to resolution, ensuring timely decisions within 30 days. By reducing dependency on manual processes and fostering accountability, the GAC online solution significantly enhances accessibility and efficiency. This initiative not only enforces the IT Rules but also empowers citizens, promotes digital governance, and strengthens trust in India's Digital Ecosystem. Through its user-friendly platform, the GAC portal facilitates seamless interaction between Citizens, Intermediaries, GAC Secretariat and Experts, ensuring a fair and standardized grievance redressal process while contributing to the creation of a responsible and accountable digital environment.



Sandeep Sood Sr. Technical Director sood.sandeep@nic.in



Sanjay Kumar Sr. Technical Director sanjay.kmr@nic.in



**Mangal Singh** s.mangal@nic.in



Grievance The **Appellate** Committee (GAC), established under the IT Rules, 2021, ensures a Safe, Trusted, and Accountable Internet for Indian users. It provides an online dispute resolution platform for Digital Nagriks (Citizens of India) aggrieved by decisions of Grievance Officers on Social Media complaints. Notably, the entire appeal process is fully digital, with the GAC's userfriendly web portal ensuring seamless, timely, and efficient resolution of appeals within 30 days.



#### **Features of the Product**

- Fully Digital Appeal Process: Entire grievance redressal process is digitized, from filing to resolution
- Dedicated Dashboard with MIS Data and Stats: The portal features a dashboard with clear MIS data and statistics, ensuring easy access to relevant information
- Grid view Interface for Appeals List: To enhance user navigation, an unique "Grid view" interface categorizes and present all appeals in an easily readable and accessible format
- Secure Access for GAC Secretariat: GAC officials can log in using Parichay SSO for secure access
- Aadhaar Authentication: Citizens (Digital Nagriks) can file appeals online after Aadhaar Authentication, ensuring transparency and accessibility

- · Configurable formats for Gist, Decision and Emails: Formats of documents and email can be configured by portal admin
- Expert Observations and Voting Mechanism: Expert observations provide insights and members can participate in a structured Voting System (Agree/Disagree with remarks)
- Timely Resolution: Appeals are resolved within a time-bound manner, aiming for decisions with-
- Data Sharing APIs: Social Media Intermediaries can onboard to access additional API-based data sharing features

#### **Tech Stack & Architecture**

The portal is developed using ASP.NET with C# programming language, following the MVC (Model-View-Controller) architecture to ensure a clean, scalable, and maintainable codebase. This architecture allows for seamless interaction between the front-end and back-end components. The backend is powered by Microsoft SQL Server 2019, providing a reliable and efficient database management system for securely managing user data, appeals, and other essential information. This ensures fast data retrieval and smooth platform operations. Various documents related to appeals are securely stored on a file server, providing centralized access and management of critical files within the system.

Bootstrap is used extensively on the front-end, ensuring a responsive and user-friendly design across devices for enhanced user experience. ApexCharts are integrated into the user dashboard for visually rich and interactive data visualization, helping users better understand real-time information. To ensure secure user access, the system utilizes Parichay SSO (Single Sign-On) service for seamless authentication, allowing GAC Secretariat to log in securely. Additionally, the Aadhaar Authentication Service by UIDAI enables citizens to create their profiles securely, ensuring proper identification. This combination of modern technologies ensures a highly efficient, secure, and user-centric grievance redressal system that meets the needs of all the stakeholders.

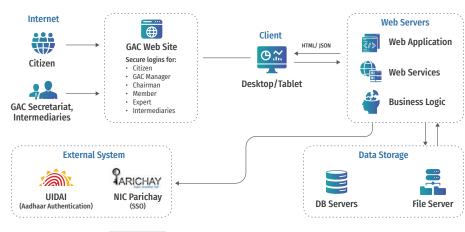
• Frontend: A user-friendly interface with Grid view data display and ApexCharts-powered visualizations are used for accessibility across devices.

- Backend (Controller): Built with ASP.NET and C#, it manages business logic, user requests, and data flow between the frontend and database securely and efficiently
- Database (Model): Microsoft SQL Server 2019 securely stores and manages user data, appeals, and decisions, ensuring fast retrieval and efficient query handling
- Authentication & Security: Parichay SSO secures GAC Secretariat logins, while Aadhaar Authentication verifies citizen identities, enhancing transparency and accountability
- File Management: A centralized server securely stores appeal documents, ensuring easy access and efficient management
- APIs & Integration: Supports data sharing with social media intermediaries, improving communication and grievance resolution efficiency

This architectural flow ensures a smooth, secure, and scalable grievance redressal system for the GAC Portal.

#### **Portal Workflow**

The workflow of the GAC portal begins when an Appellant register using Aadhaar Authentication to ensure secure identity verification. Once registered, the Appellant can file an appeal, which is automatically mapped to the relevant GAC based on the complaint type. Once the appeal is filed, the system sends alerts to the concerned Social Media Intermediaries (e.g., Meta, Google) to respond within 96 hours. Following the Intermediary's response, the Assistant Manager of the respective GAC prepares a Matter Summary, which is then reviewed by GAC Members. They provide their opinions and, if necessary, seek expert advice. The final decision is made by the GAC Chairman



**GAC Application Architecture** ▲ Fig 7.1

and copy of the decision is communicated electronically to all stakeholders automatically, including the Appellant and Intermediaries. The copy of the decision is also made available under each stakeholder's portal login. Lastly, the Intermediaries are required to submit a Compliance Report along with the URL, confirming their adherence to the decision, ensuring accountability and transparency in the process.

#### **Impact**

The Grievance Appellate Committee (GAC) portal offers several key benefits and impactful outcomes for both citizens and digital intermediaries:

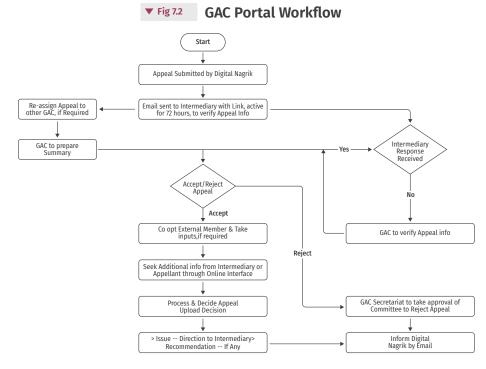
• Transparency and Accountability: Allows citizens to escalate unresolved complaints to social media platforms, ensuring fair grievance redressal

- Efficiency and Timeliness: Digital appeals ensure grievance resolution within 30 days, significantly faster than traditional methods
- Enhanced Accessibility: A user-friendly platform ensures easy navigation, promoting digital inclusion for all users
- · Digital Governance: Strengthens trust in India's online ecosystem by enforcing IT Rules and promoting a responsible digital environment
- Secure User Authentication: Aadhaar authentication and secure logins ensure identity verification and transparency
- Improved Communication: Real-time data sharing and API integration enable seamless collaboration among GAC secretariats, experts, and social media intermediaries
- Promotes Compliance: Ensures social media intermediaries submit compliance reports, fostering a safer and more accountable digital ecosystem

Ultimately, the GAC portal ensures a safe, trusted, and accountable Internet for Indian users, promoting a fair grievance resolution process and strengthening digital governance.

#### **Way Forward**

Moving forward, the GAC portal can be further enhanced by integrating more advanced AI-driven tools to automate decision-making processes and analyze appeal trends. Additionally, ongoing collaboration with more Social Media platforms and continuous monitoring will ensure adherence to evolving digital ethics and regulations. By scaling up the system and incorporating feedback from stakeholders, the GAC portal can evolve into a global model for digital grievance redressal, driving greater accountability and trust in the digital ecosystem.



#### **Ajay Singh Chahal**

Deputy Director General & SIO NIC HP State Centre, Shimla, Himachal Pradesh - 171002 Email: sio-hp@nic.in, Phone: 177-2624045

# Matsya Baibhav

A Digital Leap in Assam's **Fisheries Sector** 

Edited by KAVITA BARKAKOTY



he fisheries sector holds immense socio-economic significance for Assam, contributing substantially to the livelihood of rural communities. With an average annual growth of about 6% in fish production, Assam's total fish output has increased from 2.94 lakh tons in 2015-16 to 3.93 lakh tons in 2020-21. Similarly, fish seed production has seen a significant rise from 5,678 million fry to 9,886 million fry in the same period. However, despite this positive trend, the demand for fish in the state surpasses the supply, necessitating the import of fish from other states.

#### **Ghare Ghare Pukhuri Ghare Ghare Maach (GGPGGM) Initiative**

Recognizing this gap, the Assam government introduced a strategic project in 2017-18 to enhance local fish production and generate employment for rural youth. The project, Ghare Ghare Pukhuri Ghare Ghare Maach (GGPGGM), was launched under the Rural Infrastructure Development Fund (RIDF-XXIII) with an outlay of Rs. 12,155 lakh, sourced from NABARD (Rs. 9,509.50 lakh), State Share (Rs. 500.50 lakh), and

Matsya Baibhav is a digital initiative to enhance fisheries management in Assam. Launched under the GGPGGM project, it tracks and geo-tags fishery assets using a mobile app and web portal available at https://fisheryassets.assam. gov.in/ integrated with Bharat Map Services. With 9,083 ponds created and 9,029 geo-tagged, it ensures transparency, real-time monitoring, and data-driven decision-making. By reducing fish imports and boosting selfsufficiency, Matsya Baibhav plays a key role in Assam's fisheries development.

tracking of assets and beneficiaries became essential, leading to the development of a digital solution.

#### Objective

To streamline the monitoring and evaluation of GGPGGM, the National Informatics Centre (NIC), Assam State Centre, developed a web portal and a mobile app called Matsya Baibhav. The Matsya Baibhav mobile app and Portal https://fisheryassets.assam.gov.in was launched in the month of February, 2022. The primary objective of this application is to geo-tag the assets created under the project and provide a centralized platform for data management, integration of Fishery Assets created in the Bharat Map with location and transparency

- Common Platform: Facilitate monitoring of the GGPGGM scheme through an integrated web portal
- Real-time Status Updates: Provide up-to-date information on the implementation progress
- Dashboard & Reports: Summarize scheme status with graphical representation and detailed reports





**Atanu Das** Dy. Director General atanu.das@nic.in



Hiranmayee Goswami Sr. Technical Director asm-hiran@nic.in



Ajit Bhattacharyya **Technical Director** ajit.b@nic.in

beneficiaries (Rs. 2,145 lakh). The project aimed to boost fish production by 5,000 metric tons

As part of the initiative, beneficiaries received fish culture input support, including fish seed and feed, for two consecutive years under the Chief Minister's Samagra Grammya Unnayan Yojana (CMSGUY). They were also provided with training through College of Fisheries in Raha, and Krishi Vigyan Kendras under Assam Agricultural University, Jorhat, to ensure the long-term success of the project.

The GGPGGM scheme focused on constructing 1,000 hectares of individual farmer ponds and 430 hectares of village community tanks across all Legislative Assembly Constituencies (LACs) in Assam. Given the scale of the project, real-time



- Geo-mapping of Ponds & Tanks: Display location-based data of assets created under GG-**PGGM**
- Public Access: Ensure transparency by making dashboard and reports accessible to the public

#### **User Roles and Workflow**

The system follows a hierarchical approval mechanism:

- State-level users can approve or reject entries made by district or block-level users
- District-level users can approve or reject only block-level entries
- Block-level users

#### **Features of Matsya Baibhav**

The portal includes distinct categories to track assets and beneficiaries:

- Ponds Geotagged: List of all approved ponds/ tanks
- Individual Ponds: Approved private ponds
- Community Ponds: Approved village community tanks
- Pending for Approval: Entries awaiting vali-
- Rejected Entries: Ponds/tanks not approved by state or district authorities
- Monthly Geotagging Updates: Summary of geotagged ponds/tanks within a specific month

Additionally, the system provides districtwise, LAC-wise, and block-wise reports, ensuring comprehensive data accessibility for state-level users.

#### **Latest Data from Matsya Baibhay Portal**

As per the latest records, a total of 9,083 ponds and tanks have been created under the GGPGGM initiative, of which 8,706 are individual ponds and 377 are community tanks. In terms of geo-tagging, 9,029 water bodies have been successfully mapped, with 8,650 being individual ponds and 379 being community tanks. These figures highlight the remarkable progress made in implementing the initiative, demonstrating the crucial role of Matsya Baibhav in accurately tracking, mapping, and managing fisheries assets across Assam.

#### **Geotagging Process in Matsya Baibhav**

The geo-tagging process involves:

- Adding a new entry: Users input beneficiary or community details
- Capturing images: Clicking photos at all corners of the pond/tank, which records latitude
- Saving and uploading: Users review entries, ensure accuracy, and upload them to the server
- Approval process: Entries are verified and ei-



▲ Fig 8.2 : Online Training-cum-awareness Programme on MATSYA BAIBHAV conducted for all District and State level officials of Fishery Department



▲ Fig 8.3: Website Home page of Assets of Fishery Department

ther approved or rejected with feedback

If required, images can be re-captured before uploading to the server, ensuring precise geolocation data.

#### Conclusion

Matsya Baibhav has revolutionized fisheries management in Assam by integrating digital tracking, ensuring transparency, and enhancing decision-making capabilities. By accurately geo-tagging ponds and tanks, the initiative strengthens the state's ability to achieve selfsufficiency in fish production. With over 9,000 ponds/tanks already mapped and tracked, the

project showcases the power of technology in boosting local livelihoods and reducing Assam's dependency on fish imports. Moving forward, continuous monitoring and expansion of Matsya Baibhav will be crucial in sustaining this progress and maximizing the benefits for fish farmers across the state.

#### Shri Atanu Das

Deputy Director General

First Floor, Composite Building, Near Last Gate of Assam Secretariat, Dispur, Guwahati, Assam - 781006 Email: atanu.das@nic.in, Phone: 0361-2237164



he National Informatics Centre (NIC), in partnership with the High Court for the State of Telangana, has played a transformative role in modernizing the judicial ecosystem through robust, secure, and user-centric ICT solutions. The collaboration has vielded a wide array of innovative platforms that not only improve access to justice but also streamline court processes, enhance transparency, and promote efficiency across all levels of the judiciary-from the High Court to District and Subordinate Courts.

This comprehensive digital framework has been shaped by NIC's domain expertise in web technologies, cybersecurity, data management, e-governance, and artificial intelligence. By aligning with the judiciary's evolving needs, NIC has introduced a portfolio of services that address core operational challenges, improve litigant engagement, and promote open justice.

#### **Key ICT Initiatives and Digital Solutions**

#### Web Portal of the High Court of Telangana https://tshc.gov.in

The official website of the High Court of Telangana serves as a digital gateway for advocates, litigants, law students, media, and



**Guntuku Prasad** Sr. Technical Director & SIO



Achuta Venu Nattay Sr. Technical Director & HoD shod7-ts@nic.in



Moduguru Subha Technical Director officer3.jid-ts@nic.in



NIC, in collaboration with the High Court of Telangana, is driving digital transformation in judiciary through innovative ICT solutions like ePay, AI tools, and online RTI systems. Upcoming initiatives include extending ePay to lower courts, launching an Online Certified Copy system, and introducing an AI-powered legal chatbot. These advancements aim to streamline judicial processes, improve transparency, and enhance service delivery, creating a more accessible and efficient justice ecosystem across the state.



citizens. The portal offers a user-friendly interface with quick access to:

- Profiles of Hon'ble Judges
- · Cause Lists and Case Status
- Notifications, Circulars, and Recruitment **Notices**
- Court Judgments and Orders
- e-Filing, e-Payments, and other eServices

This dynamic platform promotes judicial transparency and acts as a single source of authentic information.

#### **RTI Portal for District and Subordinate** Courts

#### https://dcrti.tshc.gov.in

To ensure transparency and uphold citizens' right to information, NIC has developed a dedicated RTI Application Workflow System for

District and Subordinate Courts. This solution enables users to:

- Register and submit RTI applications/appeals
- · Pay RTI fees through integrated payment gate-
- Receive real-time updates via SMS notifications
- Track the status of applications through a centralized dashboard
- Facilitate prompt processing by judicial officers via secure logins

The portal ensures compliance with RTI norms while simplifying administrative handling.

#### ePay Application for High Court

#### https://epay.tshc.gov.in

Also accessible at: https://pay.ecourts.gov.in/epay

NIC has developed a robust and secure ePay platform integrated with the High Court's e-Filing system. This application facilitates:

- Online payment of Court Fees
- · Scheduled extension for penalties, fines, and other legal payments
- Multiple payment options and auto-receipt
- Real-time status tracking of payment transac-

The platform significantly reduces manual interventions, enhancing accuracy and user convenience.

#### Visitor Pass Management System (e-VPass) https://vpass.tshc.telangana.gov.in/vpass

To strengthen physical security at the High Court premises and streamline visitor entry, NIC has implemented a secure e-Visitor Pass Management System. Key features include:

- · Online generation of visitor passes for litigants, vendors, officials, and guests
- QR and barcode authentication for access con-
- Daily validity (9:30 AM to 5:00 PM) for each pass
- · Secure validation at entry points by security

This digital system minimizes queues, enhances transparency, and supports safe court functioning.

#### **AI Services Platform for Judicial Officers**

#### https://ai.tshc.gov.in

NIC has integrated artificial intelligence into judicial workflows through a dedicated platform that assists judges and officers in various stages of case handling. The platform features:

- Shruthi Converts spoken dictation in court to editable text using speech recognition
- Saaransh Generates concise summaries from lengthy judgments for quick comprehension
- Panini Translates judgments across languages to improve accessibility and inclusivity

These tools support faster documentation, multilingual accessibility, and improved legal research.

#### eTHCR - Electronic Telangana High Court Reports

#### https://tshc.gov.in/ehcr

A centralized repository of all judgments delivered by the Telangana High Court. The portal supports:

- Search by Case Number, Judge Bench, Party Names, Advocate Names
- Free-text and legal provision-based search
- Historical and real-time access to court rulings

#### **DigiTHCR - Digital Reportable Judgments** with Translations

#### https://tshc.gov.in/digihcr

This initiative ensures legal inclusivity by providing reportable judgments along with Telugu translations. Users can filter results using:

- T.H.C.R number, Volume, Case Number, Neutral Citation
- · Party names, Order Date, or Keyword search



▲ Fig 9.2 : Launch of Web Portal for High Court of Telangana

#### Online RTI Portal - High Court of Telangana https://rti.tshc.gov.in, https://rtihome.tshc.gov.in

To facilitate transparency at the High Court level, a separate Online RTI portal has been developed. Features include:

- · Digital submission of RTI applications and ap-
- ₹10 application fee payable via UPI, net banking, or cards
- Real-time SMS alerts at each stage of the RTI lifecycle
- Full integration with internal workflows for speedy disposal

#### **Case Status Information System (CSIS)**

#### https://csis.tshc.gov.in

Designed to provide up-to-date information on case progress, CSIS supports multiple search criteria including:

- Case Number, Filing Number
- Advocate Code/Name
- Party Names and Bench Details

It enhances transparency and helps litigants stay informed without visiting court premises.

#### **Way Forward**

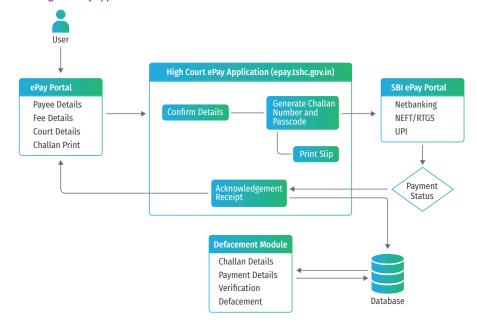
Building on the momentum of digital transformation, the ePay facility is set to be extended to District and Subordinate Courts, significantly enhancing accessibility simplifying the payment of court fees and penalties at all levels. Complementing this initiative, an Online Certified Copy system will soon be launched-integrating e-Signatures and e-Payment gateways to enable secure, seamless, and paperless access to certified judicial documents.

To empower judicial officers with intelligent tools, an AI-powered Legal Chatbot is currently under development. This solution will provide instant references to relevant case laws and precedents, streamlining legal research and supporting faster, more informed decisionmaking.

Other notable advancements include the implementation of a dedicated module for automatic disposal of infructuous matters via NAPIX API, and the expansion of Judicial Web Services to the Digitization Wing and various State Government departments—enabling deeper interoperability and improved public service delivery.

Together, these initiatives underscore a strategic vision to modernize judicial operations, elevate institutional efficiency, and deliver a more responsive, technology-enabled justice system.

#### ▼ Fig 9.1 : ePay Application Work Flow



#### Guntuku Prasad

Senior Technical Director & SIO A-Block, BRKR Bhawan, Tank Bund Road Hyderabad Telangana – 500063 Email: sio-tg@nic.in, Phone: 040-23494700

he responsibility for administering and collecting taxes from Village Panchayats in Tamil Nadu lies with the Department of Rural Development and Panchayat Raj (TNRD). In a significant move toward digital governance, the National Informatics Centre (NIC), Tamil Nadu State Centre, has developed a dedicated online platform to facilitate the systematic collection of various taxes levied by Village Panchayats. This comprehensive digital solution, known as the Village Panchayat Tax Portal, is accessible at https://vptax.tnrd.tn.gov.in.

The portal was officially inaugurated by the Hon'ble Chief Minister of Tamil Nadu, Thiru M.K. Stalin, on 26th September 2023, marking a transformative step in strengthening grassrootslevel fiscal administration. Since its launch. the portal has been widely adopted, not only by the general public but also by over 30,000 departmental officials, including personnel at the state, district, and block levels, as well as Village Panchayat Secretaries and Presidents.

As of now, the portal hosts data from over 1.5 crore properties, spread across 3.66 lakh rural streets, along with details of nearly 35 lakh water connections. This data has been meticulously entered and managed by the Village Panchayat Secretaries, who play a pivotal role in maintaining



Kamalakkannan M. Dy. Director General & SIO sio-tn@nic.in



Krishnan N. Sr. Technical Director n.krishnan@nic.in



K.K. Siva Prasath **Technical Director** sivap@nic.in

Tamil Nadu Rural Development and Panchayat Raj Department is looking after the tax collection of 12,525 Village Panchayats in the state. There are about 1.5 Crore properties in the rural villages of the State and around 50 Lac Water Connection are provided to individual Houses. Nearly 20 Lakh Professional Tax payers are employed in the rural areas of the State. Apart from this, Non-Taxes and Trade License are also collected from the concerned citizens. NIC Tamil Nadu State Centre has developed application for online collection of all these taxes by the Village Panchayats.



up-to-date records. To facilitate administrative control and operational oversight, unique user credentials have been issued to the Secretaries and Presidents of all 12,525 Village Panchayats, enabling them to manage tax demands, monitor collections, and generate reports.

The portal empowers citizens to pay taxes online from the comfort of their homes. It also supports payments through counters at Panchayat offices and via Point-of-Sale (POS) devices, which are deployed at the village level to enable doorstep collection and real-time digital receipts. The wide range of payment options, combined with a user-friendly interface, has significantly enhanced compliance and ease of access.

Since the implementation of this application, tax collection efficiency has increased manifold, driven by enhanced real-time monitoring and data transparency. Officers at every administrative tier-State, District, and Block-are now able to supervise collections, identify gaps, and implement corrective measures swiftly. The platform has not only reduced manual workloads but has also laid the foundation for data-driven policy planning and financial accountability across Tamil Nadu's rural governance framework.

Citizen can pay the following Taxes through Village Panchayat Tax Portal.

- Property tax
- Water Charges
- Professional Tax
- Trade License
- Non-Taxes
- Miscellaneous Receipts

Citizen can register in the portal and attach their single or multiple properties for the payment of various taxes. They can view the Tax demand for the Properties, pay their dues and download



P. Ponniah, IAS Commissioner, Rural Development & Panchayat Raj Department, Govt. of Tamil Nadu

the receipts. The Tax demand can be accessed by citizen through their mobile number attached to properties or by giving assessment number. The portal is bilingual and demands and receipts are available in Tamil as well as in English. This Application has significantly reduced the work load of Village Panchayat Secretaries.

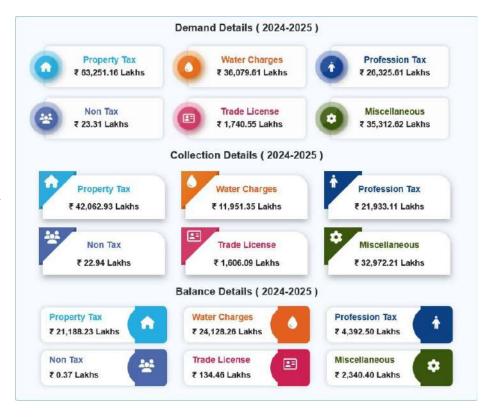
The collected taxes are transferred to Single Nodal Account (SNA)) account which are maintained by State RD for all 12,525 Village Panchayats, for both receipts and expenditure done by Village Panchayats.

The VP-Tax application follows a systematic workflow-based architecture. On receipt of the application, the President marks it to the Secretary for verification. The Secretary verifies the application and returns it to the President for approval. In certain cases, like name transfer, the application will be further forwarded for concurrence by the respective Block Development Officer (BDO).

The application is highly customizable to cater to the needs of individual Village Panchayats. Each Panchayat can decide the tax levy and other charges based on the Village Panchayat resolution. The application provides the facility to configure the same on the system, without any dependency of TN RD headquarters.

A Mobile Application has been developed and installed in Point-of-Sale (POS) Machines which were distributed for Tax Collection in all Village Panchayats. Tax Collectors can go and collect the Taxes at citizen doorstep, print the receipt and handover to the citizen. Easy payment options like cash, debit/credit card, UPI, internet payment etc. are provided for the citizen to make the tax payment. All the communications to Citizen happen via SMS and email.

The VP Tax application was seamlessly integrated with Property Registration Portal. Whenever a property is registered in the Property Registration portal, the property details get



immediately updated in the Village Panchayat Tax Portal and new Assessment ID is given to the property.

This Application has significantly reduced the work load of Village Panchayat Secretaries. Demand, Collection and Balance (DCB) reports, daily collection report under various categories (Counter, Online, POS collection) and many more reports can be generated at Village, Block, District and State levels.

#### Technology Stack Used

The VPTAX Application Software is developed

in complete Open-Source Technology using Linux, Nginx with Postgres as backend. It is developed as a Responsive Web Design (RWD) using Bootstrap Libraries for easy viewing in mobile also. AlmaLinux 9.5, Nginx 1.25, PHP 8.1 (core PHP), PostgREST for API

#### **Hardware and Connectivity**

Each Village Panchayat has been provided with Desktop machines, Printer, POS Machines. Sufficient Broad Band Connectivity is also provided through ISPs

#### Conclusion

The Village Panchayat Tax application has revolutionized collection of all kinds of taxes in Tamil Nadu Village Panchavats. The Tax Collection has improved many folds and the Government is able to centrally monitor the collection across the State. Citizen service will be introduced shortly for New Assessment, Name transfer, Water connection etc., so that citizen can submit their request online without the need to visit the office. A mobile app, named 'OORAGAM' (meaning Rural in Tamil), has been developed in local language for payment of all kinds of VP Tax services in Flutter framework for compatibility with Android and iOS. This app will be released shortly.

### ▼ Fig 10.1 **VP Tax online Hardware Architecture** TN State Data Centre NIC TN State Data Centre - Chennai User 1 Annlication DR Serv Administrato TN State Data Centre NIC TN State Data Centre - Chennai Chennai

#### State Informatics Officer

NIC, Tamil Nadu State Centre, E-2-A, Rajaji Bhavan, Besant Nagar Chennai, Tamil Nadu - 600090 Email: sio.tn@nic.in, Phone: 044-24917850

# Puduvai Kalal

Strengthening Governance Through Digital Transformation

Edited by NISSY GEORGE

he department is committed to upholding a fair and transparent excise system, fostering accountability, integrity, and public trust. By monitoring and regulating excise activities, it works to prevent illicit trade practices, protect consumers, and safeguard public health and safety. A key function of the department is the licensing and supervision of establishments involved in the production and distribution of alcoholic beverages, ensuring adherence to prescribed guidelines and standards. This regulation promotes responsible consumption and helps mitigate the negative impact of alcohol on society.

NIC Puducherry has played a pivotal role in transforming State Excise E-Services, enhancing efficiency, security, and accessibility for stakeholders in the excise sector. Through technological expertise, infrastructure support, security measures, and capacity-building initiatives, NIC Puducherry has enabled the department to implement efficient, secure, and user-friendly e-services. By leveraging NIC Puducherry's support, the State Excise Department can better serve stakeholders



The State Excise Department Puducherry is a key government agency responsible for regulating excise activities within the Union Territory. With revenue generation as its primary objective, the department plays a crucial role in excise duty collection permit issuance. ensures the implementation and enforcement of excise laws, maintaining compliance with relevant regulations and policies.





V. Gopi Swaminathan Sr. Technical Director & ASIO gopi.pon@nic.in



Shafiulla B. Technical Director Shafi.b@nic.in



A. Sundiramurthi Scientist-D murthi.as.@nic.in

and foster a digital ecosystem that promotes transparency, convenience, and regulatory compliance.

#### **Process**

The State Excise Department operates through a structured system that manages various aspects of excise regulation and administration. It ensures compliance, revenue collection, and transparency in the sale and distribution of goods and services.

#### **Arrack, Toddy, and Auctioning**

The State Excise E-Services include a robust online platform for conducting Arrack and Toddy shop auctions. This feature ensures transparency and fairness, providing equal opportunities to all interested bidders. The digital platform simplifies the bidding process, enhances efficiency, and reduces administrative overhead.

#### Online Services Offered

· Bidders' registration

1

- Single and multiple registration options
- Solvency and EMD details captured and adjusted dynamically during auctioning
- · Dynamic extension of bidding time
- Minimum incremental bid amount can be de-
- Department can define shops listed for auction and their active duration

#### **License Registrations**

The e-services platform offers an online license registration system, allowing individuals and businesses to apply for and obtain excise licenses conveniently. This streamlined process eliminates manual paperwork and reduces processing time. Applicants can submit documents and track the status of their applications through the online portal.

#### Online Services Offered

- License registration for distilleries, FL2 tourism, and microbreweries
- Registration of new brands and labels
- Online payment through e-GRAS
- Real-time status tracking
- Department workflow approvals
- EODB compliance
- MIS reports

#### Permit Approval System

The State Excise E-Services incorporate a digital permit approval system for issuing various permits, including export, import, transport, and local permits. This system eliminates paperwork, speeds up approvals, and provides real-time status updates. It ensures compliance with excise regulations and smooth business operations.

#### Online Services Offered

- Apply for various permits online (Import/Export/Transport/Local/Arrack)
- E-payment of excise duty
- Renewal of licenses, labels, and brands
- Workflow-based approvals
- Issuance of IMFL and Arrack permits & licenses
- Issuance of hologram permits

1487

- Special Excise Duty Collection (SED)
- Daily sale and purchase data capturing
- · Digitally signed permits with DSC token
- · QR code-based permit genuineness verification
- SMS/email notifications
- Arrack kits collection
- Analytical reports
- · Dashboard for monitoring

#### **Supply Chain Management System**

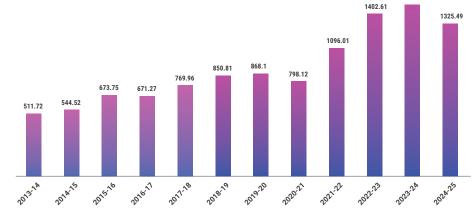
includes e-services platform comprehensive supply chain management system, allowing businesses to manage ENA permits, registers, and inventory, track the movement of goods, and maintain accurate stock records. This system enables efficient tracking and tracing from the distillery to the retail vend while mitigating illicit activities.

#### **Online Services Offered**

- End-to-end computerization (From distilleries to retail vend)
- Application for ENA and special spirit permits
- Workflow-based approvals
- Issuance of ENA/Special Spirit Permits and NOC
- Register details capturing (ENA arrival, blending, hologram, and bottling registers)
- Production and stock updates
- QR code scanning (cases and bottles)
- QR code-based track & trace facility
- Dashboard and MIS reports

#### **Mobile App Services**

To enhance accessibility and convenience, the State Excise E-Services provide mobile app support, allowing users to access system functionalities on their smartphones. The app



▲ Fig 11.1: Excise Duty - Revenue Collection (in Crore)

includes features such as QR code scanning, permit verification, stock details, and MRP viewing, enabling users to perform essential tasks on the go.

#### Online Services Offered

- · Login facility for dealers and department of-
- Facility to verify the MRP of a brand
- · Permit genuineness verification
- Stock updates and viewing details
- QR code scanning for cases and bottles
- · QR code-based track & trace

#### **Innovative Methods Used**

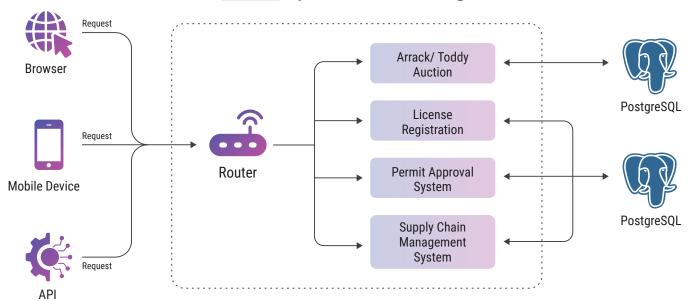
- Online Application Process: A user-friendly interface simplifies applications for licenses, permits, and approvals, eliminating physical visits
- Real-Time Status Tracking: Users can track applications, receive updates, and ensure a smooth process

- Online Payment Facilities: Secure cashless transactions via e-GRAS, net banking, credit/debit cards, and mobile wallets
- Enhanced Security with DSC Tokens: Digital signatures verify identity, prevent unauthorized use, and ensure document integrity
- Genuine Permit Verification: QR codes enable instant verification of permits, reducing counterfeit risks
- Two-Factor Authentication: SANDES OTP service enhances security using mobile-based authentication

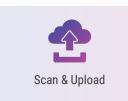
#### **Impact**

- Improved Convenience: Users can access excise services online, eliminating physical visits
- Increased Efficiency & Transparency: Automation reduces paperwork, errors, and delays
- Transparent Online Bidding: Digital auctions ensure fair, real-time bidding and reduce legal issues

#### **System Architecture Design**





















**System Overview** 

- Better Compliance & Monitoring: Enables tracking and regulation of alcohol purchase and distribution
- Faster Permit Processing: Reduced turnaround time accelerates business operations
- Enhanced Revenue Collection: Streamlined processes improve tax monitoring and collection
- Same-Day Payment Processing: e-GRAS en-

sures instant revenue credit, unlike manual pay-

• Adaptation to Crisis Situations: Special Excise Duty Online Collection ensured continuity during COVID-19.

#### **Technology Used**

The State Excise E-Services project is a digital initiative designed to streamline and enhance excise-related services using modern technology

#### **Key Technologies**

- Java, Struts 2, PostgreSQL, Apache Tomcat, Nginx for secure, scalable, and efficient operations
- Modern web technologies to facilitate seamless transactions, compliance management, and real-time data access
- · Advanced security measures, including Content Security Policy (CSP), HTTPS enforcement, and session management, ensuring data protection and system integrity
- By leveraging cutting-edge technology, Puducherry State Excise E-Services ensures greater transparency, efficiency, and convenience for stakeholders.

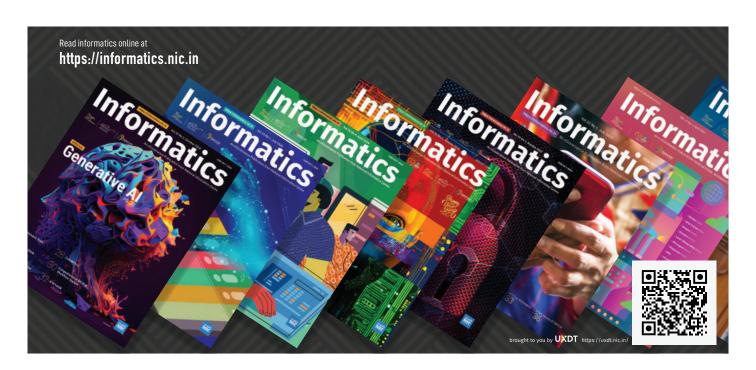
#### Conclusion

The implementation of State Excise E-Services has transformed service delivery, making it more efficient, transparent, and accessible. Through online platforms for auctioning, permit approvals, license registration, renewals, and supply chain management, the department has streamlined processes and improved regulatory compliance.

The adoption of technology has not only benefited stakeholders but has also contributed to higher revenue generation for the government of Pondicherry.

#### V. Gopi Swaminathan

Senior Technical Director & SIO A Block, 4th Floor, Chief Secretariat, Pondicherry Puducherry UT - 605001 Email: sio-pon@nic.in, Phone: 0413-2229484



President's Secretariat maintains an extensive repository of photographs taken during official events held at Rashtrapati Bhavan and across various tours and engagements of the Hon'ble President of India. These images, captured by official photographers, document state functions, ceremonial occasions, and national milestones. Over time, this has resulted in the creation of a vast digital photo archive, a portion of which is publicly accessible through the Digital Photo Library (DPL) portal (https://dpl. rashtrapatibhavan.gov.in/).

Edited by MOHAN DAS VISWAM

While metadata-based search (by event, date, or keywords) is available, it becomes increasingly difficult to locate specific individuals across different events—especially when the user does not recall the event name or date. To address this, an Al-powered FaceSearch service has been introduced. This system enables users to search for photos by



Face search technology uses Al to identify and match faces across large photo collections. It extracts unique facial features from an image and compares them with stored data to find matches-regardless of lighting, angle, or expression. It enables fast, photo-based search without relying on names or dates.



#### **Background on Facial Recognition Technology**

The core of the FaceSearch system lies in Al-based facial recognition, which uses deep learning models-primarily convolutional neural networks (CNNs)-to analyze and compare

The facial recognition process involves:

- Face Detection: Identifying and isolating faces from the background in an image
- Feature Extraction: Generating unique facial embeddings—numerical vectors that represent the distinctive features of each face
- Similarity Matching: Comparing embeddings using cosine similarity or other metrics to determine how closely they match

These techniques have evolved to handle challenges such as changes in lighting, facial angles, age progression, or expressions, making them highly effective for large-scale photo retrieval.

#### **System Architecture and Technical Details**

The FaceSearch functionality has been integrated into the Digital Photo Library platform with a modular, scalable architecture comprising the following components:

#### **Digital Photo Library Platform**

- Frontend and Backend: Developed using PHP and PostgreSQL
- Photo Storage: Images are stored in a secure file system; metadata is stored in PostgreSQL

#### FaceSearch System

The facial recognition system is built in two lavers:

- FaceSearch Web API:
- Built using FastAPI (Python)
- Manages incoming requests (image uploads), interfaces with the database, and communicates with the GPU-based encoding service



**Gyan Ranjan Nanda** Sr. Technical Director & HoD gyan@nic.in



Suresh Chandra Manral Sr. Technical Director suresh.manral@gov.in



Sayantan Saha Scientist - D sayantan.saha@gov.in

uploading a photo or taking a selfie, allowing facial recognition to identify images containing the same individual across the archive.

#### The Need for an Al-Driven Solution

Whenever the Hon'ble President participates in an event-be it at Rashtrapati Bhavan or during a state visit—the official photographer documents the occasion in detail. These photos are systematically uploaded to the Digital Photo Library. However, the need often arises to locate photographs of a specific person across multiple events. Without knowing the exact event name, date, or other metadata, finding such images through traditional filters can be time-consuming and ineffective.

Face-based search offers a more intuitive solution: by simply uploading an image, the system can identify and retrieve all photographs in which that person appears, regardless of the event context.

#### Technology Update

- · Stores image encodings and metadata link-
- Face Encoding Service
  - · Deployed on a GPU server
  - · Performs the facial feature extraction using pre-trained deep learning models
  - · Returns encodings to the Web API for storage and comparison

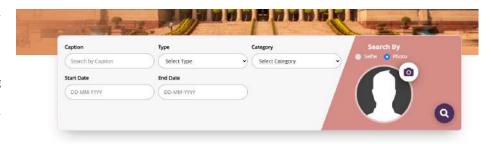
#### Workflow

#### Image Upload & Storage

- · A user uploads a photo to DPL or captures a selfie.
- Metadata is stored in PostgreSQL.
- The image is stored in the file system and sent to the FaceSearch API.

#### Encoding & Matching

- The API sends the image to the GPU-based encoding service
- · The encoding service extracts facial features and returns a vector
- This vector is stored alongside the photo metadata
- · When a search is initiated with a photo, the uploaded image is similarly encoded
- · The system compares the query embedding with those in the database (filtered by other criteria like date/event)
- · Matches are returned to the user, showcasing relevant photos



▲ Fig 12.1: The search panel for DPL showing the face search module

#### **Key Features**

#### Selfie and Photo-Based Search

Users can find photos using an image instead of relving on metadata

#### **Advanced Filtering**

Supports traditional filters like event name, date range, and keywords

#### **Fast, Scalable Performance**

GPU-backed encoding and efficient search mechanisms ensure quick results

#### **Secure and Modular Design**

Separation of services ensures maintainability and scalability

#### **Future Enhancements**

further enhance the svstem's capability and user experience, the following improvements are proposed:

#### **Multi-Face Search**

Enable simultaneous recognition of multiple faces within a single photo, useful for group photos.

#### **Improved Facial Recognition Models**

Continuously retrain the AI model using more diverse and up-to-date datasets to handle age variations, occlusions (like masks), and lighting differences more accurately.

#### **Face Clustering and Similarity Grouping**

Automatically group similar faces across the dataset using clustering algorithms to assist archivists and researchers.

#### **Natural Language-Based Search**

Integrate natural language processing (NLP) to support conversational queries like "Show all events with foreign dignitaries in 2024."

#### **Text-Image Multimodal Search**

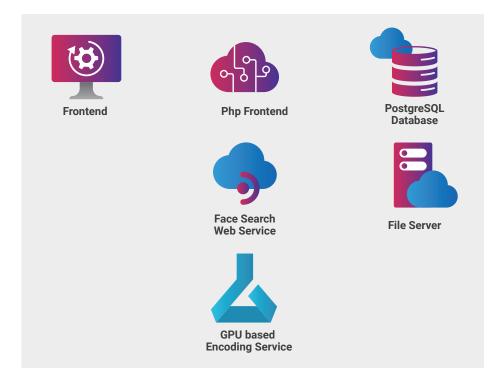
Use Multimodal Large Language Models (LLMs) to enable image retrieval based on text descriptions, even in the absence of detailed metadata.

#### Conclusion

The integration of AI-powered facial recognition into the Digital Photo Library marks a significant step toward modernizing archival access and enriching user experience. By allowing intuitive, image-based searches, the system not only enhances accessibility but also opens up new possibilities for historical research, documentation, and public engagement.

The journey ahead involves making the system smarter, faster, and more inclusiveensuring that this national visual archive continues to serve as a living chronicle of the Presidency and the people of India.

#### ▼ Fig 12.2 System Diagram



#### Sayantan Saha

Scientist - D President's Secretariat, Rashtrapati Bhavan, President's Estate, New Delhi - 110004 Email: sayantan.saha@gov.in, Phone: 011-24305768

# Decoding Data Governance & Strategy

Strategies for Data Protection, Compliance, and Optimization

Edited by MOHAN DAS VISWAM

n today's digital world, data is a vital asset, providing insight that drive strategic decision making, driving innovation, business, and governance. India, with its vast population and rapidly growing digital economy generates one of the largest volumes of personal data. Organizations increasingly rely on this data for defining their policies. However, without proper protection and management, this data remains vulnerable to misuse, breaches, as well as the information gathered can become unwieldy and unusable. Therefore, as data proliferation accelerates, effective data governance has become essential.

The Digital Personal Data Protection (DPDP) Act, 2023, serves as a landmark regulation, reinforcing privacy rights, accountability, and compliance. It mandates organizations to adopt structured policies and safeguards, balancing data utility with protection. The challenge now lies in implementing robust data governance strategies



**Prashant Kumar** Mittal Dy. Director General pk.mittal@nic.in



**Mukesh Kumar Gupta** Sr. Technical Director mk.gupta74@nic.in



**Shashi Kant Pandey** Technical Director sk.pandey@nic.in



todav's digital data is the cornerstone of innovation, business growth, governance. As India witnesses an exponential increase in digital transactions and personal data generation, ensuring robust data governance has become imperative. This article delves into the principles of data governance, the impact of the Digital Personal Data Protection (DPDP) Act, 2023, and the role of advanced technologies in strengthening data security, compliance, and strategic utilization.

that not only comply with regulatory frameworks but also unlock the value of data-driven decisionmaking. This article explores key components of data governance, technology interventions, and the strategic roadmap for organizations to maximize data utility while ensuring privacy and

Data Governance refers to the policies, frameworks, and processes that ensure data is accurate, secure, and accessible to the right stakeholders. It establishes clear roles, responsibilities, and standards for data management while ensuring compliance with

regulations. The Digital Personal Data Protection (DPDP) Act, 2023, is a timely initiative that strengthens data privacy and accountability, reinforcing India's leadership in data governance.

This article explores key principles of data governance and the strategic approaches, including data quality management, security, stewardship, and the integration of advanced technologies like AI and machine learning that organizations must adopt to manage, protect, and optimize their data assets. These tools enhance governance efforts by automating compliance and improving decision-making. By prioritizing data protection and strategic utilization, organizations can gain a competitive edge in the evolving digital landscape.

### **Key Components of Data Governance**

Data governance encompasses policies, frameworks, and operational strategies that define how data is collected, stored, accessed, and utilized. Key components include:

- Data Quality Management: Ensuring consistency, accuracy, and completeness of data
- Data Security & Privacy Protection: Implementing encryption, access controls, and anonymization techniques to safeguard personal data
- Compliance and Regulatory Adherence: Aligning with the DPDP Act, 2023, and global data protection laws to ensure lawful processing
- Data Stewardship & Accountability: Defining roles and responsibilities to maintain governance structures and ethical data practices
- Data Lifecycle Management: Managing data from collection to deletion, ensuring transparency and control over data processing
- Cross-functional Collaboration: stakeholders across departments to maintain consistent data governance practices

Organizations should embed these principles into their operations, fostering a culture of responsible data handling.

### **Technology Interventions in Data** Governance

With the increasing complexity of data ecosystems, technology plays a crucial role in automating governance frameworks. Advanced tools and methodologies enhance efficiency, ensuring compliance and security optimizing data utility.

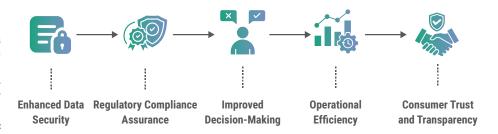
- Data Catalogs and Metadata Management: Providing a structured inventory of data assets, enabling better discovery, usage tracking, and policy enforcement
- Artificial Intelligence (AI) and Machine Learning (ML): AI-driven tools can help automate data classification, detect anomalies, and ensure policy compliance by identifying risks in real time
- Cloud-Based Governance Solutions: Cloud platforms offer scalable data governance solutions, enabling centralized data monitoring, access control, and compliance enforcement
- Automated Compliance Monitoring: Tools that continuously assess adherence to regulatory standards, alerting organizations about potential violations

By leveraging these technologies, organizations can strengthen their data governance frameworks, improving security and operational efficiency.

### **Innovations Applied in Data Governance**

Several innovations have been adopted to enhance data governance and ensure compliance with evolving regulatory landscapes:

• Zero-Trust Architecture: A security model that



▲ Fig 13.1: Benefits and Impact of Robust Data Governance

continuously verifies users and devices before granting access to data, reducing risks of insider threats

- Automated Data Masking and Tokenization: Protecting personally identifiable information (PII) while allowing analytical insights without exposing raw data
- Emerging Tech-Driven Governance Dashboards: Providing real-time insights into data usage, compliance metrics, and potential risks, aiding decision-makers

innovations are instrumental in streamlining governance, reducing manual effort, and strengthening data protection mechanisms.

### **Benefits and Impact of Robust Data** Governance

Implementing a structured data governance strategy yields significant advantages, including:

• Enhanced Data Security: Minimizes the risks of data breaches and unauthorized access through strong security protocols

- Regulatory Compliance Assurance: Ensures adherence to the DPDP Act, 2023, reducing legal risks and penalties
- Improved Decision-Making: Reliable and well-managed data fosters strategic insights, improving business outcomes
- Consumer Trust and Transparency: Strengthening privacy protections builds public confidence in digital services, fostering trust in organizations

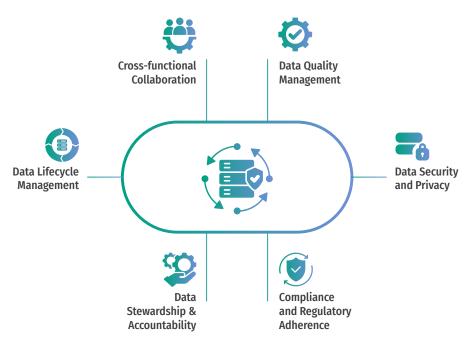
Effective governance ultimately enables organizations to harness data's full potential while maintaining compliance and security.

### Way Forward: Building a Future-**Ready Data Governance Framework**

As data continues to grow in volume and complexity, we must proactively refine our governance strategies. The following steps may help in building a future-ready data governance framework:

- Align Governance Strategies with Business Goals: Integrate governance into the core operational strategy to drive value creation
- Invest in Scalable Technologies: Adopt Al, blockchain, and cloud solutions to ensure agility in governance processes
- Enhance Workforce Capabilities: personnel on data privacy, regulatory requirements, and best governance practices
- Regularly Audit and Update Policies: Conduct periodic assessments to identify gaps and refine governance frameworks
- Foster a Culture of Data Responsibility: Encourage cross-functional collaboration and accountability for ethical data usage
- implementing these organizations can ensure sustained compliance, security, and optimal utilization of data assets in an increasingly digital world.

# **Key Components of Data Governance**



### **Prashant Kumar Mittal**

**Deputy Director General** NIC HQ, A Block, CGO Complex Lodhi Road, New Delhi - 110003 Email: pk.mittal@nic.in, Phone: 011-24305201



# **MeitY Unveils Digital Brand Identity Manual to Standardize Government's Online Presence**

he Ministry of Electronics and Information Technology (MeitY) hosted the inaugural Chief Information Officer (CIO) Conference 2025 on February 18, 2025, in New Delhi. A highlight of the event was the unveiling of the Digital Brand Identity Manual (DBIM), a strategic initiative aimed at standardizing the digital presence of government entities across India.

During the conference, the DBIM-compliant MeitY website was unveiled, demonstrating a consistent and citizen-friendly digital experience. Additionally, websites of five other ministries, including the Ministry of Commerce and Industry, have been revamped following the new guidelines to provide a more standardized and user-friendly experience.

The nationwide adoption of the DBIM is set to revolutionize citizen engagement, strengthen trust, and enhance government service delivery in the digital space. This initiative underscores the government's commitment to leveraging technology for effective governance and aligns with the broader vision of a digitally empowered India.

- Archana Sharma, NIC HQ

# NIC Teams from Gujarat and Jharkhand Collaborate with State Drugs **Directorate to Host XLN Project Workshop**

he National Informatics Centre (NIC) teams from Gujarat and Jharkhand, in collaboration with the State Drugs Directorate of the Government of Jharkhand, organized a workshop focusing on the extended License, Lab & Legal Node (XLN) Project on 3rd March 2025. This initiative underscores the commitment to enhancing Good Regulatory Practices in the realm of Drugs and Cosmetics Regulation.

The workshop brought together a diverse group of stakeholders, including Drug Inspectors, Licensing Authorities, Joint Directors, and other key participants. The primary objective was to provide comprehensive insights into the XLN Project, emphasizing its role in streamlining regulatory processes and ensuring compliance within the pharmaceutical sector.

The XLN Project serves as a pivotal instrument in promoting Good Regulatory Practices in the field of Drugs and Cosmetics Regulation. By integrating licensing, laboratory, and legal functionalities into a unified digital platform, XLN aims to enhance transparency, efficiency, and accountability in regulatory procedures.

The successful organization of this workshop highlights the collaborative efforts between NIC teams from Gujarat and Jharkhand and the State Drugs Directorate of Jharkhand. Such partnerships are crucial in driving digital transformation initiatives that align with national objectives of regulatory



excellence and public health safety. For more details on the XLN Project and its implementation in Jharkhand, interested parties can visit the official portal: xln.jharkhand.gov.in

- Rajiv Kumar Sinha, Jharkhand

# Puducherry's Civil Supplies Minister Commends NIC and VLEs in **Training on Online Ration Card Services**

he Department of Civil Supplies & Consumer Affairs in Puducherry, in collaboration with the NIC, recently organized a training program aimed at enhancing the digital capabilities of Village Level Entrepreneurs (VLEs) associated with Common Service Centres (CSCs) on 15th January 2025 at Puducherry. The focus of the training was to sensitize VLEs about the Online Ration Card services, a significant step towards streamlining public distribution systems in the Union Territory.

The Hon'ble Minister of Civil Supplies & Consumer Affairs, Shri P.R.N. Thirumurugan, addressed the gathering, commending the efforts of the NIC team in developing and implementing the online services. He emphasized the pivotal role of VLEs in bridging the digital divide, ensuring that essential services like ration card applications are accessible to all citizens, especially those in rural areas.

NIC officials conducted detailed demonstrations of the application's workflow and functionalities, ensuring that VLEs are well-equipped to assist citizens in utilizing the online ration card services. This initiative is expected to enhance transparency, reduce processing times, and improve the overall efficiency of the ration card issuance process.

By empowering VLEs with the necessary knowledge and tools, the Department aims to ensure that citizens can seamlessly access online services related to ration cards. This training is a testament to the government's commitment to leveraging technology for better governance and service delivery.



NIC team's efforts in developing and implementing online services

For more information on the online ration card services, citizens can visit the official portal of the Department of Civil Supplies and Consumer Affairs, Puducherry.

- N.S. Kumaran, Puducherry

# Hon'ble Chief Minister of Jammu & Kashmir Launches J&K RTI Online **Portal to Enhance Transparency**

he Hon'ble Chief Minister, Omar Abdullah inaugurated the Jammu & Kashmir Right to Information (RTI) Online Portal at the Civil Secretariat on January 10, 2025 at Jammu, marking a significant advancement in promoting transparency and accountability within the region's governance.

The launch event was attended by Hon'ble Deputy Chief Minister Surinder Kumar Choudhary, Cabinet Ministers Sakeena Itoo, Javed Ahmad Rana, and Javed Ahmad Dar, along with Chief Secretary Atal Dulloo, Additional Chief Secretary to the Chief Minister Dheeraj Gupta, administrative secretaries, and senior officials.

In his address, Hon'ble Chief Minister lauded the efforts of the NIC Jammu and Kashmir in developing the portal, emphasizing its potential to streamline the RTI application process for citizens. He stated, "This initiative will provide easy access to government information under the RTI Act, empowering citizens with a faster, more transparent, and cost-efficient mechanism."

The Chief Minister also called for widespread publicity of the portal to ensure that citizens across Jammu & Kashmir are aware of its benefits.

Developed by NIC Jammu and Kashmir, the portal transitions the RTI application process from manual to online, enabling citizens to submit requests, track their status, and receive responses electronically, thereby eliminating the need for physical visits to government offices.

A notable feature of the portal is the issuance of a registration number to applicants via SMS and email for future reference, facilitating easy tracking of RTI applications.

The portal integrates 61 government departments, 272 nodal officers/ public authorities, 720 First Appellate Authorities (FAAs), and 3,419 Central



Hon'ble Chief Minister, Shri Omar Abdullah, accompanied by Hon'ble Deputy Chief Minister Shri Surinder Kumar Choudhary and senior officials, presides over the launch event of the J&K RTI Online Portal at the Civil Secretariat in Jammu

Public Information Officers (CPIOs) and Public Information Officers (PIOs), ensuring comprehensive coverage and keeping citizens informed about government activities.

This initiative represents a significant step towards enhancing transparency and accountability in governance, aligning with the administration's commitment to empowering citizens through accessible information.

- Anil Kumar Sharma, Jammu & Kashmir

# **NIC Empowers Punjab with eDAR**

n a significant step towards enhancing road safety and streamlining accident reporting, NIC in collaboration with the Transport Department, Punjab, organized a one-day training session at Mahatma Gandhi State Institute of Public Administration (MGSIPA), Chandigarh on 13th February 2025 to ensure the effective implementation of the Electronic Detailed Accident Report (eDAR) software in the state.

The initiative, conducted under the guidance of Transport Minister Shri S. Laljit Singh Bhullar, aligns with the directives of the Hon'ble Supreme Court of India and the Ministry of Road Transport and Highways to improve accident reporting and claim settlements.

At the heart of this initiative is NIC's eDAR system, a digital platform that ensures real-time data collection on road accidents. The system enables authorities to capture, analyze, and share accident data instantly, facilitating quicker response times and efficient claim settlements. The training session, led by NIC experts, provided hands-on demonstrations to government officials, police officers, and insurance representatives on seamless data entry and report generation using eDAR.

State Transport Commissioner Shri Jaspreet Singh highlighted NIC's critical role in developing and deploying this technology-driven solution. He emphasized that the eDAR system digitizes the entire accident reporting workflow, reducing delays and ensuring timely financial assistance for victims and their families.

During the session, NIC officials, including State Informatics Officer Shri Vivek Verma, CGM NIC Delhi Shri Jatinder Kumar, Shri Narinder Singh, and Shri Pawan Gupta, conducted detailed presentations on the functionalities of eDAR. The training covered:

- · Scientific crash investigation techniques to improve road safety mea-
- Accident data digitization for real-time reporting and policy-making.
- Cashless treatment provisions to expedite medical care for victims.



demonstrating its features for real-time accident reporting and streamlined claim settlements

Streamlined claim settlements to ensure faster financial compensation.

The event also saw participation from senior officials such as Additional State Transport Commissioner Shri Sukhvinder Kumar, Deputy General Manager of the General Insurance Council of India, Madan Vasundhara, and law enforcement officers, who discussed the importance of accurate accident data in policymaking and insurance settlements.

With eDAR, NIC has equipped Punjab's transport and law enforcement authorities with a powerful digital tool to improve accident response, enforce road safety regulations, and analyze traffic patterns for preventive action. The integration of real-time accident data with healthcare services and insurance mechanisms ensures that victims receive immediate assistance without bureaucratic delays.

This initiative marks another milestone in NIC's commitment to leveraging technology for public welfare, reinforcing Punjab's mission to reduce road fatalities and ensure a more efficient and transparent accident management system.

- Parminder Kaur, Punjab

# **Uttarakhand Legislative Assembly Embraces Digital Transformation**

n a landmark move towards paperless governance, the Hon'ble Chief Minister of Uttarakhand and the Hon'ble Speaker of the Uttarakhand Legislative Assembly officially launched the National e-Vidhan Application (NeVA) portal on 21st February 2025.

The NeVA portal, a state-of-the-art digital legislative solution, aims to streamline the functioning of the Uttarakhand Legislative Assembly by offering a smart and efficient data management system. By integrating digital records, real-time access to legislative proceedings, and an automated workflow, NeVA eliminates the need for physical paperwork, making the assembly's operations more transparent, accessible, and eco-friendly.

Speaking at the launch event, the Hon'ble Chief Minister emphasized that NeVA would revolutionize legislative governance by enhancing efficiency, ensuring real-time information access, and promoting environmental sustainability. The Hon'ble Speaker highlighted that this initiative aligns with the Digital India vision, ensuring that legislators, officials, and the public can seamlessly access legislative documents, bills, and reports.

Developed by NIC, the NeVA platform is designed to digitize and automate legislative proceedings across the country. It enables real-time document access, electronic bill processing, committee management, and digital voting, significantly reducing administrative delays.

With Uttarakhand adopting NeVA, the state joins the growing list of assemblies that have transitioned towards paperless governance, making legislative processes more efficient, transparent, and digitally inclusive. The



Hon'ble Chief Minister of Uttarakhand and Hon'ble Speaker of the Uttarakhand Legislative Assembly inaugurating the NeVA portal, a digital initiative by NIC under MeitY, to enhance legislative efficiency and transparency

initiative sets a benchmark for modernizing governance through digital interventions, reinforcing the state's commitment to e-Governance and smart legislative practices.

- Rajiv Joshi, Uttarakhand

# **NIC Celebrates Safer Internet Day 2025**

IC, across its state and district centres, actively participated in celebrating Safer Internet Day 2025, reinforcing its commitment to digital security, cyber hygiene, and responsible Internet usage. This annual global initiative, observed on February 11, aims to foster a safer, more inclusive digital environment for individuals, businesses, and government agencies.

On this occasion, NIC state and district teams conducted cybersecurity awareness workshops, interactive sessions, and training programs focusing

- Recognizing cyber threats such as phishing, malware, and identity theft.
- Best practices for data protection and secure online transactions.
- Responsible Internet usage and safeguarding digital identities.
- Government initiatives on cybersecurity and digital privacy.

Senior officials from NIC emphasized the importance of cyber resilience in today's digital era, particularly for government agencies handling sensitive

NIC plays a pivotal role in ensuring secure digital governance across the country. As part of the Safer Internet Day celebrations, NIC experts highlighted the organization's key initiatives, including:

- Strengthening cybersecurity infrastructure in e-Governance applications.
- Promoting secure authentication mechanisms through e-Pramaan and
- Raising awareness among government employees on safe digital prac-

NIC officials also reiterated the importance of citizen awareness in pre-



venting cyber fraud, particularly in the wake of growing digital transactions and online service adoption.

With the increasing shift towards paperless governance and digital transformation, initiatives like Safer Internet Day play a crucial role in building a cyber-aware ecosystem. Through statewide awareness programs and proactive cybersecurity measures, NIC continues to be a driving force in ensuring a secure, digitally empowered India.

- Archana Sharma, NIC HQ

# NIC Telangana and SBTET Join Hands to Develop Advanced ICT Solutions for Technical Education

 trengthening its commitment to digital transformation in governance, NIC, Telangana, has signed an agreement with the State Board of Technical Education and Training (SBTET), Government of Telangana, to develop, maintain, and implement customized software solutions for enhancing student services, academic workflows, and institutional management.

The Memorandum of Understanding (MoU), signed on February 3, 2025, underscores NIC's pivotal role in driving ICT adoption within state government departments. This collaboration will enable SBTET to streamline workflows, integrate digital dashboards, and improve decision-making processes through a comprehensive and integrated ICT platform.

The NIC-developed solution, hosted at SBTET Telangana, will empower stakeholders including:

- Students Access to seamless academic services, online applications, pre-exam and post-exam processes.
- Professional Institutions Simplified administration and real-time data
- Academic Counselors Enhanced student support with digital academic records.
- State Departments Improved decision-making with integrated dashboards and analytics.

NIC Telangana's initiative will provide transparent, accountable, and trustworthy services by digitizing core functions of SBTET, ensuring efficiency, security, and compliance with evolving educational standards.



Speaking on the collaboration, officials from NIC Telangana and SBTET highlighted the importance of technology-driven reforms in enhancing student experience, automating workflows, and fostering data-driven governance. This initiative aligns with Telangana's digital vision, reinforcing NIC's commitment to delivering cutting-edge ICT solutions for public service improvement.

- Hemendra Kumar Saini, NIC HQ

# India and Venezuela Strengthen Digital Ties

n a landmark step towards global digital collaboration, Shri S. Krishnan, Secretary, Ministry of Electronics and Information Technology (MeitY), Government of India, signed a Memorandum of Understanding (MoU) with H.E. Mr. Raul Hernandez, Vice Minister for Development of Information Technologies, Telecommunications, and Space Activities, Venezuela, to foster cooperation in building advanced Digital Public Infrastructure (DPI) on February 12, 2025 at New Delhi.

The strategic partnership aims to drive innovation, enhance digital service delivery, and create new avenues for technological growth between both nations. By leveraging India's expertise in scalable, secure, and inclusive digital solutions, the MoU will facilitate collaborative development in key areas such as digital governance, fintech, cybersecurity, AI-driven public services, and telecommunications.

With India's proven leadership in Digital Public Infrastructure, particularly through initiatives like Aadhaar, UPI, DigiLocker, and CoWIN, this collaboration presents an opportunity to share best practices and technological frameworks with Venezuela. The MoU will:

- Support knowledge exchange for developing scalable e-governance solutions.
- Strengthen digital service delivery across public and private sectors.
- Enhance cooperation in emerging technologies, including AI, blockchain, and cybersecurity.
- Enable capacity building and technical assistance to bolster digital ecosystems.

Speaking on the occasion, Shri S. Krishnan emphasized that this partnership aligns with India's vision of fostering digital inclusivity on a global scale. He highlighted that India's Digital India mission and robust digital



governance frameworks can serve as a blueprint for nations seeking transformative digital reforms.

H.E. Mr. Raul Hernandez expressed optimism about the collaboration, noting that India's expertise in large-scale digital infrastructure can significantly contribute to Venezuela's digital transformation journey.

This MoU marks a new chapter in international digital cooperation, reinforcing India's role as a global leader in Digital Public Infrastructure development while fostering technological growth and digital empowerment in

Source- https://pib.gov.in

# Launch of .bank.in and .fin.in Domains to Combat Digital Fraud

n a significant move to enhance cybersecurity and trust in India's financial ecosystem, the Reserve Bank of India (RBI) has introduced two dedicated domain zones-bank.in and .fin.in. This initiative aims to curb digital fraud, protect consumers, and establish a secure online presence for financial institutions. The National Internet Exchange of India (NIXI) is playing a pivotal role in supporting and managing these domains, ensuring that only verified entities can register under them.

Speaking on the development, Dr. Devesh Tyagi, CEO of NIXI, emphasized the importance of secure digital identity for financial institutions. "The launch of .bank.in and .fin.in is a proactive measure to counter online fraud and phishing attacks. These domains will provide financial institutions with a trusted online presence, assuring customers that they are interacting with legitimate and RBI-approved entities," he said.

The financial sector has been a prime target for cybercriminals, with an increasing number of online fraud cases reported each year. Fraudulent websites impersonating banks and financial institutions have led to significant monetary losses for consumers. The introduction of these dedicated domain zones aims to eliminate such threats by ensuring that only genuine financial institutions can register their websites under .bank.in and .fin.in.

### Key Benefits of .bank.in and .fin.in Domains

### **Enhanced Security Against Cyber Threats**

These domain extensions provide an additional layer of cybersecurity, restricting their use to verified financial institutions and preventing malicious entities from misleading customers.



### **Protection from Phishing Attacks**

Cybercriminals often create deceptive websites that mimic legitimate financial institutions. With strict verification processes, only RBI-approved banks, NBFCs, and financial entities can use these domains, reducing the risk of phishing scams.

### **Boosting Consumer Trust and Confidence**

Customers will be able to easily recognize legitimate financial websites, fostering greater trust in online banking, digital payments, and other financial transactions.

### **Supporting India's Digital Economy**

A secure digital infrastructure is essential for Digital India. By enabling

a secure and verified digital presence for financial institutions, these domains contribute to a more resilient fintech ecosystem.

As the national registry managing India's .IN domains, NIXI plays a critical role in ensuring domain security, managing registrations, and supporting digital governance. With the introduction of .bank.in and .fin.in, NIXI is reinforcing India's financial cybersecurity framework, enabling a safer and more reliable online environment.

"The financial sector is a cornerstone of our economy, and securing its digital presence is essential. Through these exclusive domain zones, we are ensuring that financial institutions and consumers alike can operate with trust and security in the online space," Dr. Tyagi added.

The launch of these secure domain extensions marks a major milestone in India's journey toward a stronger, fraud-resistant digital economy. With cyber threats evolving rapidly, proactive measures like these are crucial to safeguard financial transactions and consumer data.

As India embraces digital banking and financial inclusion, NIXI and RBI's joint efforts will play a key role in ensuring that online financial interactions remain safe, secure, and trustworthy—a vital step in strengthening the nation's digital infrastructure.

Source- https://government.economictimes.indiatimes.com

# **Entity Locker: A Game-Changer in Business Document** Management

inistry of Electronics and Information Technology (MeitY) has unveiled Entity Locker, a secure, cloud-based document management platform developed by the National eGovernance Division (NeGD). This innovative solution is set to revolutionize business document storage, sharing, and verification by offering real-time access, 10 GB of secure cloud storage, and digital signature authentication.

As a key component of India's Digital Public Infrastructure, Entity Locker aligns with the Union Budget 2024-25's vision for enhanced digital governance and the ease of doing business. The platform is expected to minimize administrative overhead, speed up processes, and improve operational efficiency across industries.

Entity Locker is designed to cater to a broad spectrum of businesses, including:

- · Corporations and large enterprises
- Micro, Small, and Medium Enterprises (MSMEs)
- · Startups and trusts
- Societies and NGOs

By integrating seamlessly with government and regulatory systems, the platform provides businesses with a centralized and secure environment for managing critical documents.

### **Key Features of Entity Locker**

- · Real-time access and verification: Direct integration with government databases for instant document validation.
- Consent-based sharing: Secure mechanisms to share documents with stakeholders.
- Role-based access: Aadhaar-authenticated access to ensure accountability.
- 10 GB of encrypted cloud storage: Secure, scalable, and efficient document storage for businesses.
- Legally valid digital signatures: Enhancing document authentication and

With built-in automation and compliance features, Entity Locker eliminates common operational bottlenecks faced by businesses. Some of its key benefits include:

- · Faster document verification and approvals
- Reduced regulatory burden through automated compliance checks
- Improved transparency with audit trails for all activities
- · Simplified collaboration with partners, regulators, and financial institutions



Entity Locker integrates with major government platforms, including:

- Ministry of Corporate Affairs (MCA)
- Goods and Services Tax Network (GSTN)
- Directorate General of Foreign Trade (DGFT)
- Procurement and tendering systems

This connectivity streamlines compliance and regulatory processes, ensuring businesses can efficiently manage document-heavy transactions.

The platform offers tangible benefits for various business functions,

- Vendor verification in procurement and trade portals.
- Expedited MSME loan applications by providing instant financial documentation.
- · FSSAI compliance for food businesses.
- GSTN and MCA registrations with minimal paperwork.
- · Corporate annual filings for regulatory reporting.

Senior officials at MeitY emphasize that Entity Locker is not just a digital tool-it is a strategic initiative to boost productivity, reduce compliance friction, and unlock new growth opportunities.

By addressing longstanding inefficiencies in document management, the platform empowers businesses to focus on innovation and expansion rather than administrative hurdles.

As a flagship initiative under Digital India, Entity Locker represents a significant leap towards a digitally empowered economy. Its phased rollout will include further enhancements and integrations, bringing more stakeholders into the digital governance framework.

Businesses, financial institutions, and regulators are encouraged to adopt Entity Locker to enhance efficiency, security, and compliance.

Source- https://pib.gov.in

# Linux Foundation Launches LF India to Accelerate Open Source Innovation

he Linux Foundation, a global leader in open source development, has launched LF India, a strategic initiative aimed at advancing open source adoption and innovation across the country. Announced during KubeCon + CloudNativeCon India, the launch highlights India's growing prominence in the global open source ecosystem.

LF India will foster collaboration among developers, enterprises, government bodies, and intergovernmental organizations (IGOs), with a focus on key domains such as cloud native technologies, telecommunications, Edge/IoT, blockchain, cybersecurity, and domain-specific artificial intelligence (AI). India is currently home to nearly 200,000 active contributors to Linux Foundation-hosted projects, and LF India will serve as a sandbox for innovation, encouraging the incubation of new open source software (OSS) initiatives.

"With India on track to become the world's largest developer community by 2028, its open innovation ecosystem is ripe for exponential growth," said Jim Zemlin, Executive Director of the Linux Foundation. He added that LF India marks a critical step in expanding global awareness of open source, and that the Foundation is eager to work closely with government leaders, enterprises, and developers to drive innovation with lasting global impact.

LF India plans to actively support India's developer community by engaging regional startups, hosting events, providing training, and facilitating community meetups. The initiative also aims to strengthen India's position as a contributor to transformative technologies, building on its robust digital public infrastructure and deep-tech startup ecosystem.

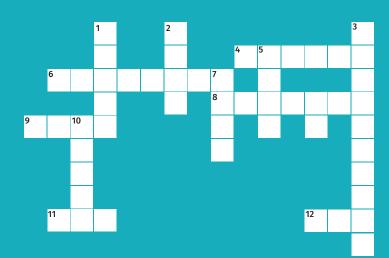


Arpit Joshipura, General Manager/SVP and Head of LF India, emphasized that LF India will serve as a hub for collaborative open source communities, driving local innovation with global relevance and helping shift India's role in the tech landscape from a consumer to a contributor.

As open source technologies continue to power critical digital infrastructure globally, LF India is expected to play a pivotal role in shaping the future of innovation, empowering developers, and supporting industry-wide transformation.

Source- https://www.thehindu.com

### **NICROSSWORD #3**



### **Across**

- 4. Scannable code for emergency and information access
- 6. Language platform enabling multilingual access
- 8. Virtual assistant answering pilgrims' queries
- 9. Secure connection used between Kumbh DC and DR site
- 11. Network zone separating public apps from internal systems
- 12. Creates secure data connection between sites

### Down

- 1. Digital entry pass system for pilgrims
- 2. Wristband tech used to track pilgrim movement
- 3. Tracks locations to monitor water levels and risk zones
- 5. Role-based system to manage app access securely
- 7. Integrated control center managing Kumbh operations
- 10. Large Language Model behind Kumbh chatbot



Scan QR code for the answers

# Appscape

obile technology has emerged as a primary tool for governments to serve their citizens. It has bypassed the need of traditional physical networks for communications and collaborations. It is also much more affordable and accessible, thus strengthening the nation through better citizen-government interaction. To further nourish this interactivity, NIC has created a repository of more than 730 mobile apps available through both the Android and iOS platforms. This issue of Appscape covers some of the more popular mobile apps launched recently. These apps belong to different sectors such as Administration, Development, Finance, Public Distribution, Health and

# **AWAAS**

waas App is an Android-based mobile application designed to streamline the reporting and inspection process for rural housing under Pradhan Mantri Awaas Yojana - Gramin (PMAY-G). The app serves a dual purpose:

- For PMAY-G Beneficiaries: It enables beneficiaries or their representatives to upload real-time progress reports of house construction. This helps them secure the next installment of financial assistance without delays.
- For PMAY-G Inspectors: Designated housing inspectors use the app to conduct on-site inspections of houses constructed under PMAY-G or other rural housing schemes integrated with AwaasSoft-the e-Governance solution of the Ministry of Rural Development (MoRD).

### **Key Features:**

- Captures high-quality images with time-stamp and geo-coordinates at each construction stage.
- Ensures faster verification by the Block Office on AwaasSoft, preventing delays.
- · Enhances transparency and reduces fraud through real-time tracking.
- By integrating technology and governance, Awaas App makes
- Faster Fund Disbursement: Beneficiaries receive their next installment of financial aid promptly.
- Transparency & Accountability: Geo-tagged and time-stamped photos reduce the risk of fraud.
- Improved Monitoring: Inspectors can efficiently track progress across multiple housing projects.
- Shri Amit Bhargava (hog-mohua@nic.in)

### For NIC apps related query, please contact

### **Android**

Education.

Sandeep Sood Email: sood.sandeep@nic.in | Phone: 0177-2880890

**Andrews Varghese** 

Email: kerkan@nic.in | Phone: 0497-2700761

# **T-Registration**

he T-Registration App is a mobile application designed to simplify the registration process for citizens in Telangana. It provides an easy-to-use digital platform for Hindu Marriage Registration, eliminating the need for physical visits to registration offices.

### Key Features of the T-Registration App:

- Users can submit applications for Hindu marriage registration directly through the app, reducing paperwork and wait times.
- Provides a guided process, ensuring that applicants can complete their registration smoothly.
- Users can securely upload the necessary documents, which are then verified digitally by the authorities.
- The app ensures data security and authenticity through government-verified credentials.
- Applicants can track the progress of their registration in real-time without needing to visit an office.
- Once approved, registered users can download their digital marriage certificate through the app.

By integrating technology and governance, the T-Registration App enhances transparency, efficiency, and accessibility, making the registration process seamless, paperless, and time-saving for the people of Telangana. Future updates may expand its services to cover additional registrations.

Shri Guntuku Prasad (sio-tn@nic.in)

# eSakshya

Sakshya is an advanced evidence management system that includes both a web portal and a mobile application, developed in alignment with the latest criminal laws under the Bharatiya Nyaya Sanhita (BNS). The app is designed to streamline and secure evidence collection, ensuring accuracy, authenticity, and compliance with legal standards. **Key Features of the eSakshya App:** 

- Users can instantly record videos and images of evidence and witness statements using the mobile app.
- Captured evidence is securely stored, ensuring tamper-proof documentation for legal proceedings.
- The system verifies and timestamps all recorded materials, maintaining their integrity and credibility.
- The app works in sync with a centralized web portal, allowing authorized users to access and review digital evidence.
- Developed as per the latest BNS criminal laws, ensuring that all evidence collection meets updated judicial standards.

By leveraging technology and real-time data recording, eSakshya enhances transparency, accountability, and efficiency in criminal investigations, making the evidence collection process seamless, secure, and legally robust.

🏝 Shri Shashi Kant Sharma (hog-mha@nic.in)

## Bhagya Keralam

hagya Keralam is an official mobile application developed by the Department of State Lotteries, Government of Kerala, aimed at ensuring transparency and convenience for lottery ticket buyers. The app provides a secure and user-friendly platform for verifying the authenticity of purchased paper lottery tickets and checking for prize-winning status after the draw.

### Key Features of the Bhagya Keralam App:

- Ticket Authenticity Check: Users can scan the lottery ticket to verify if it is genuine and officially issued.
- Prize Verification: After the draw, users can check if their ticket has won a prize by entering the ticket number.
- Prize Claim Status: Lottery winners can track the status of their prize claim and payment process.
- User-Friendly Interface: The app is designed for easy navigation, ensuring accessibility for all users.
- Secure and Reliable: Developed by the Government of Kerala, ensuring data security and accuracy in lottery transactions.

By digitizing the lottery verification and claim process, Bhagya Keralam enhances trust, transparency, and ease of use for lottery participants, making the system more efficient and fraud-proof.

Dr. Suchitra Pyarelal (sio-ker@nic.in)

# eLabharthi

Labharthi is an official mobile application launched by the Government of Bihar to provide a seamless digital platform for beneficiaries of various pension schemes. The app allows widows, senior citizens, and persons with disabilities to check their pension payment status, beneficiary details, an d Aadhaar seeding status effortlessly.

### Key Features of the eLabharthi App:

- Pension Payment Status Check: Users can verify their pension disbursement details by entering their Beneficiary ID, Aadhaar Number, or Account Number.
- Beneficiary List Access: Citizens can search for their name in the beneficiary list based on district, block, and panchayat details.
- Aadhaar Seeding Status: Beneficiaries can check if their Aadhaar is linked to their pension account for smooth transactions.
- Multiple Pension Schemes Covered: The app provides access to schemes like: Old Age Pension, Widow Pension, Disability Pension, Laxmi Bai Social Security Pension, Mukhyamantri Vridhjan Pension

One can easily access pension details without visiting offices, get real-time payment updates securely, and navigate effortlessly with a user-friendly interface.

Shri Ajay Kumar (sio-bih@nic.in)

### **Khanan Soft**

hanan Soft is an official mobile application developed by the Mines Department, Government of Bihar, to enhance efficiency, transparency, and accountability in the administration of mineral resources like sand and stone. The app streamlines mining operations, transport monitoring, and regulatory inspections, ensuring compliance with legal protocols. **Key Features:** 

- Users can verify mining and transport challans by entering the challan number or scanning a QR code to ensure authenticity.
- Officers can inspect sand mining sites (Balu Ghats) to detect and prevent illegal mining activities, with real-time data recording.
- Ensures that vehicles are registered, have valid challans, and comply with transport regulations.
- Provides a record of past inspections, allowing officers to track activity trends.
- Displays daily issuance trends through graphical insights.
- Offers a real-time view of operational and non-operational mining zones.
- Allows owners to securely manage accounts and update PINs.

Shri Ajay Kumar (sio-bih@nic.in)

# e-Jagriti

-Jagriti is an official mobile application developed by the Government of India to digitize and streamline Consumer Dispute Redressal Commissions across the country. The app enhances consumer protection and transparency by enabling users to file complaints, track case statuses, and access crucial information about their rights under the Consumer Protection Act, 2019.

### Key Features of the e-Jagriti App:

- Online Complaint Filing: Consumers can lodge grievances directly through the app.
- Case Status Tracking: Users can monitor real-time updates on their cases at the District (DCDRC), State (SCDRC), and National (NCDRC) Consumer Disputes Redressal Commissions.
- Consumer Rights Information: Provides detailed guidelines on consumer rights and responsibilities.
- Public Distribution System Insights: Offers updates on policies and schemes related to consumer welfare.
- **User-Friendly Interface:** Designed for easy navigation, ensuring accessibility for all consumers.

By leveraging digital connectivity, e-Jagriti empowers consumers with efficient, transparent, and accessible dispute resolution.

Shri Alok Tiwari (hog-consumeraffairs@nic.in)



# **NIC Honored with Best Electoral Practices Award 2024-25**

n the occasion of the 15th National Voters' Day (25 January 2025), the Hon'ble President of India, Smt. Droupadi Murmu, conferred the Best Electoral Practices Award 2024-25 for Best Government Department to NIC (National Informatics Centre). This prestigious recognition highlights NIC's seamless performance of IT systems during the General Elections to the 18th Lok Sabha.

NIC played a crucial role in ensuring a robust, efficient, and transparent digital infrastructure for election management. Its cutting-edge IT solutions facilitated real-time monitoring, secure data handling, and smooth execution of electoral processes, reinforcing the Election Commission of India's commitment to free and fair elections.

This award reaffirms NIC's dedication to leveraging technology for democracy, strengthening electoral integrity, and enhancing governance through innovative digital solutions.

# DG NIC Honored with 'Digital Champion' Award at **Tech Sabha 2025**

t the prestigious Tech Sabha 2025, Shri IPS Sethi, Director General, NIC was conferred with the "Digital Champion" Award, acknowledging his visionary leadership and transformative contributions to digital governance. His efforts in spearheading cutting-edge technology solutions have significantly advanced the nation's digital infrastructure, making governance more accessible, efficient, and citizen-centric.

The Digital Champion Award, a hallmark of excellence in e-Governance and technology-driven public service, was presented to Shri Sethi for his innovative approach in driving digital reforms, ensuring seamless service delivery, and enhancing transparency across government platforms.

Under his leadership, several flagship digital initiatives have been successfully implemented, paving the way for smart governance frameworks, Al-driven public services, and enhanced digital inclusivity. His contributions have played a pivotal role in transforming citizen engagement, data-driven policymaking, and secure digital ecosystems within governance structures.

