

Informatics



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by National Informatics Centre



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PRIYANK BHARTI, IAS

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PRINT & COORDINATION

UXDT Division

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National Informatics Centre

Ministry of Electronics & IT

Government of India

CONTACT ADDRESS

INFORMATICS SECRETARIAT

379, A4B4, Floor-3, NIC

A-Block, CGO Complex, Lodhi Road

New Delhi-110003, INDIA

Phone: 011-24305363/65

Email: editor.info@nic.in

From Digital To Intelligent Governance

Technology has long helped governments do things faster. Artificial Intelligence offers the opportunity to do them more wisely.

India's remarkable digital transformation over the past decade has created the foundation for the next phase of governance. Robust Digital Public Infrastructure and citizen-centric digital platforms have transformed the way governments deliver services, making them more transparent, accessible and efficient. As these digital ecosystems continue to mature and generate richer insights, governance is evolving beyond digital service delivery towards becoming increasingly intelligent, data-informed and proactive.



Artificial Intelligence is emerging as a powerful enabler of this transformation. Its greatest strength lies not in replacing human judgment, but in augmenting it. By analysing data, identifying patterns, automating routine processes and supporting informed decision-making, AI enables governments to become more responsive, efficient and citizen-centric while allowing public institutions to focus on what matters most: serving citizens with empathy, accountability and trust.

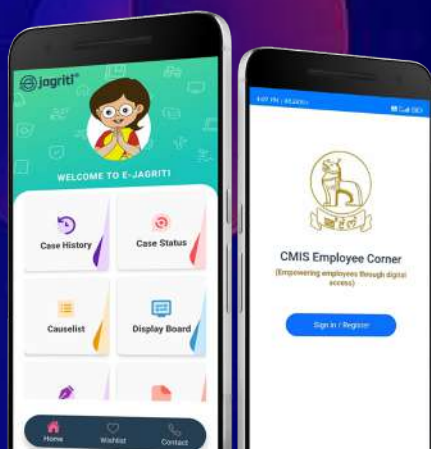
The articles featured in this issue demonstrate how this transformation is already taking shape across diverse domains of governance. Rajasthan's PadhaiWithAI illustrates how AI can personalise learning in government schools, while Punjab's Pensioner Sewa Portal, together with its roadmap for an AI-powered Pension Assistant, demonstrates how intelligent technologies can simplify public service delivery and improve the experience of pensioners. Together, these initiatives reaffirm that Artificial Intelligence is no longer a futuristic aspiration, but a practical tool for creating tangible public value.

Yet, intelligent governance cannot be built on algorithms alone; it must be built on trust. As governments increasingly adopt AI and advanced analytics, equal emphasis must be placed on cybersecurity, responsible use of data, transparency, privacy and ethical innovation. Public trust remains the cornerstone of every successful digital initiative, ensuring that technology serves every citizen securely, fairly and inclusively.

For nearly five decades, the National Informatics Centre has been at the forefront of India's digital governance journey by building secure, scalable and interoperable digital platforms that support governments at every level. As emerging technologies become integral to public administration, NIC is evolving from enabling digital services to building trusted, AI-enabled governance ecosystems that strengthen institutions and improve public service delivery.

The future of governance will not be defined merely by how intelligent our technologies become, but by how wisely we choose to apply them. The true measure of Artificial Intelligence will not lie in computational capability alone, but in the public value it creates by making governance more responsive, inclusive and humane. The journey from digital to intelligent governance has begun, and it must remain firmly anchored in innovation, responsibility and public trust.

-Editor-in-Chief



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Disclaimer

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Shri Priyank Bharti, IAS Assumes Charge as Director General, NIC

Shri Priyank Bharti, IAS assumed charge as the 20th Director General of the National Informatics Centre (NIC) on 21 May 2026, bringing with him over two decades of rich administrative experience spanning public policy, governance, technology-enabled service delivery, and institutional leadership. His appointment comes at a time when digital public infrastructure, data-driven governance, and emerging technologies are increasingly shaping the future of public service delivery across the country.

A 2001-batch IAS officer of the Punjab cadre, Shri Bharti brings with him over two decades of experience in public administration, policy implementation, institutional leadership, and technology-enabled governance. An engineer with an MBA, he has served in several key positions in both the State and Central Governments and has been associated with initiatives focused on innovation, administrative reforms, and citizen-centric service delivery.

Prior to joining NIC, Shri Bharti served as Administrative Secretary, Department of Science, Technology and Environment, Government of Punjab, where he contributed to advancing the use of science and technology for governance and sustainable development.

Over the years, Shri Priyank Bharti has held several key assignments including Secretary, Joint Secretary, Director, Deputy Commissioner, Additional Deputy Commissioner, and Sub-Divisional Magistrate. These diverse responsibilities have provided him with first-hand experience in public administration, district governance, policy implementation, infrastructure development, and service delivery. His work across multiple sectors has given him a deep understanding of both the opportunities and challenges involved in leveraging technology to improve governance outcomes.

His peers often describe Shri Priyank Bharti as a thoughtful administrator with a strong focus on institution building, collaborative leadership, and results-oriented governance. His ability to bridge policy objectives with



practical implementation has been a defining feature of his administrative journey.

As Director General, NIC, Shri Priyank Bharti takes charge during a significant phase in India's digital transformation journey. With governments increasingly relying on secure digital platforms, cloud infrastructure, artificial intelligence, data analytics, and citizen-centric digital services, NIC continues to play a pivotal role in enabling technology-led governance across the nation.

Under the leadership of Shri Priyank Bharti, NIC is expected to further strengthen its mission of providing robust, secure, and scalable digital solutions for government. His extensive administrative experience, combined with a deep appreciation of technology's role in governance, is expected to guide NIC in its continued efforts to build inclusive, transparent, and efficient digital public services for citizens.





Priyank Bharti, IAS
Director General

Government of India
Ministry of Electronics
& Information Technology
National Informatics Centre

Dear Readers,

Technology is redefining the way governments serve citizens, make decisions, and address complex societal challenges. As India's premier institution for digital governance, the National Informatics Centre has played a pivotal role in this transformation by building secure, scalable, and citizen-centric digital solutions that have become integral to governance across the country.

Today, as emerging technologies such as Artificial Intelligence, advanced analytics, cloud computing, and quantum technologies reshape the digital landscape, NIC is uniquely positioned to lead the next phase of innovation in governance and public service delivery.

Our achievements over the years are a testament to the dedication, expertise, and commitment of NIC officers and staff across the nation. Together, we have built digital platforms and public infrastructure that have strengthened governance, enhanced transparency, and improved the delivery of services to citizens. This collective spirit of excellence remains the foundation of our success.

The opportunities before us extend beyond the digitisation of processes. They invite us to reimagine governance itself, making it more intelligent, responsive, inclusive and citizen-centric. To realise this vision, we must continue to foster a culture of innovation, learning and collaboration while embracing emerging technologies that can create meaningful impact at scale.

The future of digital governance will be shaped by stronger partnerships among government, academia, research institutions, startups and industry. By promoting collaboration and knowledge exchange, NIC can accelerate the adoption of transformative technologies and develop solutions that address evolving governance challenges. As we move forward, our commitment to building secure, resilient and trusted digital public infrastructure must remain unwavering. Cybersecurity, interoperability, responsible innovation and citizen trust are not merely technical considerations; they are essential pillars of effective digital governance.

The strength of NIC has always been its people - professionals who combine technological expertise with a deep understanding of governance and public service. I am confident that, together, we will continue to build on NIC's rich legacy, explore new frontiers of innovation, and strengthen our contribution to the vision of Digital India.

Let us continue to harness the power of technology, innovation and knowledge to create lasting public value and shape the future of digital governance for the nation.

With best wishes

Warm regards,
Priyank Bharti



Rajasthan

Digital Bridge to citizens

Edited by **AVINASH V. PEDGAONKAR**

Since its establishment in Rajasthan in 1988, NIC has been at the forefront of building the state's digital governance ecosystem. With a presence at the State Secretariat, all District Collectorates, and multiple departmental project offices, NIC Rajasthan has established a robust ICT infrastructure that supports governance across one of India's largest and most geographically diverse states.

NIC Rajasthan has developed and maintained a secure communication network connecting the State Secretariat, District Collectorates, and over 100 government institutions through high-speed connectivity. The Centre provides critical digital services including network infrastructure, video conferencing, email services, cloud-based solutions, and end-to-end IT support, enabling seamless coordination and efficient public service delivery across the state.

A significant technological milestone has been the establishment of the Regional Centre of Excellence for Application Security (RCoEAS) at Jaipur. The Centre plays a vital role in strengthening cybersecurity by conducting security assessments and ensuring secure application development practices for e-Governance solutions developed by NIC teams across seven states. Through its focus on digital infrastructure, cybersecurity, connectivity, and enterprise technology services, NIC Rajasthan continues to drive the state's digital transformation journey.



Dr. Gayatri Pandurangi

Dy. Director General & SIO
gayatri.ap@nic.in



Amit Agarwal

Sr. Technical Director
amit.agarwal@nic.in

NIC Rajasthan has played a pivotal role in implementing key e-Governance initiatives across the state. Through innovative ICT solutions, the Centre has enhanced citizen service delivery while improving efficiency and transparency. Emerging technologies such as Artificial Intelligence and Data Analytics are being leveraged to strengthen governance and decision-making. Besides providing networking and video conferencing infrastructure, NIC Rajasthan has developed flagship digital platforms including IFMS, Pehchan, Sanstha Aadhaar, PCTS, ShalaDarpan, and ePanjiyan. Integration of these platforms with government applications has improved coordination and streamlined public service delivery. NIC Rajasthan's contributions have earned widespread recognition, including multiple National e-Governance Awards.

ICT Initiatives in the State

Integrated Financial Management System (IFMS)

<https://ifms.rajasthan.gov.in>

The Integrated Financial Management System (IFMS) is Rajasthan's flagship digital platform for public financial management. It provides an end-to-end solution covering budgeting, treasury operations, receipts, expenditures, works management, accounting, pensions, and electronic payments. Integrated with e-GRAS for online revenue collection and real-time reconciliation, IFMS has transformed the state's financial administration into a transparent, efficient, and accountable digital ecosystem.

Major Modules

- **Budget Management** – Budget estimation, allocation, re-appropriation, and monitoring.
- **Treasury Management** – Processing and authorization of government payments and receipts.
- **Revenue Management (e-GRAS/RMS)** – Online collection and reconciliation of government revenues.
- **Employee Management** – Salary processing, employee self-service, and payroll administration.
- **Pension Management** – Civil and social pension processing and disbursement.
- **Works Management** – Administrative sanctions, technical sanctions, work orders, and payments.
- **Accounting & Reconciliation** – Real-time compilation and reconciliation of government accounts.
- **Vendor & Beneficiary Management** – Registration, invoice tracking, and payment monitoring.
- **Direct Benefit Transfer (DBT) & Electronic Payments** – Secure transfer of funds through integrated banking systems.

Digital India Land Records Modernization Programme (DILRMP)

The Digital India Land Records Modernization Programme (DILRMP) in Rajasthan has evolved

into a comprehensive digital ecosystem for efficient, transparent, and citizen-centric land records management. The integrated suite comprises:

ApnaKhata (<https://apnakhata.rajasthan.gov.in>)

A citizen-facing portal that provides online access to digitized Records of Rights (RoR), mutation details, and eSigned land records. It also facilitates online applications for mutations, boundary identification, and land partition services.

eDharti (<https://edharti.rajasthan.gov.in>)

A workflow-based platform that automates land mutation processes through paperless submissions, digital verification, and electronic approvals. The system leverages Single Sign-On (SSO), eSign, QR codes, and grievance redressal mechanisms to enhance transparency and expedite service delivery.

BhuNaksha (<https://bhunaksha.rajasthan.gov.in>)

A GIS-enabled cadastral mapping solution that supports digitization, geo-referencing, and visualization of land parcels. Integrated with ApnaKhata and eDharti, it synchronizes spatial and textual land records while enabling ULPIN-based land identification.

Together, these platforms provide a unified, secure, and technology-driven framework for land administration, improving accessibility, accuracy, and transparency in land governance across Rajasthan.

ePanjiyan

<https://epanjiyan.rajasthan.gov.in>

ePanjiyan is Rajasthan's integrated digital platform for property registration and stamp administration. Designed as a citizen-centric solution, it has transformed land and property registration through end-to-end digitization and seamless integration with Apna Khata, enabling automatic mutation of property records at the time of registration. The system is operational across all 661 Sub-Registrar Offices (SROs) and has processed over 12.5 Crore documents, generating revenue exceeding ₹43,000 Crore.

Key features

- Auto Deed Generation for sale, gift, and release deeds
- Anywhere Registration at selected SROs
- Onsite Registration at property locations
- Time-slot Booking for in-office visits
- Faceless Refunds for unused or excess stamp duty
- Integration with eGras and eDharti for smooth financial transactions and land record updates

A notable innovation is the GIS-based Valuation System, deployed across 26 SROs, which automatically determines property values using geo-tagged DLC rates. The platform also supports secure data sharing with agencies such as RBI, the Income Tax Department, and the Accountant General's Office.

The ePanjiyan Citizen Mobile App enables digital submission of property details, GPS-based property mapping, geo-tagged photographs, real-time application tracking, and online appointment scheduling. Complementing this, the Stamp Vendor Mobile App digitizes inventory management, sales recording, and reporting processes, enhancing efficiency and transparency in stamp administration.

PCTS

<https://pctsrjmedical.rajasthan.gov.in>

PCTS (Pregnancy, Child Tracking and Health Services Management System) is a comprehensive digital system for the Medical & Health Department, Rajasthan, aimed at reducing maternal and infant mortality and improving healthcare delivery up to the village level. Operational in all government health facilities since 2009 and private hospitals since April 2023, it enables:

- Tracking of pregnant women and children till complete immunization
- Monitoring of high-risk pregnancies and government health schemes
- Real-time vaccine and medicine stock management

Through its implementation, MMR reduced from 318 to 86, IMR from 63 to 29, ANC check-ups

NIC Rajasthan has been a steadfast technology partner in the State's digital transformation journey. Through innovative, citizen-centric digital solutions and robust ICT infrastructure, NIC has consistently enabled efficient governance and improved public service delivery across departments. Its commitment to excellence, timely implementation of e-Governance initiatives, and close collaboration with the State Government have significantly strengthened transparency, accessibility, and administrative efficiency. NIC's continued efforts in leveraging emerging technologies are contributing meaningfully to the vision of a digitally empowered Rajasthan.

Shri V. Srinivas, IAS

Chief Secretary, Govt. of Rajasthan



improved from 28% to 93%, and institutional deliveries from 45% to 98%. PCTS is seamlessly integrated with key platforms like Pehchan Portal, Raj-Poshan, Shala Darpan, RCH Portal, and HMIS, ensuring efficient data sharing and better service delivery across departments.

AshaSoft

<https://ashasoft.rajasthan.gov.in>

ASHASoft is a workflow-based platform for monitoring the performance of Accredited Social Health Activists (ASHAs) and enabling Direct Benefit Transfer (DBT) for 56 health-related activities. The system digitizes sanction and payment processes, reducing payment timelines from months to less than a week while enhancing transparency, accountability, and operational efficiency.

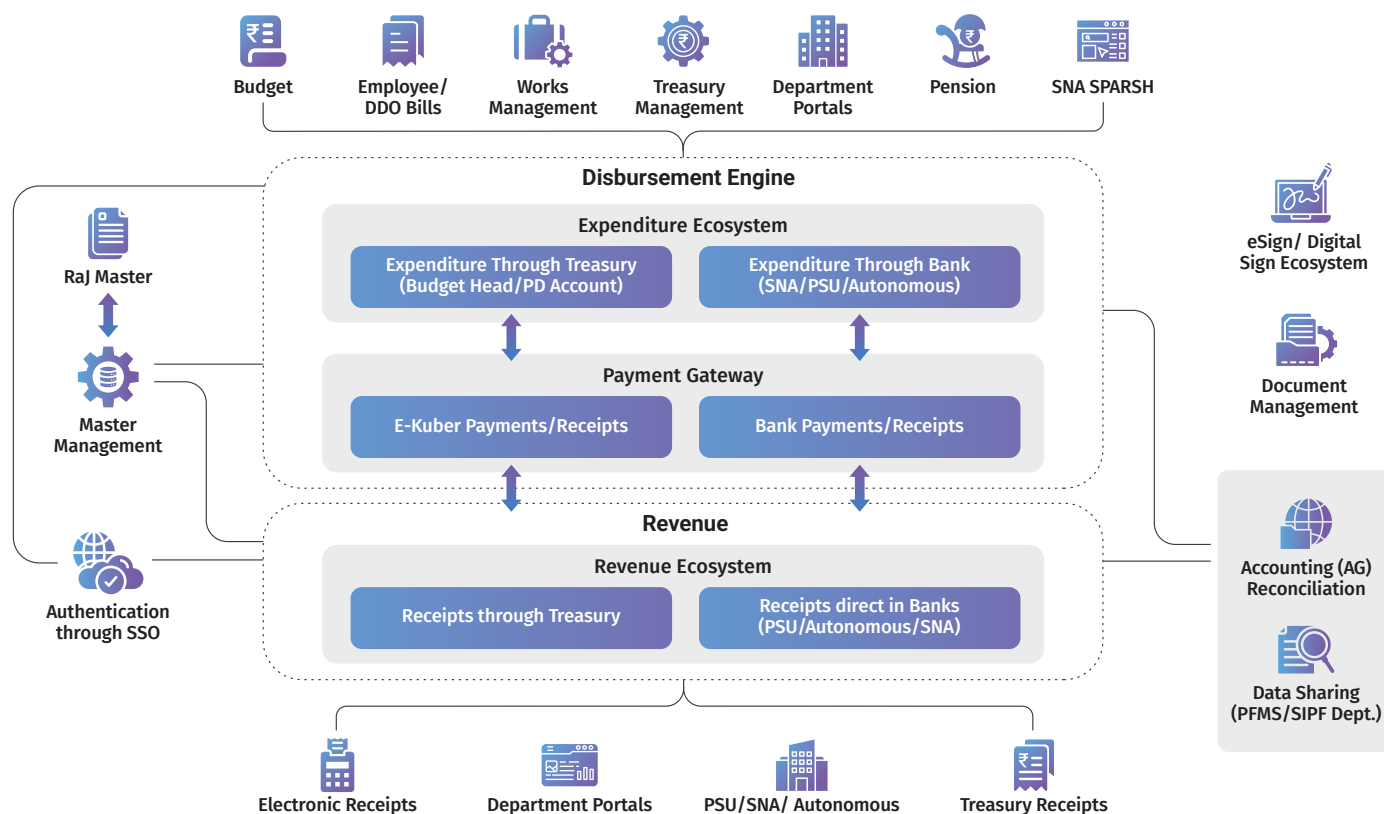
OJAS

<https://ojspm.rajasthan.gov.in>

OJAS (Online JSY, Rajshree and ShubLaxmi Payment System) is a Direct Benefit Transfer platform for women and child welfare schemes, including JSY, Rajshree, Shubhlaxmi, and Lado Protsahan Yojana. It also supports payments to private sonography centres under the MAA Voucher Yojana. The system has facilitated transfer of over ₹3,300 crore to more than 1.7 crore beneficiaries, ensuring timely and transparent benefit delivery.

▼ Fig 2.1 : Hon'ble Chief Minister of Rajasthan inaugurated the state's landmark Auto-Mutation service, linking the property registration process seamlessly with the Land Records Management System





▲ Fig 2.2 Integrated Financial Management System (IFMS) 3.0

RajHealth

<https://rajhealth.rajasthan.gov.in>

RajHealth is a comprehensive HR management system for Rajasthan's Medical & Health Department, covering employees across more than 20,000 health institutions. It digitizes key HR processes such as postings, transfers, probation clearance, pay fixation, online joining, and performance reporting, enabling transparent, paperless, and efficient workforce management.

IMPACT

<https://pcpndt.rajasthan.gov.in>

IMPACT (Integrated System for Monitoring of PCPNDT Act) is a digital monitoring platform for effective implementation of the PCPNDT Act. The system enables online registration and renewal of sonography centres, integrated fee payments, and maintenance of digital records of prenatal diagnostic procedures. Covering all government and private sonography centres in Rajasthan, it strengthens compliance, transparency, and monitoring efforts to prevent female foeticide and improve the sex ratio at birth.

Integrated ShalaDarpan

<https://rajshaladarpan.rajasthan.gov.in>

The Integrated ShalaDarpan platform serves as the digital backbone of Rajasthan's School Education Department, providing a comprehensive decision-support system for managing and monitoring school infrastructure, enrolment, ac-

ademics, human resources, and welfare schemes across more than 72,000 government schools.

The platform maintains real-time data of over 76 lakh students and 4.4 lakh teachers and staff, making it one of the largest educational information systems in the country. It supports key academic and administrative functions, including examination management for Classes 5 and 8, result processing, staff recruitment and postings, staffing pattern generation, teacher internship allocation, school inspections, civil works monitoring, vocational education management, and mainstreaming of out-of-school children.

ShalaDarpan also enables end-to-end administration of major student welfare schemes such as scholarships, free textbooks and workbooks, cycle and laptop distribution, transport vouchers, uniform DBT, NMMS, Gargi Awards, and Balika Protsahan schemes, ensuring transparent beneficiary management and timely delivery of benefits.

Private School Portal

<https://rajpsp.rajasthan.gov.in>

Complementing ShalaDarpan, the Rajasthan Private School Portal (RajPSP) provides a comprehensive digital governance platform for over 36,000 private schools across the state. The portal streamlines recognition, affiliation, inspections, compliance monitoring, and implementation of the Right to Education (RTE) Act through

transparent, paperless workflows.

A key component of the platform is the RTE Admission and Reimbursement System, which supports nearly 14 lakh students admitted under the RTE Act. The portal has facilitated disbursement of over ₹5,000 crore in reimbursements to private schools, including nearly ₹1,000 crore during the previous financial year, ensuring efficient, transparent, and accountable fund management.

GyanSankalp

<https://gyansankalp.nic.in>

GyanSankalp strengthens Rajasthan's digital education ecosystem by connecting government schools with donors, philanthropists, corporate organizations, and CSR initiatives. The platform facilitates contributions for school infrastructure, digital learning resources, sanitation facilities, libraries, sports infrastructure, and girls' education. Integrated with ShalaDarpan, GyanSankalp ensures transparency and accountability through real-time monitoring of donations, project implementation, and outcomes. The platform fosters community participation in education and enables data-driven assessment of the impact of philanthropic contributions.

Labour Department Management System (LDMS)

LDMS is a comprehensive e-Governance platform of the Labour Department, Government of Rajasthan, designed to modernize labour ad-

ministration and deliver citizen-centric services through a unified digital system.

LDMS maintains a centralized, real-time database of workers, establishments, contractors, inspections, and labour welfare schemes, enabling efficient regulation, data-driven decision-making, and improved policy planning. It digitizes the entire labour administration lifecycle, including worker and establishment registration, licence management, contract labour management, inspections, compliance monitoring, grievance redressal, and MIS reporting.

The platform also streamlines the implementation of labour welfare schemes such as financial assistance, education, healthcare, maternity benefits, pensions, housing support, skill development, and accident relief. Integration with the Direct Benefit Transfer (DBT) framework ensures transparent and timely delivery of benefits to eligible beneficiaries.

NeVA

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

The National e-Vidhan Application (NeVA) is a workflow-based platform that enables paperless functioning of legislative assemblies. Rajasthan Legislative Assembly has implemented NeVA to digitize legislative processes, enhance efficiency, and improve transparency. The project includes deployment of iPads, laptops, PCs, network infrastructure, and nearly 400 LAN nodes for members. Legacy records, including Questions, Motions, Bills, Members' profiles, and House Proceedings, have been digitized and migrated to the platform, creating a modern, paperless legislative ecosystem.

Rajasthan Legislative Assembly (<https://assembly.rajasthan.gov.in>): The Assembly portal provides comprehensive access to legislative information, including Members' profiles, List of Business, Questions, Motions, Bills, House Proceedings, Committee Meetings, Press Clippings, and e-Bulletins.

APRISE (<https://rlaaprise.rajasthan.gov.in>) : APRISE (Assembly Proceedings Information System) serves as the digital repository of Assembly proceedings, offering session-wise and date-wise access to revised and unrevised proceedings of all Houses since 1952, supported by full-text search capabilities.

OASYS (<https://rlaoasys.rajasthan.gov.in>) : OASYS (Online Answering Information System) provides online access to Starred, Unstarred, and Short Notice Questions raised by Members, along with departmental replies, creating a searchable repository of legislative questions and answers.

Rajasthan High Court

<https://hcraj.nic.in>

NIC Rajasthan provides end-to-end ICT support to the Rajasthan High Court and subordinate courts. The Case Information System (CIS 3.1), integrated with the National Judicial Data Grid (NJDG), supports digital case filing, scrutiny, cause lists, and order generation. Citizens can ac-



▲ Fig 2.3 : Paperless Proceedings under NeVA at Rajasthan Legislative Assembly

cess case status, orders, and judgments online, including over 15 lakh High Court judgments and 10 lakh subordinate court judgments. Real-time court information is delivered through digital display boards and mobile applications, while the Rajasthan High Court mobile app enables advocates and litigants to access case records and manage case diaries efficiently.

PDS, Rajasthan

<https://food.rajasthan.gov.in>

The Department of Food and Civil Supplies, Government of Rajasthan, has implemented a fully digital Public Distribution System (PDS) that enables end-to-end transparency and real-time monitoring of food security operations, from ration card management to foodgrain distribution.

Citizens can avail all ration card services online through SSO and e-Mitra, including new registrations, modifications, duplicate card issuance, and surrender. Aadhaar-seeded ration cards are integrated with the Integrated Management of PDS (IMPDS), ensuring national interoperability and portability of benefits.

The NFSA and Give-Up Abhiyan portals facilitate beneficiary verification, inclusion of eligible

households, and voluntary surrender by ineligible beneficiaries. The Supply Chain Management system digitally tracks foodgrain movement from FCI depots to Fair Price Shops through geo-tagging, route monitoring, and online acknowledgements, ensuring accountability across the distribution chain.

The system is seamlessly integrated with national platforms such as IMPDS, NFSA, DigiLocker, and One Nation One Ration Card (ONORC). Rajasthan has been an early adopter of ONORC, enabling beneficiaries to access subsidized foodgrains anywhere in the country through Aadhaar-based authentication. NIC Rajasthan has also developed the MSP Procurement Portal to streamline procurement operations and facilitate timely payments to farmers.

Civil Registration System, Pehchan

<https://pehchan.rajasthan.gov.in>

Pehchan serves as the single source of truth for birth, death, and marriage registrations in Rajasthan. The platform is used by over 12,500 registrars, 3,500+ sub-registrars, 2,500+ private hospitals, and 80,000 e-Mitra kiosks. Citizens can access services online through the portal and

▼ Fig 2.4 : The Vehicle Location Tracking System (VLTS) was officially launched in Jaipur by Hon'ble Deputy Chief Minister and Transport Minister, Dr. Prem Chand Bairwa



Other Key Digital Initiatives

Initiative	Purpose	Implementation Highlights
eHospital	Comprehensive Hospital Management System	Implemented at AIIMS Jodhpur and National Institute of Ayurveda, Jaipur
Jeevan Pramaan	Digital life certificate for pensioners	Integrated with eMitra for seamless service delivery
e-Prison	Prison administration, visitor management, and eMulakaat services	Records of over 22 lakh historical inmates and 21,000 current inmates digitized; around 9,000 eMulakaat sessions conducted
e-Procurement	End-to-end e-Tendering platform for government procurement	Supports Tender Inviting Authorities (TIAs) and bidders, with over 1 lakh tenders floated annually
SAAR	Statistical Abstract Application of Rajasthan	Used by over 80 departments for preparation of the State Statistical Abstract
Index of Industrial Production (IIP)	Generation of industrial production indices across sectors	Implemented statewide for manufacturing, mining, and electricity sectors
Price Statistics in Rajasthan (PSR)	Monitoring wholesale, retail, building material, and livestock price indices	Implemented across all districts and Krishi Upaj Mandi Samitis
Rajasthan Agriculture Statistics (RajAS)	Comprehensive agricultural statistics management	Covers crop estimation, rainfall, farm harvest prices, agricultural wages, and related datasets across all districts
RajPoshan	Direct Benefit Transfer (DBT) platform for ICDS schemes	Implemented up to block level across all districts.
Media Management System	Centralized repository for media reports, photographs, and videos	Implemented for the Directorate of Economics & Statistics (DES) and NIC Rajasthan
eOffice	Digital office automation and file management	Implemented in the Rajasthan Legislative Assembly to promote paperless governance
AEBAS	Aadhaar Enabled Biometric Attendance System	Adopted by over 200 Central and State Government departments for attendance management

mobile app, with digitally signed, QR code-enabled certificates delivered electronically, including through WhatsApp. More than 4.15 crore registrations have been recorded on the platform. Pehchan is integrated with Aadhaar, Jan Aadhaar, health systems, and social welfare schemes, enabling automated Aadhaar enrolment for newborns and deactivation for deceased persons while eliminating manual certificate processing.

Sanstha Aadhaar

<https://san.rajabstha.gov.in>

Sanstha Aadhaar Number (SAN) is a unique 16-digit identification number assigned to all

government departments, boards, corporations, autonomous bodies, NGOs, and private enterprises in Rajasthan. Based on the principle of "One Number, One Identity," SAN creates a unified database of institutions to support efficient governance, planning, and monitoring. It ensures transparent delivery of government benefits, subsidies, grants, and services across departments. Introduced by revamping the Business Register Scheme, SAN is issued through Aadhaar or Jan Aadhaar authentication. The integrated platform also serves as a reliable statistical database, enabling better policy planning, enterprise

management, and evidence-based decision-making across the state.

eGram

<https://egram.rajabstha.gov.in>

Chief Minister's eGram is a unified web-based platform for real-time monitoring and holistic development of villages across Rajasthan. Integrating data from 25 sectors, it provides a comprehensive view of rural infrastructure, public services, and government schemes, enabling transparent governance, effective planning, inter-departmental coordination, and data-driven decision-making for sustainable rural development.

RCoEAS

The Regional Centre of Excellence for Application Security (RCoEAS), established at Jaipur, strengthens the security of NIC-developed applications across eight states and UTs—Rajasthan, Gujarat, Maharashtra, Goa, Daman & Diu, Dadra & Nagar Haveli, Madhya Pradesh, and NCT Delhi. The centre conducts security audits of web applications, APIs, and mobile applications, including regular penetration testing, to enhance the cybersecurity posture of government digital services.

NICCI Chatbot & Voicebot Service

<https://niccicms.rajabstha.nic.in>

NICCI is a multilingual, voice-enabled chatbot platform developed by NIC Rajasthan that can be integrated with portals without programming effort. Supporting Hindi, English, and regional language translations, it uses intelligent rule-based response mechanisms to provide accurate assistance. Deployed across more than 100 portals, NICCI includes a user-friendly Content Management System (CMS) for easy knowledge-base management and continuous enhancement.

eTransport

<https://transport.rajabstha.gov.in>

eTransport, a Mission Mode Project of the Ministry of Road Transport and Highways (MoRTH), delivers integrated G2G, G2C, and G2B services in compliance with CMVR and state regulations. Rajasthan's transport ecosystem spans 89 RTO/DTO/Sub Offices, over 3,500 vehicle dealers, 350 driving schools, 83 automated fitness centres, 13 automated driving test tracks, and 1,500 e-Challan POS devices. The state manages 2.29 crore vehicle registrations and 1.35 crore digitized driving licences, generating over ₹8,000 crore in annual revenue. Every month, nearly 1 lakh new vehicles are registered, 65,000 driving licences are issued, and over 5 lakh transport-related services are delivered.

- **ITMS-E-Ravanna Integration:** Enables automatic transfer of overloaded vehicle data from the Mines Department's E-Ravanna system to NIC-ITMS, facilitating automated issuance of MV Act notices and e-Challans for transparent and data-driven enforcement.

- **Auto Hypothecation Termination (HPT):** Allows

Important Mobile Applications

App	Users	Key Features
Budget Rajasthan	Citizens, Government Officials	Provides access to Budget documents, allocations, and financial information of the Government of Rajasthan.
Sanstha Aadhaar	Citizens, Institutions	Enables online registration, application tracking, and search of Sanstha Aadhaar records.
Integrated Works Monitoring System (IWMS)	Government Officials	Provides real-time monitoring of development works, including technical and financial progress.
Pehchan	Citizens	Facilitates online application, download, and status tracking of Birth, Death, and Marriage Certificates.
Pregnancy and Child Tracking System (PCTS)	Health Officials	Supports monitoring of maternal and child healthcare services, including ANC, PNC, immunization schedules, work plans, and maternal and infant health indicators.
Rajasthan High Court	Citizens, Advocates	Provides access to cause lists, display boards, case status, filing defect status, and certified copy information.
eGRAS	Citizens, Taxpayers	Enables anytime, anywhere online payments to the Government of Rajasthan through multiple banking channels, including debit and credit cards.

automatic loan closure updates from financial institutions. Citizens can apply online for hypothecation termination, with approvals processed automatically, eliminating RTO visits and enabling faster, paperless service.

Rajasthan Revenue Court Monitoring System

The project focuses on implementing an integrated IT solution to modernize all revenue courts. It automates key functions such as digital recording of statements at various stages of court proceedings, issuance of notices and final orders, and automated generation of cause lists. The solution consists of two modules: one for revenue officials and another for citizens/advocates. The revenue officials' module has been fully developed and successfully demonstrated to the BOR. Development of the citizen module is currently underway.

RALAMS

RALAMS (Rajasthan Agriculture Land Allotment Monitoring System) is a digital platform developed by the Revenue Department to modernize and streamline the government land allotment process. Designed to enhance transparency and efficiency, the system delivers paperless, technology-driven services for the allotment of government land for public infrastructure, educational and healthcare institutions, industrial development, renewable energy projects, and other public-purpose initiatives.

Major Initiative in State - District level Initiatives

PadhaiWithAI

PadhaiWithAI is an AI-powered learning platform designed to strengthen Class 10 mathematics education in government schools across Tonk district. The platform provides personalized learning, instant problem-solving support, automated practice generation, and bilingual explanations to improve conceptual understanding and student engagement. With over 11,500 active students, it leverages real-time analytics, digital attendance, and performance dashboards to enhance learning outcomes, accountability, and exam preparedness.

Gang Canal Regulation Computerization System

The Water Regulation Information System in Sri Ganganagar provides real-time information on canal operations, water levels, irrigation schedules, and village-level records. Its Agriculture module delivers weather forecasts, market prices, crop advisory services, and information on government schemes to support informed and sustainable farming decisions. Complementing the system, e-Bari enables farmers to access details of their irrigation water allocation online with ease, while e-Abiyana facilitates the digital collection and management of water taxes, enhancing transparency, accountability, and efficiency in irrigation administration.

Core Infrastructure

NIC Rajasthan has established a robust digital infrastructure to support governance across the state. The Centre manages over 5,000 NIC-NET nodes connecting the State Secretariat, District Collectorates, government offices, and educational institutions. HD Video Conferencing facilities are operational at the Secretariat, High Court benches, District Collectorates, and District Courts, enabling seamless collaboration. NIC Rajasthan maintains over 3,000 official email accounts, supports more than 100 government portals and applications, and operates a mini cloud to meet growing computing demands. High-speed connectivity has also been extended to key institutions, including IIT Jodhpur, IIM Udaipur, AIIMS Jodhpur, MNIT Jaipur, RSDC, and RSWAN through nearly 300 leased-line connections.

Accolades

NIC Rajasthan's digital initiatives have received widespread recognition at both national and state levels for their innovation, impact, and contribution to e-Governance.

- National e-Governance Awards for the Pregnancy and Child Tracking System (PCTS), Gang Canal Regulation System, and ASHASoft.
- CSI-Nihilit Awards for projects including PCTS, Price Statistics Portal, Civil Registration System (Pehchan), Sanstha Aadhaar, Gyan-Sankalp, and Integrated ShalaDarpan.
- GEMS of Digital India Award for excellence in e-Governance in the Finance sector.
- Several other prestigious recognitions, including SKOCH Awards, Technology Sabha Awards, and eGov Rajasthan Awards, have been conferred on various NIC Rajasthan projects.

These accolades reflect NIC Rajasthan's sustained efforts in leveraging technology to improve governance, service delivery, and citizen engagement across the state.

Way Forward

NIC Rajasthan is focusing on next-generation digital governance initiatives through the adoption of emerging technologies and modern application architectures. Efforts are underway to develop AI-enabled solutions for key sectors such as finance, healthcare, and education, while advanced data analytics is being leveraged to derive actionable insights from the Civil Registration System. The Centre is also expanding m-Governance through citizen-centric mobile applications and modernizing major e-Governance platforms by transitioning to microservices-based architecture, thereby enhancing scalability, interoperability, and service resilience.

Contact for more details

State Informatics Officer
NIC Rajasthan State Centre
8318, NW Block, Secretariat, Jaipur
Rajasthan - 302005
Email: sio-raj@nic.in, Phone: 0141-2227992

Tripura

Building a Connected Digital Governance Ecosystem

Edited by **LAL BHADUR SINGH**

Despite its relatively small geographical footprint, Tripura has built a robust digital governance ecosystem spanning finance, land administration, transport, justice, healthcare, education, and welfare services. NIC Tripura State Centre has partnered with the State Government to develop and implement digital platforms that have streamlined governance and improved public service delivery.

Alongside implementing national e-Governance initiatives, NIC Tripura has developed several state-specific applications tailored to local administrative needs. From Direct Benefit Transfer (DBT) and land records to paperless offices, digital procurement, transport services, and integrated justice systems, these platforms have created an interconnected governance ecosystem that enables seamless information sharing and informed decision-making.

This article presents the major ICT initiatives implemented by NIC Tripura across key sectors and the digital infrastructure powering these services.

Finance

Beneficiary Management System

The Beneficiary Management System (BMS) is NIC Tripura's flagship digital platform for delivering welfare benefits through a unified



Achintya Kumar De

Sr. Technical Director & SIO
ak.de@nic.in



Pinaki Acharya

Sr. Technical Director & ASIO
pinaki.a@nic.in



Tripura, a northeastern border state, has built a comprehensive digital governance ecosystem under NIC's State Centre. Spanning finance, transport, revenue, judiciary, healthcare, education, and welfare delivery, platforms like BMS, eGRAS, RCMS, eDistrict, and eCourts have strengthened transparency, efficiency, and citizen access. Robust network infrastructure — NKN, TSWAN, and the Mini Cloud — underpins this ecosystem. Award-winning systems and strong inter-departmental integration reflect Tripura's shift toward a connected, technology-enabled governance model.



Direct Benefit Transfer (DBT) ecosystem. Developed using open-source technologies, the cloud-ready platform provides an end-to-end, faceless service delivery framework that streamlines the complete beneficiary lifecycle—from citizen registration and scheme enrolment to eligibility determination, benefit disbursement, and post-delivery monitoring. By leveraging family-based mapping and de-duplication techniques, BMS ensures accurate beneficiary identification, minimizes duplication,

and enhances transparency in welfare delivery.

Designed as a configurable and scalable platform, BMS integrates online beneficiary registration, scheme onboarding, eligibility and entitlement management, application processing, and real-time dashboards within a single ecosystem. It is seamlessly integrated with the State Treasury, PFMS, NPCI, DigiLocker, UMANG, Meri Pehchaan, and other digital public infrastructure, enabling secure Direct Benefit Transfers through Aadhaar-based, bank account-based, and e-RUPI payment modes. The platform also supports online and offline bank account validation, Aadhaar Vault-based tokenization for secure transactions, in-kind benefit distribution through an integrated delivery mechanism, and legacy data migration, enabling departments to onboard existing welfare schemes with ease.

Currently, BMS supports 73 welfare schemes across 30 government departments, benefiting nearly 40 lakh citizens across the State. The platform has processed over 37.5 lakh Direct Benefit Transfer transactions amounting to more than ₹656 crore, significantly improving the efficiency, transparency, and accountability of welfare delivery. In recognition of its contribution to digital governance, BMS has received the Chief Minister's Civil Service Award (2021–22), the 15th National Digital Transformation Award (2024), and the ET Government DigiTech Award (2025).

NextGen HRMS

NextGen HRMS is a comprehensive, cloud-ready Human Resource Management System developed by NIC Tripura to digitize and streamline the complete employee lifecycle—from onboarding to retirement. The integrated platform enables government departments to manage employee records, service books, payroll, leave, transfers, promotions, pensions, and other personnel functions through a unified digital ecosystem, improving administrative efficiency, transparency, and service delivery.

The platform provides end-to-end digital management of employee services, including

electronic onboarding, Digital Service Books, leave and attendance management, payroll and employee benefits, transfer and promotion management, pension processing, and an Employee Self-Service (ESS) portal. Through configurable workflows, digital approvals, eSign integration, and real-time dashboards, NextGen HRMS enables paperless processing, faster decision-making, and improved workforce planning while empowering employees to access and manage their service-related information online.

Currently, 68 government departments have been onboarded onto the platform, covering over 88,740 employees with an equal number of Digital Service Books. The system has generated more than 3.54 lakh monthly pay bills, facilitated over 1.36 lakh eSign transactions, and digitally processed more than 2,000 office orders, demonstrating its scale and operational effectiveness in modernizing public sector human resource management.

A key innovation in NextGen HRMS is its AI-enabled Anomaly and Fraud Detection framework, which applies intelligent rules and behavioural analytics to identify anomalous transactions, duplicate payments, ineligible claims, ghost employees, and policy violations. Supported by real-time alerts and analytical dashboards, the feature strengthens governance, enhances financial accountability, and assists departments in preventing irregularities before they impact public finances.

Generic State Election Suite

The Generic State Election Suite is a comprehensive digital platform developed by NIC Tripura to modernize and streamline the conduct of local body elections across the State. Designed for Gram Panchayats, Panchayat Samities, Municipal Bodies, Zilla Parishads, and the Tripura Tribal Areas Autonomous District Council (TTAADC), the platform digitizes critical election workflows—from polling personnel deployment and vote counting to the publication of election results. By replacing manual processes with secure digital workflows, the system enhances transparency, operational efficiency, and data integrity throughout the election lifecycle.

The platform supports end-to-end election management through integrated modules for polling station mapping, constituency management, personnel deployment, vote counting, and statutory reporting. A configurable role-based workflow enables Returning Officers, Assistant Returning Officers, and other election officials to manage the complete counting process using a secure maker-checker-approver mechanism. It also automates the generation of statutory election forms with digital signing capabilities and provides real-time dashboards for publishing and monitoring election results.

To strengthen election preparedness, the suite integrates with the State HRMS and other departmental databases to facilitate the



▲ Fig 3.1 : Shri Jishnu Dev Varma, then Hon'ble Deputy CM, Tripura inaugurated NIC developed 'eAbgari' portal for the Excise Organization, Finance Dept., Govt. of Tripura on October 6, 2022

automated deployment of polling personnel. Multi-level randomization ensures fair and transparent allocation of polling, counting, and micro-observer staff, while automatically generating identity cards and deployment orders. These features significantly reduce manual effort, improve accuracy, and accelerate election planning.

The platform continues to evolve with the addition of new capabilities, including online candidate nomination, real-time poll-day monitoring, and digital electoral roll management, further strengthening the State's vision of transparent, efficient, and technology-driven election administration.

eGRAS

eGRAS is Tripura's integrated online receipt portal for State Treasury and 32 non-treasury receipt accounts. The platform supports digital payments through multiple modes and is integrated with applications across transport,

judiciary, revenue, and other government departments. As of July 2025, eGRAS has processed over 10.83 lakh transactions, facilitating revenue collection of more than ₹5,786 crore across 28 integrated applications.

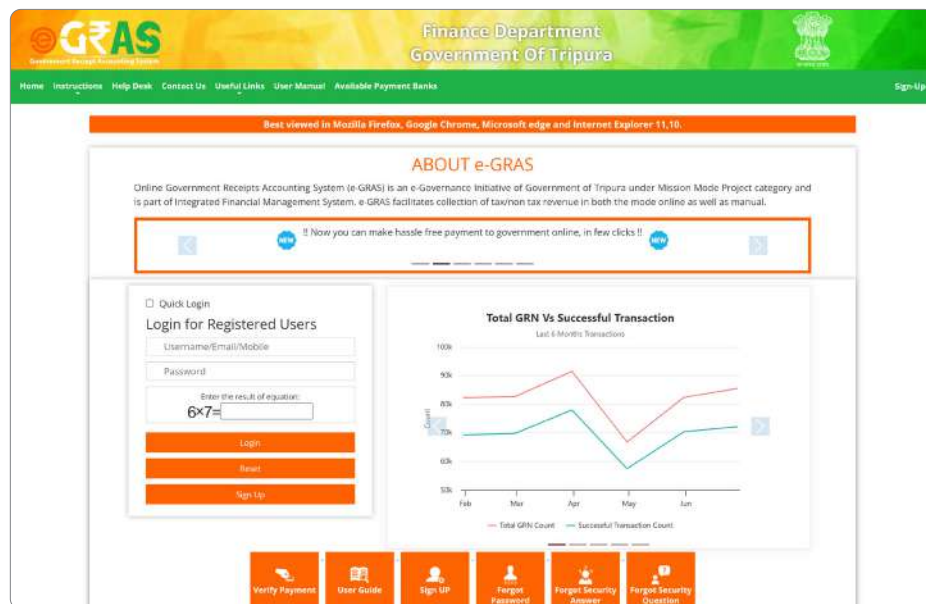
GST-Prime

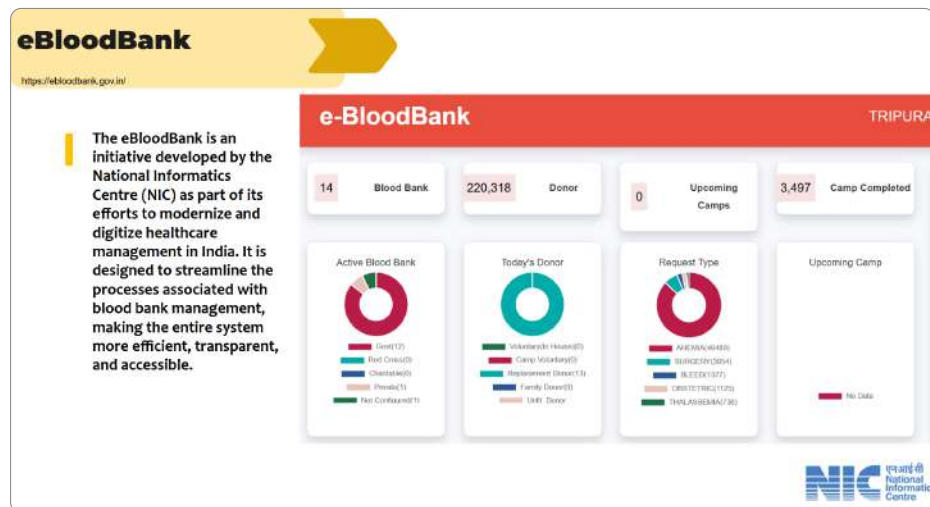
GST-Prime is an analytical dashboard that enables State tax administrators to monitor GST collection and compliance across their jurisdictions. Complementing it is GSTAIR (GST Accounting Information and Two-Way Reconciliation System), which supports the Finance Department and the Accountant General, Tripura, in GST accounting and reconciliation. Together, these platforms strengthen tax administration through data-driven monitoring and efficient financial reconciliation.

eProcurement

Under eProcurement, the Government eProcurement system of NIC (GePNIC) has been implemented under CPPP with end-to-end

▼ Fig 3.2 : eGRAS Website Home Page





▲ Fig 3.3 : eBloodBank Website Dashboard

workflows for tender publishing, corrigenda, bid submission, and contract award. The State eProcurement Portal has published 62,688 tenders worth Rs. 53,634 crore since its inception in 2013. The state has also been onboarded onto the national eAuction Portal since 2020, used by the State Forest Department and the Directorate of Institutional Finance for forward and reverse auctions.

eAbgari

eAbgari is a comprehensive digital platform for the Excise Department that facilitates online licensing, import permits, label registration, stock inventory management, and filing of monthly returns. The platform has processed over 22.81 crore transactions, significantly improving efficiency, transparency, and regulatory compliance in excise administration.

Health

Online Registration System (ORS)

The Online Registration System (ORS) is a flagship Digital India initiative that provides citizens with a unified platform for accessing

outpatient services in government hospitals. Compliant with the Ayushman Bharat Digital Mission (ABDM) standards, ORS enables online appointment booking, access to laboratory reports and ePrescriptions, ABHA integration, follow-up management, and teleconsultation services. The platform has emerged as a key component of India's digital health ecosystem, connecting thousands of government hospitals and enabling seamless, citizen-centric healthcare delivery.

eHospital

eHospital is a comprehensive Hospital Information Management System (HIMS) that digitizes clinical, diagnostic, administrative, and patient service workflows across healthcare institutions. Beyond its implementation in Tripura, NIC Tripura has made a significant national contribution through the development and operational support of the eHospital on-premises solution at AIIMS, New Delhi—the first public hospital in India to become fully digital under the Digital India initiative. The platform supports one of the country's busiest healthcare institutions, handling over 10,000 patient registrations, 15,000 OPD appointments,

and nearly one lakh laboratory tests every day, demonstrating its scalability and robustness.

eBloodBank

The eBloodBank system streamlines blood bank operations by digitizing donor registration, blood collection, inventory management, testing, and issue of blood units. The platform improves efficiency, transparency, and availability of blood services while enabling healthcare institutions to manage blood inventories more effectively and deliver timely support to patients in need.

Transport

NIC Tripura has modernized transport administration through the implementation of key digital platforms covering vehicle registration, driver licensing, pollution monitoring, traffic enforcement, and citizen services. Vahan and Sarathi, operational across all District Transport Offices, streamline the issuance of driving licences, registration certificates, permits, and fitness certificates. As of August 2025, the platforms have facilitated the registration of over 8.47 lakh vehicles and the issuance of more than 6.08 lakh driving licences. The PUC system digitizes the issuance and monitoring of Pollution Under Control Certificates through 189 centres, with over 18.59 lakh certificates issued. eChallan, integrated with the Virtual Court, has strengthened traffic law enforcement through electronic issuance and online disposal of traffic violations, with over 22.22 lakh challans issued. Citizens can also access transport services, including digital driving licences and registration certificates, through the mParivahan mobile application. Together, these initiatives have simplified service delivery, strengthened regulatory compliance, and made transport services more accessible across the state.

Office Productivity

eGazette

eGazette platform serves as Tripura's centralized digital repository for authenticated government publications, providing citizens, government officials, and other stakeholders with easy access to Gazettes, Acts, Rules, Regulations, Government Orders, Gazette Notifications, Circulars, and other statutory documents through a single online platform. The initiative supports the State Government's compliance with the Compliance Reduction and Deregulation Initiative (Phase-II) of the Union Cabinet Secretariat and the Department for Promotion of Industry and Internal Trade (DPIIT), while promoting transparency, accessibility, and paperless governance.

The platform incorporates a secure workflow for the submission, review, approval, and publication of official documents, ensuring that only authenticated versions are made available in the public domain. A key feature of the platform is its AI-powered Assistant, which enables users to search and interact with government

▼ Fig 3.4 : Hon'ble Chief Minister of Tripura, Dr. Manik Saha, introducing the NIC's eCabinet Solution in Agartala on September 27, 2023, with an aim to advance digital infrastructure and digitize government services



publications using natural language queries instead of conventional keyword-based searches. By leveraging Optical Character Recognition (OCR), semantic search, and Retrieval-Augmented Generation (RAG) techniques, the assistant can retrieve relevant information from both scanned and digitally generated documents, making legal and administrative information significantly easier to discover and use.

By transforming static government publications into an intelligent, searchable knowledge repository, eGazette enhances public access to authentic information, improves administrative efficiency, and strengthens the State's digital governance ecosystem.

eOffice Tripura

eOffice Tripura has transformed government file management through its workflow-based eFile system, enabling paperless processing across 2,536 government offices and directorates, including Gram Panchayats and Village Committees. Since its implementation in 2017, the platform has served over 17,700 users, significantly improving the speed and efficiency of official correspondence. The SPARROW performance appraisal system has also been implemented for around 850 Tripura Civil Service officers, while SPARROW (IPR) covers over 5,500 officers belonging to other state cadre services.

eCabinet

To further strengthen paperless governance, the Government of Tripura adopted NIC's eCabinet system in September 2023 for the digital management of Cabinet meetings. The platform enables online submission, review, and approval of Cabinet memoranda, replacing conventional paper-based processes with secure digital workflows. With its implementation, Tripura became the fourth state in the country and the second in the North East to adopt the eCabinet system. The initiative complements the State's wider adoption of eOffice and reinforces its commitment to transparent, efficient, and environmentally sustainable governance.

Tripura Darpan

Launched in 2017, Tripura Darpan provides real-time dashboards for the Chief Minister and District Magistrates to monitor the implementation of government programmes. The District Magistrate Dashboard has been rolled out across all eight districts, while integrated analytical dashboards track key performance indicators of 19 flagship schemes, enabling informed and data-driven decision-making.

SWAGATAM

SWAGATAM is an online visitor management system that enables citizens to schedule appointments with government officers. Currently implemented in the Departments of Information Technology and Secretariat Administration, the platform has onboarded around 200 officers. Complementing this initiative, the Aadhaar-



▲ Fig 3.5 : FEAST Website Home Page

enabled Biometric Attendance System (AeBAS) has been implemented across 82 government offices, covering nearly 14,300 officials.

Executive Record Sheet

The Executive Record Sheet (ERS) serves as a digital repository of service records for officers belonging to the Tripura Civil, Police, and Forest Services, along with 23 other cadre services. The platform currently maintains records of over 5,800 officers and incorporates SMS and email alerts to facilitate timely profile updates.

eSign Gateway

The Tripura eSign Gateway, integrated with the C-DAC eSign Service, enables secure digital signing across major e-Governance applications, including eOffice, SPARROW, BMS, HRMS, RCMS, eJAMI, and eDistrict. Since its implementation, the platform has facilitated over 12.20 lakh electronic signatures, strengthening paperless governance and secure digital transactions across the state.

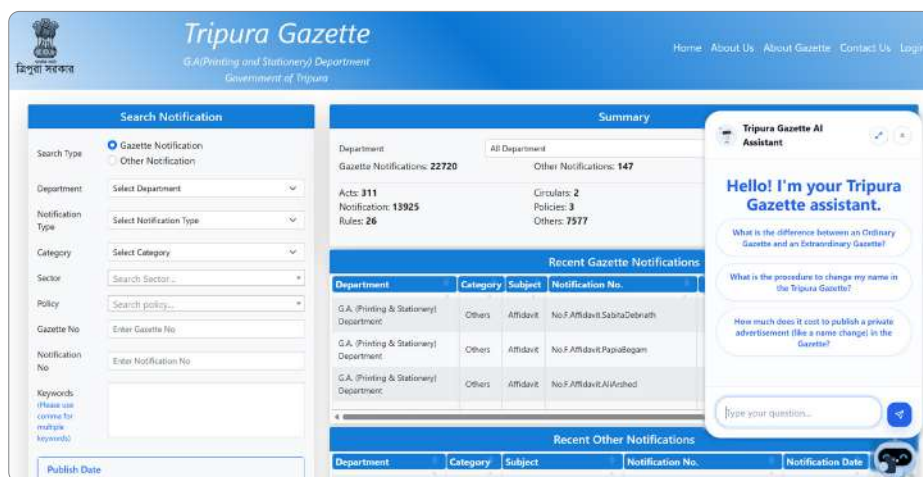
PDS RCMS

The Ration Card Management System (RCMS) serves as the State's baseline database for ration card management, supporting end-to-end services such as addition, deletion, splitting, shifting, and updation of family records. Integrated with the Beneficiary Management System and Aadhaar-enabled eKYC through AePDS, the platform ensures accurate beneficiary identification and efficient delivery of welfare schemes. It currently maintains records of over 9.90 lakh ration card families comprising 37.08 lakh members, with 100% Aadhaar seeding for heads of families.

FEAST

FEAST, the Supply Chain Management System, digitizes the movement of foodgrains from FCI godowns and other procurement sources to fair price shops, enabling end-to-end monitoring of

▼ Fig 3.6 : Tripura eGazette Website Home Page with AI Assistant



the Public Distribution System. Complementing this, Fair Price Shop Automation (AePDS) ensures Aadhaar-authenticated distribution of foodgrains to beneficiaries through electronic Point-of-Sale devices. Since their implementation, the platforms have processed over 7.81 lakh delivery challans and receipts, while achieving 99.2% Aadhaar-authenticated transactions across more than 2,070 fair price shops, significantly improving transparency and accountability in foodgrain distribution.

Paddy Procurement

The Paddy Procurement System streamlines procurement by integrating ration card records with land records for farmer verification, automated payable calculation, and Direct Benefit Transfer through the Beneficiary Management System. Since the 2021 Kharif season, the platform has registered over 1.17 lakh farmers, facilitated the procurement of 2.25 lakh metric tonnes of paddy, and enabled DBT payments exceeding ₹446 crore.

Revenue

eDistrict Tripura

eDistrict Tripura, developed on the ServicePlus platform, delivers a wide range of citizen services through a unified online portal. The platform provides 16 categories of certificates and licences and 21 additional licences and No Objection Certificates (NOCs) across departments such as Legal Metrology, Home (Fire), Industries, Forest, and Land Records. Integrated with eGRAS, eSign, DigiLocker, CSC Connect, and HRMS, it also facilitates rehabilitation payments to BRU migrants in coordination with the Ministry of Home Affairs. Since its launch in 2015, the portal has received over 8.20 lakh applications, with more than 8.12 lakh applications successfully processed.

DILRMP Tripura

Under the Digital India Land Records Modernization Programme (DILRMP), NIC Tripura has developed an integrated digital ecosystem for land administration comprising eJami for land records, TORS for online registration, NGDRS for property registration, and WebMap for cadastral mapping. Together, these platforms have streamlined land registration and mutation processes while improving accessibility and transparency in land records management. The system has facilitated the online registration of over 4.13 lakh deeds, disposal of 8.12 lakh mutation cases, and issuance of more than 13.67 lakh Record of Rights (RoR) copies and 2.21 lakh certified cadastral maps.

eStamp Repository

The eStamp Repository provides a secure digital platform for the verification, consumption, and reconciliation of electronic stamp papers issued by SHCIL. Integrated with NGDRS, the Registration Portal, and eGRAS, it ensures

seamless management of stamp duty and electronic stamping transactions. Since its implementation in 2019, the platform has handled over 36 lakh eStamps, facilitating stamp duty collection of more than ₹436 crore while strengthening transparency and efficiency in stamp administration.

Land Administration

eJami

eJami (Jami Tripura) is a web-based, single-window application developed for the Revenue Department, Government of Tripura under the Digital India Land Records Modernization Programme (DILRMP). The platform serves as the State's official digital land records system, replacing conventional handwritten records with secure digital workflows. It provides citizens with online access to digitally signed Record of Rights (RoR/Khatian), online mutation (Namjari) tracking, Jami Map preview, plot history verification, and land unit conversion.

National Integrations

eJami has been integrated with several national digital initiatives to extend the use of authenticated land records beyond revenue administration.

- **AgriStack:** Farmplot ID generation, Unified Land API integration, and geospatial data sharing for Digital Crop Survey.
- **PM Gati Shakti:** Integration of RoR and geospatial data to support infrastructure planning.
- **RBIH Unified Lending Interface (ULI):** Automated plot and ownership verification for Digital Kisan Credit Card (KCC) loans, along with flag-marking to prevent duplicate financing.
- **CLU Portal:** Online processing of Land Diversion (US-20) requests.

Government Interoperability

To support seamless service delivery across departments, eJami exchanges data with multiple government platforms.

- **UNNOTI Portal:** Plot ownership verification, mutation services, Revenue Court case registration, case status tracking, and deed information.
- **NAKSHA:** Sharing of land records and geospatial data for urban land surveys.
- **Departmental APIs:** Integration with Urban Development, DWS, TSECL, Civil Courts, eDistrict, SWAGATAM, CSC, Tribal Welfare Department, and Revenue Courts to support initiatives under the Business Reforms Action Plan (BRAP).

Forest Rights Management

NIC Tripura has also developed dedicated applications to support implementation of the Forest Rights Act.

- **Forest Rights:** Maintains the authoritative database of forest rights titles, including land particulars, title issuance, and certificate generation.
- **MyPatta:** Serves as the official repository of claims rejected under the Forest Rights Act, supporting statutory reporting, judicial and admin-

istrative compliance, monitoring, and retrieval of historical records in accordance with the directions of the Hon'ble Supreme Court.

Home & Judicial

eCourts

The eCourts Case Information System has digitized judicial processes across all courts in Tripura, providing online access to case status, cause lists, orders, judgments, and automated notifications. The system is operational across 8 districts, covering 82 courts in 16 court complexes. Complementing the platform are NSTEPS for electronic process delivery, eFiling and ePay for online filing and fee payment, and Virtual Courts, enabling citizens and litigants to access judicial services with greater convenience. As of August 2025, the system had registered over 1.94 lakh cases, of which 1.51 lakh cases had been disposed.

eProsecution

eProsecution streamlines coordination between the Police and Prosecution departments by enabling electronic scrutiny of charge sheets, legal opinions, and case tracking. Integrated with CCTNS and eCourts, the platform is operational across all eight districts, improving efficiency in prosecution management through digital workflows and real-time information sharing.

eForensics

eForensics supports the functioning of the State Forensic Science Laboratory by digitizing case registration, examination workflows, and report generation. As of August 2025, the system had registered over 12,200 forensic cases, enabling efficient monitoring and timely processing of forensic investigations.

ePrisons

ePrisons is a cloud-based prison management system implemented across all 13 jails in the state. The platform digitizes inmate management, visitor requests, grievance redressal, and information sharing among criminal justice agencies, improving prison administration and operational efficiency.

▼ Fig 3.7 : Chief Secretary Tripura delivering the Keynote Address during the Regional Tech Saksham Workshop



ICJS

The Interoperable Criminal Justice System (ICJS) integrates CCTNS, eCourts, ePrisons, eForensics, and eProsecution under the principle of “One Data, One Entry.” By enabling secure information exchange across justice sector institutions, the platform eliminates duplication, improves coordination among stakeholders, and supports informed decision-making throughout the criminal justice process.

IVFRT

NIC Tripura also supports the Immigration, Visa and Foreigners Registration & Tracking System (IVFRT), a Mission Mode Project of the Ministry of Home Affairs. The system facilitates a range of immigration and citizenship services, including online foreigner registration, eFRRO, institutional S-Form and C-Form services, online citizenship applications, nationality verification, visa security clearance, and the Sri Kartarpur Sahib Pilgrimage registration portal.

Education

eCounselling

eCounselling provides an integrated online platform for admissions to ITI, diploma, joint entrance, nursing, and undergraduate and postgraduate medical courses. The system manages the complete admission process, including candidate registration, fee payment, merit list generation, counselling, and seat allocation. It has facilitated admissions for over 1.10 lakh candidates across nearly 5,000 institutions.

NSP

The National Scholarship Portal (NSP 2.0) provides an end-to-end digital platform for the implementation of Central Sector, Centrally Sponsored, and State Scholarship Schemes. The portal streamlines application processing, verification, approval, and scholarship disbursement while providing comprehensive monitoring through an integrated Management Information System. During 2024–25, the portal processed over 1.36 lakh scholarship applications and facilitated the disbursement of ₹61.52 crore.

eGranthalaya

eGranthalaya is a cloud-based integrated library management system that supports cataloguing, circulation, digital library services, and Online Public Access Catalogue (OPAC). The platform has been implemented across more than 70 libraries in Tripura, improving access to library resources and digital information services.

Network and Infrastructure Services

NIC Tripura has established a robust and secure digital infrastructure that serves as the backbone of the State's e-Governance ecosystem. Through NICNET, the National Knowledge Network (NKN), Tripura State Wide Area Network (TSWAN), and



▲ Fig 3.8 : Hon'ble Home Minister, Shri Amit Shah during the Regional Official Language Conference

ACAN, the Centre provides reliable connectivity to government departments, educational institutions, and critical public establishments across the State. The network supports approximately 250 NICNET users, 6,000 NKN users, 8,000 TSWAN users, and over 4,100 ACAN users, while also providing dedicated connectivity to key institutions including the Tripura Secretariat, High Court, Legislative Assembly, Raj Bhavan, and other government offices. All eight districts are interconnected through 1 Gbps primary links with 1 Gbps failover connectivity from a separate Internet Service Provider, ensuring high availability and business continuity.

NIC Tripura also hosts 42 mission-critical web applications across the Mini Data Centre (MDC), State Data Centre (SDC), Container Data Centre (CDC), and the National Data Centre (NDC), providing secure, reliable, and highly available hosting infrastructure for government services. To strengthen cybersecurity, endpoint inventory and IP address management are being enhanced through the National IPAM Portal. In addition, the Centre operates an extensive Video Conferencing network comprising 36 registered studios, including facilities at the State Headquarters and all district headquarters, supporting nearly 1,600 video conferencing sessions annually for governance, administration, training, and interdepartmental coordination.

Application Development in Pipeline

The following initiatives are currently under development to further strengthen Tripura's digital governance ecosystem:

- **Two-way integration between WAMIS and the eProcurement Portal** to enable seamless exchange of Tender BOQ details and discovered bidder rates.
- **eVendor Portal** – A comprehensive digital platform for end-to-end contractor lifecycle management, offering:
 - Online contractor registration and verification through PAN, GST-IRP, and Bank Account API integration.
 - Electronic Bank Guarantee (eBG) generation

with NeSL integration for secure, paperless bank guarantee processing.

- Digital agreement management with online signing and secure archival.
- Integration with GePNIC for work and supply order management, enabling contractors to view assigned orders online.
- Online invoice generation, bill submission, and real-time bill status tracking.
- Departmental workflows for Letter of Intent (LoI) generation and agreement management by Tender Inviting Authorities (TIAs).

Accolades

The Beneficiary Management System (BMS) has received widespread recognition for its contribution to digital governance and Direct Benefit Transfer (DBT) delivery. The platform was honoured with the Chief Minister's Civil Service Award (2021–22), the 15th National Digital Transformation Award (2024), and the ET Government DigiTech Award (2025), reflecting its effectiveness in improving the transparency, efficiency, and scale of welfare service delivery.

Way Forward

NIC Tripura has laid a strong foundation for integrated digital governance by connecting key sectors through interoperable platforms and robust ICT infrastructure. Building on this foundation, the focus will be on strengthening data-driven governance, expanding citizen-centric digital services, and enhancing interoperability across government systems. With continued emphasis on secure digital infrastructure, paperless administration, and emerging technologies, NIC Tripura will continue to support the State Government in delivering transparent, efficient, and accessible public services while advancing the vision of Digital India.

Contact for more details

State Informatics Officer

NIC Tripura State Centre
Block 4, 3rd Floor, New Secretariat Building
New Capital Complex, Khejurbagan
Agartala, Tripura - 799010
Email: sio-trpr@nic.in, Phone: 0381-2414053



Chittoor, Andhra Pradesh

Driving Digital Governance Through Innovative ICT Solutions

Edited by **JOYCE R. AMIRTHARAJ**

Located in southern Andhra Pradesh, Chittoor is an important administrative and pilgrimage district bordering Tamil Nadu and Karnataka. NIC Chittoor provides ICT support to the district administration through the implementation of e-Governance platforms, development of innovative digital solutions and delivery of technology-enabled services. Its initiatives have strengthened administrative efficiency, transparency and citizen-centric governance across Chittoor and Tirupati districts.

ICT Initiatives in the District

Tirumala Citizen Verification and Surveillance System (TCVSS)

<https://tcvss.ap.gov.in>

To strengthen security management in Tirumala, NIC Chittoor developed the Tirumala Citizen Verification and Surveillance System (TCVSS) for the Police Department. The platform maintains a verified database of establishments and individuals residing or working in Tirumala, including hotels, mutts, shops, service providers, workers and local residents.

TCVSS enables real-time verification, monitoring and surveillance through a centralized repository of authenticated information. Integrated dashboards support preventive policing, crowd management, VVIP security and other law enforcement operations by providing actionable insights for informed decision-making.

The platform has improved the efficiency of verification processes, strengthened security management and enhanced situational awareness through faster identification and verification of individuals.

Impact

- Verified database of establishments, workers and residents in Tirumala



Venkateswara Rao Nakka

Scientist - D & DIO
venkat.rao@nic.in

NIC Chittoor is strengthening digital governance through innovative solutions such as the Tirumala Citizen Verification and Surveillance System (TCVSS) and the File Pendency Monitoring System (FPMS), while supporting key national and state e-Governance initiatives including eOffice, iRAD/eDAR, eHospital, RTIMIS and Webland. These technology-driven interventions have enhanced administrative efficiency, transparency and citizen service delivery across Chittoor and Tirupati districts.

- Real-time verification and monitoring
- Strengthened surveillance and preventive policing
- Enhanced support for VVIP security operations
- Data-driven decision-making through dashboards and reports
- Faster identification and verification of individuals

File Pendency Monitoring System (FPMS)

The File Pendency Monitoring System (FPMS), developed by NIC Chittoor, enables online tracking and monitoring of pending files and administrative issues across departments and field offices. The platform facilitates electronic file movement, real-time status updates and centralized monitoring through integrated dashboards.

By providing visibility into pendency levels across administrative hierarchies, FPMS has improved transparency, accountability and decision-making. The success of the application has led to its adoption in other locations, including GVMC Visakhapatnam and Krishna district.

Impact

- Online monitoring of pending files and administrative issues

It gives me immense pleasure to put on record the good ICT Support services being extended by NIC Chittoor District Centre to the District Administration. The support of District NIC Team in development and maintenance of District official portal, continuous support to local and general elections, many Central and State projects and cybersecurity are commendable. I appreciate the role of NIC Chittoor District Centre in making e-Governance initiatives successful across the district.

Shri Sumit Kumar, IAS

Collector & District Magistrate, Chittoor



- Improved transparency and accountability
- Real-time status tracking and reporting
- Centralized dashboards for administrative review
- Better monitoring of grievances and departmental activities
- Replication in other districts and local bodies

District Websites and Digital Platforms

NIC Chittoor manages the official websites of Chittoor and Tirupati districts, the district police departments and the Extension Training Centre (ETC), Srikalahasti. These platforms provide access to government services, public information, citizen services, training resources and departmental updates, enhancing transparency, digital outreach and citizen engagement.

Other Key Initiatives in the District

iRAD/eDAR

NIC Chittoor supports the implementation of iRAD and eDAR systems for digital accident reporting and road safety management through stakeholder training and technical support, strengthening data-driven decision-making and accident analysis.

NextGen eHospital

NextGen eHospital has been implemented across major government healthcare institutions in Chittoor and Tirupati districts, enabling digital management of patient registration, clinical services and electronic health records, and improving healthcare delivery.

Webland

NIC Chittoor provides technical support for Webland, Andhra Pradesh's digital land records management system, facilitating transparent and efficient land administration across revenue offices in Chittoor and Tirupati districts.

RTIMIS

NIC Chittoor supports the implementation of RTIMIS, enabling online submission and processing of RTI applications, appeals and complaints, thereby improving transparency and citizen access to information.

eOffice

NIC Chittoor has implemented eOffice across 153 State and Central Government offices, facilitating over 4.47 lakh eFiles and 5.69 lakh electronic receipts. The platform has streamlined workflows, reduced paper-based processes and improved administrative efficiency.

Network and Email Services

NIC Chittoor provides network, email and video conferencing services to government departments, ensuring reliable digital communication and uninterrupted ICT operations across the district.

Important Events and Outreach Activities

NIC Chittoor actively promotes cyber security awareness and digital literacy through workshops,



▲ Fig 4.1 : Training Conducted on iRAD/eDAR and PM RAHAT Scheme

training programmes and outreach initiatives. As part of Safer Internet Day 2026, the district centre conducted an awareness programme highlighting safe internet practices, cyber hygiene, online fraud prevention and the responsible use of emerging technologies such as Artificial Intelligence.

The district centre also provides technical support for national, state and district-level events by facilitating video conferencing, network connectivity and IT infrastructure. NIC Chittoor regularly supports administrative meetings, conferences and high-level visits, ensuring seamless digital communication and coordination across government departments.

Accolades

The ICT support services provided by NIC Chittoor have been widely acknowledged by district administration and various government departments. In recognition of its contribution to digital governance and implementation of e-Governance initiatives, the district centre and its officers have received certificates of appreciation and commendations during state and district-level events.

Way Forward

NIC Chittoor remains committed to strengthening digital governance through innovative local ICT solutions and continued support for existing state and central digital platforms. In the future, the TCVSS may be enhanced through integration with national systems such as CCTNS for criminal record verification, ICJS for court case information, VAHAN and SARATHI for vehicle and driver-related details, and other authorized government databases, subject to applicable legal and privacy requirements. The system will also include mobile applications to support citizen verification, visitor management, and public safety for individuals working, serving, or residing in the holy town of Tirumala.

Contact for more details

District Informatics Officer
NIC Chittoor District Centre
2nd Floor, New Collectorate
Chittoor District, Andhra Pradesh - 517001
Email: dio-chi@nic.in, Phone: 08572-242666

It gives us immense pleasure to appreciate the valuable support extended by the NIC, Chittoor District Centre, in developing and maintaining the "Tirumala Citizen Verification and Surveillance System (TCVSS)" at Tirumala. The application has greatly strengthened the verification and monitoring of Tirumala residents, workers, and shop owners, while assisting in identifying offenders and absconding accused persons as well as missing persons. The continuous technical support extended by the NIC team, particularly during major events such as the Srivari Brahmotsavams and Vaikunta Ekadasi, is highly commendable. We sincerely appreciate their commitment and contribution towards enhancing security and e-Governance in Tirumala.

Shri L. Subbarayudu, IPS
Superintendent of Police, Tirupati



Kendrapara, Odisha

Strengthening Grassroots Governance through ICT

Edited by **LAL BAHADUR SINGH**



Kendrapara district is steadily advancing its digital governance ecosystem through the strategic adoption of Information and Communication Technology (ICT). At the centre of this transformation is the NIC District Centre, Kendrapara, which serves as the district's technology backbone by implementing national and state e-Governance platforms, strengthening ICT infrastructure, providing cybersecurity guidance, and enabling the effective use of digital technologies across government departments.

From Aadhaar-enabled attendance systems and GIS-based decision-support tools to mobile applications, digital service delivery platforms, and real-time monitoring solutions, NIC Kendrapara has been driving technology-led innovation in governance. Through continuous technical support, capacity building, and the development of citizen-centric digital solutions, the District Centre has helped improve transparency, operational efficiency, data-driven decision-making, and service delivery, contributing to a more responsive and technology-enabled administration.

ICT Initiatives in the District

Aadhaar Enabled Biometric Attendance System (AEBAS)

Under the guidance of the Collector & District Magistrate, Kendrapara, NIC Kendrapara implemented the Aadhaar Enabled Biometric Attendance System (AEBAS) across all Tahasils and Blocks in January 2026. The system currently covers 714 offices across 32 administrative units, including Tahasils, Blocks, hospitals, Community Health Centres, and Emergency Operation Centres.

AEBAS provides real-time attendance monitoring, biometric and mobile-based attendance marking, geo-tagged tour management, dashboards, and centralized



Subhendu Sekhar Sahoo
Scientific/ Technical Assistant-A
kk.sahoo@nic.in



NIC Kendrapara's ICT initiatives have enhanced transparency, efficiency, and service delivery through digital platforms such as AEBAS, e-Counselling, and e-DAR. Combined with capacity building, technical advisory services, and district-level innovations, these efforts have strengthened its role as the technology backbone of the district administration.



reporting. With more than 2,000 registered users, the platform recorded over 80 percent attendance compliance during April–May 2026, strengthening accountability, punctuality, and transparency in government functioning.

Census and Agriculture Census Support

NIC Kendrapara provided technical and coordination support for Population, Household Census and Agriculture Census activities in the district. The District Informatics Officer served as Master Trainer-cum-Additional District Census Officer, leading training, capacity building, and digital process facilitation. Through technical assistance, field-level support, and issue resolution for enumerators and supervisors, NIC helped ensure accurate data collection, improved coordination, and the timely completion of Census operations.

e-Counselling System for Transfer and Posting

NIC Kendrapara developed the e-Counselling Portal to digitize employee transfer and posting processes. The platform streamlines vacancy management, preference submission, allotment,

and posting order generation, promoting transparency, fairness, and timely decision-making. More than 150 transfer and posting cases have been processed through the portal.

e-DAR and PM Rahat

NIC Kendrapara supports the implementation of the Electronic Detailed Accident Report (e-DAR) platform, enabling digital processing of road accident cases and improving coordination among stakeholder departments. The District Centre also provides technical support for PM Rahat, facilitating efficient accident-related assistance and documentation.

Election ICT Support

NIC Kendrapara provides end-to-end ICT support during elections, including application management, data preparation, personnel and EVM randomization, technical training, and communication support. These services enable transparent, technology-driven, and efficient electoral processes.

Revenue, Land, Disaster Management, and Citizen Services

NIC Kendrapara supports key digital platforms for land records, revenue administration, certificate issuance, grievance redressal, disaster assistance, and citizen service delivery. The District Centre also provides technical support, training, and troubleshooting for applications such as DAMPS and e-Court services, ensuring effective utilization and improved public service delivery.

e-Lottery for Retail Liquor Shops

The e-Lottery for settlement of IMFL "OFF" Shops and Country Liquor Shops for the Excise Year 2026–27 was conducted at the Conference Hall of Zilla Parishad, Kendrapara.

The District Informatics Officer, NIC Kendrapara, played a significant role as a member of both the Scrutiny Committee and the Lottery Committee, supporting verification of applications and documents, ICT infrastructure arrangements, computerised entry of lottery winners, generation of provisional winner certificates, and all technical aspects of the process.

A total of 919 applications from 634 applicants

were received for IMFL “OFF” Shops, while 173 applications from 122 applicants were received for Country Liquor Shops. Altogether, 1,092 applications from 756 applicants were processed against 64 shops, and the lottery was conducted successfully in a fair, transparent, and efficient manner, demonstrating the reliability of the digital platform.

District Geo-Portal

The Kendrapara District Geo-Portal, built on the Bharat Maps framework, provides a unified GIS platform for planning, monitoring, and decision-making. By integrating administrative, infrastructure, and resource datasets, it enables officials to analyse geospatial information, improve coordination, and support evidence-based governance across the district.

District Mobile Application Development

NIC Kendrapara develops need-based mobile applications to improve accessibility, field-level coordination, information dissemination, and digital monitoring. These solutions support faster decision-making, better field reporting, and greater adoption of digital governance tools.

ICT Infrastructure, Network, and Video Conferencing Support

NIC Kendrapara provides critical ICT infrastructure support, including network connectivity, indoor and outdoor video conferencing services, official email services, cybersecurity guidance, and application support.

The District Centre plays a crucial role in review meetings, training programmes, VVIP visits, and other high-priority governance activities by ensuring uninterrupted connectivity, digital presentation support, real-time technical coordination, and reliable ICT services.

Mentoring and Capacity Building

NIC Kendrapara actively contributes to capacity

building by mentoring undergraduate and postgraduate interns and providing exposure to practical aspects of e-Governance, cybersecurity, ICT infrastructure, and digital service delivery.

The District Centre also conducts awareness sessions and technical workshops for government officials, police personnel, and students on cybersecurity, Artificial Intelligence, digital governance, online services, and emerging technologies.

Technical Committees and ICT Advisory Support

The District Informatics Officer serves on various ICT-related committees covering national examinations, GeM procurement, technology evaluation, ICT infrastructure planning, and digital project implementation. NIC Kendrapara provides technical guidance on technology adoption, cybersecurity, procurement, and application deployment, while also supporting computer-based recruitment examinations, skill tests, and departmental assessments across the district.

Awards and Recognition

The contributions of NIC Kendrapara and its officers have received recognition at both district and national levels:

- GenAI Award of Excellence 2024 for developing an advanced chatbot solution based on a Large Language Model (LLM) and Retrieval-Augmented Generation (RAG)
- Appreciation Letter from the Superintendent of Police, Kendrapara (May 2026) for outstanding ICT support and technical contributions
- Appreciation Letter from the Chief Electoral Officer (CEO), Odisha, for providing ICT support towards the successful conduct of the General Elections 2024
- Appreciation from the Additional Chief Secretary, Odisha, for providing ICT support towards the successful completion of the Ek Ped Maa Ke Naam campaign

The District Administration, Kendrapara, has been steadily adopting ICT-enabled solutions to strengthen transparency, efficiency and accountability in governance. Initiatives such as AEBAS, e-DAR, e-Counseling, eDistrict, Revenue and Land services, e-DAR and other digital platforms have improved monitoring, service delivery and coordination across departments. I appreciate the valuable support provided by NIC Kendrapara in implementing these e-Governance initiatives, providing technical assistance, capacity building and reliable ICT support during important governance activities. Their efforts have significantly contributed to making administration more responsive, data-driven and citizen-centric.

I extend my best wishes to NIC Kendrapara for continuing its role in strengthening digital governance and supporting the vision of Digital India at the district level.

Shri Raghuram R. Iyer, IAS

Collector & District Magistrate Kendrapara



- Bhumi Samman Award received by Kendrapara district for successful digitalisation and modernisation of land records and related services
- The District Informatics Officer has published four research papers in reputed international journals and conference proceedings

Way Forward

NIC Kendrapara will continue to strengthen digital governance through enhanced ICT infrastructure, cybersecurity, AI-driven solutions, and citizen-centric digital services. With sustained collaboration between NIC and the district administration, Kendrapara is steadily progressing towards a more transparent, efficient, and technology-enabled governance ecosystem.

Contact for more details

District Informatics Officer

NIC Kendrapara District Centre

Collectorate Building, Kendrapara, Odisha - 754211

Email: dio-knd@nic.in, Phone: 06727-232816

▼ Fig 5.1 : GenAI Award of Excellence 2024 received from Minister of Electronic IT, Health and Family Welfare and Parliament Affairs, Govt. Of Odisha



Morigaon, Assam

Rooted in Heritage, Driven by Technology

Edited by **LAL BAHADUR SINGH**



Situated in the heart of Assam, Morigaon district is known for its rich cultural heritage and the renowned Pobitora Wildlife Sanctuary, home to the Indian One-Horned Rhinoceros. Alongside preserving its cultural and natural legacy, the district has steadily embraced digital technologies to strengthen governance and public service delivery. Supporting this transformation, NIC Morigaon has played a pivotal role in implementing key e-Governance initiatives such as Sewa Setu, Basundhara, Dharitree, eOffice and iRAD. The District Centre has also developed innovative solutions including SurveyHub, a platform for surveys and structured data collection, and Sadak Pragati, a road project monitoring system. Complemented by the district website ecosystem built on ePrastuti 2.0, these initiatives have enhanced transparency, efficiency and citizen-centric service delivery across Morigaon.

ICT Initiatives in the District

SurveyHub – Digital Forms, Surveys and Data Collection Platform

SurveyHub is a digital platform developed to streamline form creation, surveys and structured data collection across departments. The platform enables users to design, publish and manage digital forms for data collection, feedback gathering and administrative activities through a centralized interface. Equipped with real-time dashboards and analytical reporting capabilities, SurveyHub facilitates efficient monitoring, improves data accuracy and supports informed decision-making. The platform demonstrates how scalable digital tools can address a wide range of governance and administrative requirements.



Bishnu Chetri

Scientific Officer - SB & DIO
bisnu.chetri95@nic.in

NIC Morigaon is advancing digital governance through key e-Governance initiatives such as Sewa Setu, Basundhara, eOffice and iRAD, while developing innovative solutions like SurveyHub and Sadak Pragati. These technology-driven interventions are enhancing administrative efficiency, transparency and citizen-centric service delivery across the district.

Sadak Pragati – Roads Project Monitoring System

Developed by NIC Morigaon in collaboration with the District Administration, Sadak Pragati is a digital platform for monitoring road construction and maintenance projects across the district. The system enables project-wise progress tracking, field inspection reporting and centralized monitoring of infrastructure works. By providing timely updates and improved visibility into project execution, the platform helps administrators review progress, identify bottlenecks and ensure accountability. Sadak Pragati supports evidence-based decision-making and enhances oversight of infrastructure development activities across Morigaon.

Morigaon District Website on ePrastuti 2.0

NIC Morigaon successfully onboarded the Morigaon District Website onto the ePrastuti 2.0 framework, creating a modern, accessible and citizen-centric digital information platform. More than 24 departments and offices have

been integrated into the website ecosystem. To enable decentralized content management, departmental Content Managers were trained to independently update and maintain website content. NIC Morigaon continues to provide technical guidance and support for the effective management of the district's online presence.

Other Key Initiatives in the District

NIC Morigaon continues to serve as a key technology partner to the District and State Administration by supporting the implementation and operation of several e-Governance initiatives.

Integrated Land Records Management System (ILRMS)

The Integrated Land Records Management System (ILRMS) has significantly improved the delivery of land-related services in Morigaon by integrating applications such as Basundhara, Dharitree, Bhunaksha, eKhazana, NGDRS and Survey/Resurvey. NIC Morigaon supports implementation through capacity-building initiatives and technical guidance, helping ensure efficient delivery of land administration services.

Sewa Setu

Sewa Setu, designed and developed by NIC Assam, is the flagship citizen service delivery platform of the Government of Assam. The portal enables citizens to access more than 815 services, including registrations, licences, certificates and welfare schemes. NIC Morigaon supports the rollout and effective utilization of the platform through user training and technical facilitation.

Basundhara

Mission Basundhara 3.0 is a flagship initiative of the Government of Assam aimed at delivering land revenue services efficiently and transparently. The programme enables citizens to access a wide range of land-related services through a simplified digital process. NIC Morigaon facilitates effective implementation through user training, troubleshooting support and coordination with revenue authorities.

eOffice

NIC Morigaon facilitated the implementation

of eOffice in the District Commissioner's Office and Co-District Commissioner Offices, enabling paperless administration and streamlined digital workflows. Continuous capacity building and technical assistance ensure smooth adoption and operation of the platform across offices.

iRAD

NIC Morigaon supports the implementation of the Integrated Road Accident Database (iRAD) to strengthen road safety data management and accident reporting in the district. Regular training and capacity-building programmes are conducted for nodal officers from stakeholder departments to ensure effective utilization of the platform. The District Centre also supports the integration of the PM Rahat Scheme for efficient processing of eligible beneficiaries.

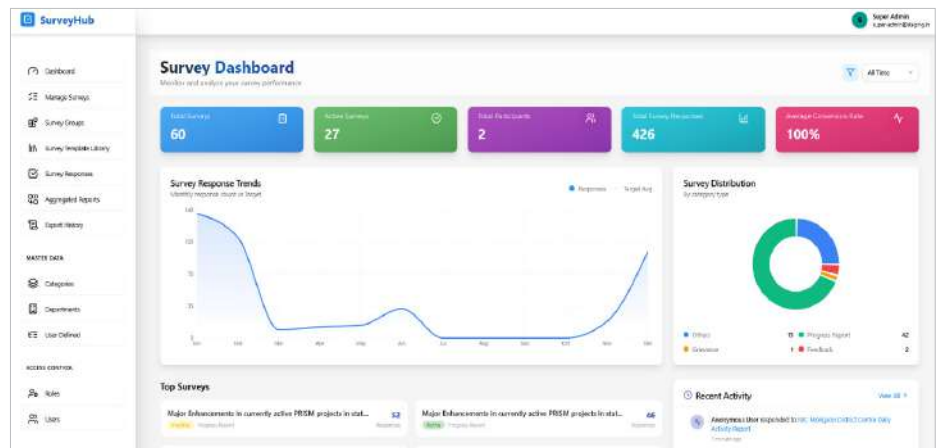
ICT Support for Elections

NIC Morigaon provides comprehensive ICT support to the District Administration during Parliamentary, Assembly, Panchayat and Local Body Elections. The District Centre supports the deployment of the Polling Personnel Management

NIC Morigaon has been an invaluable partner in the district's digital transformation journey, consistently providing innovative ICT solutions and dedicated technical support to the District Administration. From facilitating seamless Video Conferencing services, supporting the implementation of eOffice and various e-Governance initiatives, to providing comprehensive technical assistance during elections, NIC has significantly strengthened transparency, efficiency, and service delivery. The ongoing development of the Sadak Pragati platform for road project monitoring further reflects NIC Morigaon's commitment to leveraging technology for effective governance and informed decision making. I appreciate the efforts of the NIC Morigaon team and wish them continued success in advancing citizen-centric digital governance in the district.

Smt. Anamika Tewari, ACS

District Commissioner, Morigaon



▲ Fig 6.1 : Survey Dashboard



▲ Fig 6.2 : Election ICT Support by NIC Morigaon

System (PPMS), developed by NIC Assam, and facilitates capacity building for various digital platforms of the Election Commission of India.

Video Conferencing and NICNET Services

NIC Morigaon manages critical digital infrastructure services including NICNET, NKN, video conferencing and webcasting facilities. These services serve as the backbone of administrative communication and coordination, with the District Centre ensuring reliable connectivity and uninterrupted operations through round-the-clock technical support.

Important Event Organised

Safer Internet Day 2026

As part of its commitment to promoting cyber awareness and responsible use of digital technologies, NIC Morigaon organised an awareness workshop on Safer Internet Day 2026. Attended by around 70 government officials from various departments, the programme focused on cyber hygiene, password security, safe online practices and protection against emerging

cyber threats. The workshop highlighted the importance of responsible digital behaviour and cybersecurity in an increasingly connected governance ecosystem.

Way Forward

Going forward, NIC Morigaon will focus on enhancing the capabilities of Sadak Pragati and expanding the adoption of SurveyHub across departments. Continued efforts will be directed towards strengthening digital service delivery, promoting cybersecurity awareness and supporting data-driven governance. As a trusted technology partner to the District Administration, NIC Morigaon remains committed to leveraging digital innovation for efficient, transparent and citizen-centric governance.

Contact for more details

District Informatics Officer
NIC Morigaon District Centre
Office of the District Commissioner
Morigaon, Assam – 782105
Email: dio-mgn@nic.in, Phone: 03678-240225

Ujjain, Madhya Pradesh

Driving Digital Governance Through ICT Innovations

Edited by **SWARUP DUTTA**

Ujjain, located on the banks of the sacred Kshipra River in the Malwa region of Madhya Pradesh, is one of India's most prominent religious, cultural, and heritage destinations. Home to the Shri Mahakaleshwar Jyotirlinga, Mahakal Lok, Vedh Shala, and the globally renowned Simhastha Kumbh Mela, the district holds immense historical and spiritual significance.

Supporting the district's evolving governance and developmental requirements, NIC Ujjain has been leveraging Information and Communication Technology (ICT) to enhance public service delivery, improve administrative efficiency, and accelerate digital transformation through robust e-Governance initiatives and digital infrastructure.

ICT Initiatives in the District

NIC Ujjain has played a key role in implementing, monitoring, and providing technical support for several mission-mode e-Governance projects across the district.

e-Office

The Centre facilitated the implementation and operational support of e-Office across divisional, district, sub-divisional, and tehsil offices. The initiative has significantly reduced paper-based processes, improved file tracking, enhanced transparency, and expedited decision-making.

e-Uparjan

NIC Ujjain provided technical support for the successful implementation of the e-Uparjan system for agricultural procurement. The platform has streamlined procurement operations, ensured transparency, and facilitated timely payments to farmers.



Vivek Mahawar
Scientist - C & DIO
mahawar.vivek@nic.in



NIC Ujjain is driving digital governance through the implementation of key e-Governance initiatives such as e-Office, e-Uparjan, NextGen eHospital, and PM RAHAT. The Centre facilitated over 850 video conferences and webcasts, supported major governance and cultural events, and developed an Automated Land Acquisition Monitoring System for Simhastha 2028. Through ICT enablement, capacity building, proactive cybersecurity awareness, seamless digital transformation initiatives, and robust technical support, NIC Ujjain continues to strengthen citizen-centric service delivery across the district with efficiency and innovation.



Census 2027 Operations

As the District IT Nodal Agency, NIC Ujjain coordinated and monitored the first phase of Census-related IT activities. The Centre provided technical guidance, infrastructure support, and stakeholder coordination for the smooth conduct of house-listing operations undertaken in May 2026.

Janakansha Portal and TL Monitoring

NIC Ujjain provides technical support for

the Janakansha Portal, extensively used by the Collector, Ujjain, during weekly Time Limit (TL) meetings to monitor public grievances. The portal enables effective tracking of complaint status, departmental compliance, pending cases, and timely grievance redressal, thereby strengthening accountability and responsiveness in governance.

NDAL Arms Licence System

The Centre provides technical support and software management for the National Database of Arms Licences (NDAL), facilitating efficient digital processing and management of arms licence services in the district.

NextGen eHospital

District Hospital, Ujjain, was upgraded from the legacy eHospital platform to the NextGen eHospital System. The enhanced platform has strengthened patient registration, appointment scheduling, hospital administration, and clinical workflows, leading to improved healthcare service delivery.

PM RAHAT through e-DAR

In collaboration with the district administration, NIC Ujjain successfully supported the implementation of PM RAHAT (Road Accident Victim Hospitalization and Assured Treatment). Joint training programmes were conducted for officials from the Police and Health Departments to ensure effective utilization of the e-DAR (e-Detailed Accident Report) portal.

Through coordinated efforts among NIC, the district administration, police, and health departments, the e-DAR and TMS 2.0 ecosystem has achieved seamless operational integration in the district. Continuous technical support and handholding by NIC enabled 68 road accident victims to avail benefits under the scheme.

Automated Land Acquisition Monitoring System

To support the large-scale infrastructure projects planned for Simhastha 2028, NIC Ujjain is developing an Automated Land Acquisition Monitoring & Notification System. The solution enables systematic tracking of land acquisition cases across statutory stages while monitoring timelines associated with the acquisition process.

The system provides automated notifications, reminders, real-time dashboards, and escalation alerts for delayed cases. By enhancing transparency, accountability, and inter-departmental coordination, the platform is facilitating timely completion of land acquisition proceedings and effective execution of development projects.

Video Conferencing and Webcasting Services

NIC Ujjain has been providing robust video conferencing, webcasting, and ICT support for governance, developmental initiatives, public outreach programmes, and special events across the district.

As Ujjain is the home district of the Hon'ble Chief Minister of Madhya Pradesh and a major centre for cultural, religious, and developmental activities, it frequently hosts visits by senior government officials. With preparations underway for Simhashta 2028, the demand for technology-enabled coordination and monitoring has increased substantially.

During the past year, NIC Ujjain facilitated more than 850 video conferences and webcasts, enabling seamless communication between the State Government, district administration, field offices, and citizens.

The Centre provided ICT support for several prestigious events, including the National Conference on Astronomy and Indian Knowledge Tradition, Kalidas Samaroh, Vikram Mahotsav, United Consciousness Conclave, and the Global Spiritual Tourism Conclave, along with various heritage and cultural programmes.

NIC Ujjain also facilitated virtual meetings and reviews chaired by the Hon'ble Chief Minister, Chief Secretary, Additional Chief Secretaries, Commissioner, Collector, and other senior officials. These included Samadhan Online,



▲ Fig 7.2 : District Ujjain Website Home Page

Collectors' Conferences, Law and Order Reviews, Civil Defence Preparedness Meetings, election-related reviews, and Simhashta 2028 planning and monitoring meetings.

Additionally, the Centre extended technical support for key welfare and developmental programmes such as Ladli Behna Yojana, Mukhyamantri Kanya Vivaah Sammelan, Sambal Yojana, Kisan Kalyan Yojana fund transfer programmes, procurement reviews, and infrastructure project inaugurations across the district.

Capacity Building and Digital Governance

NIC Ujjain continues to strengthen digital governance through regular capacity-building initiatives and technical support to government departments. The Centre conducts e-Office training programmes, cybersecurity awareness

sessions, and ICT capacity-building workshops to enhance digital competencies among government officials.

These efforts have contributed to greater adoption of e-Governance platforms, improved cybersecurity awareness, and more efficient public service delivery across the district.

Safer Internet Day Commemoration

As part of its commitment to promoting safe and responsible use of digital technologies, NIC Ujjain organized cybersecurity awareness programmes for students and government stakeholders. On the occasion of Safer Internet Day, cyber safety sessions were conducted focusing on personal data protection, strong password practices, two-factor authentication, identification of phishing attempts, and safe use of public Wi-Fi networks.

These initiatives are helping build a digitally aware and cyber-resilient community.

Way Forward

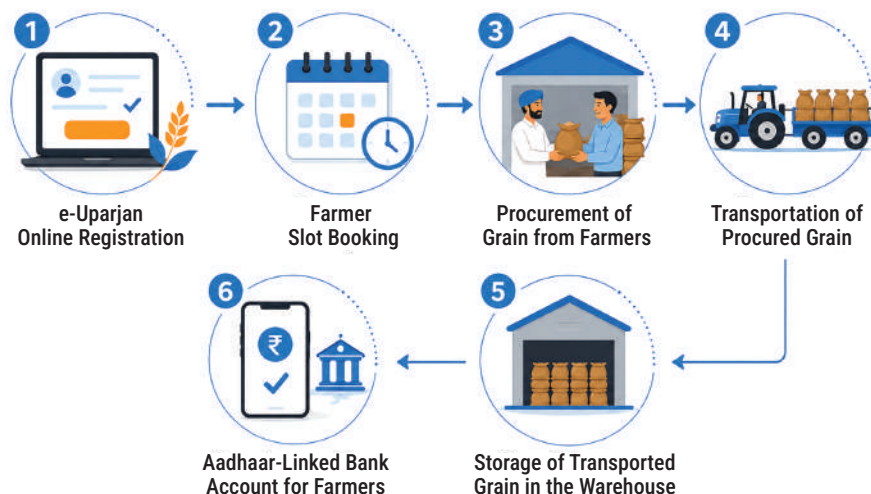
NIC Ujjain continues to play a pivotal role in advancing digital governance through innovative ICT solutions, capacity-building initiatives, and seamless support to mission-mode projects. As the district prepares for Simhashta 2028 and other major developmental initiatives, the Centre remains committed to leveraging technology for efficient, transparent, and citizen-centric governance.

Contact for more details

District Informatics Officer

NIC Ujjain District Centre
Ground Floor, Collectorate Building
Samrat Vikramaditya Prashasnik Sankul, Kothi Road
Ujjain, Madhya Pradesh – 456010
Email: dio-ujj@nic.in, Phone: 07652-240883

▼ Fig 7.1 e-Uparjan Process flow



Pensioner Sewa Portal Punjab

A Digital Leap For Pensioner Ease

Edited by VINOD KUMAR GARG

The Pensioner Sewa Portal, Punjab, is a flagship digital governance initiative of the Government of Punjab aimed at delivering transparent, efficient, and citizen-centric pension services to retired State Government employees. The platform provides a secure, unified digital interface enabling pensioners to access pension-related services and information anytime, anywhere, while strengthening controls against fraudulent and duplicate pension payments.

Managed by the Department of Finance (Treasuries and Accounts), Government of Punjab, the portal digitizes and streamlines end-to-end pension workflows, reducing manual intervention, minimizing office visits, and enabling seamless coordination among pensioners and stakeholders.

Launched on November 01, 2025, the key modules include Pensioner Services, e-Scroll, and allied functional components thereby enhancing operational efficiency, financial transparency,



Vivek Verma

Dy. Director General & SIO
vivek.verma@nic.in



Anoop Jalali

Sr. Technical Director & HoD
anoop.jalali@nic.in



Narinder Singh

Sr. Technical Director
narinder.singh@nic.in



Anil Katiyar

Scientist - D
katiyar.anil@nic.in

Powered by an advanced automation and data intelligence framework, PSP Punjab has achieved an 8% reduction in government expenditure while enabling fraud detection, duplicate pension identification, and pension benefit validation. A centralized digital repository of 3.5 lakh pensioners, enriched with over 235 structured data attributes and PPO records, has been created through intelligent data extraction and processing. This transformation was achieved without manual data entry, user-driven PDF uploads, or repetitive document scanning, creating a scalable digital foundation for streamlined pension services, reduced physical visits, and seamless stakeholder communication.

and service delivery. With automated validations and verification mechanisms, the system has contributed in reinforcing accountability and optimal utilization of public resources.

Features

Component Integrations

- Aadhaar/Biometric Authentication Module
- Common Service Platform Integration
- Banking Entities Integration

- Workflow Integrations

Pensioner Services

- eKYC, LTC Module, Pension Slip, and Form 16
- Self Verification Module
- Pension Revision Module
- Medical Reimbursement Module
- Change Management and Succession Application

Process Automation

- E-Scroll Module
- Pension Succession / Family Pension Module
- Recovery Module
- Pension Sanctioning Authority Module
- Pension Processing Module
- Life Certification Module
- Finance Module
- Legacy Data Sanitization & Processing Module

Innovations Applied

Additional Layer of Authenticity Check with Fusion of eKYC & JPP

A unique integration of OTP-based eKYC and Jeevan Pramaan Patra enables dual verification through demographic authentication and liveness validation, automatically cross-checking PPO records to detect fraudulent or duplicate pension cases.

Zero-Touch Digital Pension Data Transformation

A centralized repository of 3.5 lakh pensioners, enriched with 235+ structured data attributes and PPO records, was created using intelligent document processing without manual data entry, user uploads, or repetitive scanning.

Document Type Validation

The system automatically identifies document types and beneficiary relevance, rejecting invalid submissions without manual intervention, reducing rejection-related effort by 70% and accelerating processing by 10 times faster.

High-Volume Initialization (Top-Heavy Model)

The platform is deployed with production-scale historical data, document archives, and transaction records from day one, ensuring readiness for real-world workloads.

Data Tunnel Architecture for Tiered Data Management and PII Governance

A dual-database design enables secure PII governance, data segregation, lifecycle management, and controlled movement of data from ingestion to structured storage, ensuring scalability and compliance.

Pre-Enabled Intelligent Audit & Validation Framework

Automated verification routines are embedded within the processing pipeline, enabling self-auditing, zero-touch compliance, and minimal audit overhead.

Aadhaar Ecosystem Integration & PII Data Protection Framework

Built-in masking, obfuscation, and secure data handling mechanisms ensure full compliance with UIDAI guidelines for Aadhaar-linked information.

Data-Driven Database Architecture for Optimized Storage and Retrieval

A document-oriented, schema-less database design supports high-volume unstructured and semi-structured data, delivering scalability, performance, and efficient retrieval.

Standard Reports

All reports follow a centralized template framework and include metadata, digital watermarks, and compliance declarations to meet DDPA and UIDAI requirements.

Benefits

Aadhaar-Enabled Digital Life Certificate Transformation

Digital Life Certificate adoption increased

from 6% to 90% after PSP implementation in 2026. Aadhaar-based authentication has helped eliminate approximately 20,000–25,000 fraudulent or ineligible pension records.

Real-Time Pension Discontinuation Workflow

Pension payments are automatically stopped upon verified events such as death, marriage, or income threshold breaches through integration with external registries. The system also identifies excess payments and initiates corrective actions.

Digital Pension Forensics & Intelligence Engine

Using PPO records issued 30–40 years ago, the system accurately reconstructs and validates pension entitlements, automates Pay Commission revisions, DA arrears, and other calculations, detects overpayments, validates recoveries from bank scrolls, and maintains a complete digital audit trail.

Audit & Traceability Framework

Enables end-to-end financial auditability from superannuation to family pension, with automatic generation of statutory reports, ledgers, and documents for AG Office, RBI, and other agencies with zero manual data entry.

AI-Driven Analytics Dashboard

Delivers real-time insights, predictive analytics, and intelligent decision support for proactive pension administration and smarter financial management.

Way Forward

The future roadmap for PSP Punjab envisions a Face Authentication-enabled mobile application

The Pensioner Sewa Portal, Punjab, launched in 2025, is a flagship digital governance initiative of the Government aimed at delivering transparent, efficient paperless pension processing and services. It reflects our commitment to ensuring that every pensioner remains connected, informed, and served with dignity.

Through an algorithm and analytics-driven approach, the platform has transformed the complete pension lifecycle—from initiation to disbursement—into a secure, paperless, and integrated digital ecosystem. The transition from a manual system to a fully digitized platform was achieved within a record timeframe, enhancing efficiency, transparency, and eliminating fraudulent pension payments.

I extend congratulations to the NIC Team for their exceptional dedication, innovative ideas, and outstanding execution. Their commitment and relentless efforts have played a pivotal role in making this transformation a successful reality.

Shri M. K. Arvind, IAS

Director of Treasury and Accounts



for secure one-click eKYC and Digital Life Certificate submission, significantly reducing manual processes and improving convenience for pensioners.

Leveraging Data Analytics, Artificial Intelligence, and Machine Learning, the platform will further evolve with an AI-powered Pension Assistant that enables seamless access to information and services through natural conversations. Together, these initiatives will transform PSP Punjab into an intelligent, citizen-centric digital governance platform, delivering faster services, quicker grievance resolution, and enhanced pensioner satisfaction while setting new benchmarks in digital transformation.

Contact for more details

State Informatics Officer

NIC Punjab State Centre
Room No 31, Punjab Civil Secretariat
Sector-1, Chandigarh - 160009
Email: sio-punjab@nic.in, Phone: 0172-2747357

Technologies Used	
Particulars	Technology/Tools Used
Application /Business Layer	.NET Core (MVC)
Database Layer	PostgreSQL and MongoDB
Monitoring & Observability	Zabbix - Open Source
Identity & Access Management	Keycloak – Open Source
PIM/PAM Tool	PAM 360
Load Balancing & High Availability	HAProxy
DevOps & CI/CD Automation	Jenkins / GitLab
Software Testing & Quality Assurance	JMeter / Postman
Vulnerability & Security Testing	Zap and Burp Suite Professional
Log Monitoring and Fraud Detection Tools	In-house developed tool

eSCMS

A Digital Platform for Monitoring and Managing Liquor Distribution in Manipur

Edited by **LAL BAHADUR SINGH**



The Excise Department, Government of Manipur, regulates the manufacture, import, storage, transportation, distribution, and sale of liquor across the State. To improve transparency, compliance, and supply chain monitoring, the department has implemented the eSCMS (e-Supply Chain Management System).

eSCMS is an integrated digital platform that tracks liquor movement from bottling to retail sale. It connects all stakeholders—including suppliers, bottlers, bonded warehouses, wholesalers, and retailers—within a centralized ecosystem integrated with the eAbkari framework.

The system uses Excise Adhesive Labels (EALs), QR codes, SSCC, GTIN, XML-based data exchange, and handheld scanning devices to enable bottle-level traceability, monitor stock movement, prevent diversion, and strengthen regulatory oversight. It also provides real-time visibility into inventory, facilitates seamless data exchange among stakeholders, improves operational efficiency, enhances compliance with excise regulations, and supports informed decision-making through accurate, timely, and centralized information.



N. Binod Singh
Sr. Technical Director & SIO
binod@nic.in



Kongbrailatpam Gopal Krishna Sharma
Scientist - D
gopal.krishna@nic.in



S. Ramesh Singh
Scientist - C
ramesh.s@nic.in



The e-Supply Chain Management System (eSCMS) is a digital platform developed for the Excise Department, Government of Manipur, to enable end-to-end monitoring of liquor distribution. Integrated with the eAbkari system, it provides bottle-level traceability through Excise Adhesive Labels (EALs), QR-code verification, and real-time inventory tracking. By digitizing supply chain operations from bottling to retail sale, eSCMS enhances transparency, prevents diversion and circulation of counterfeit products, strengthens regulatory oversight, improves revenue assurance, enables data-driven decision-making, streamlines compliance monitoring, and supports efficient enforcement across the entire supply chain.



Objectives

The key objectives are:

- Establish end-to-end digital tracking of liquor distribution
- Ensure transparency and accountability in stock movement
- Prevent diversion, duplication, and unauthorized sales
- Enable bottle-level traceability through EALs.

- Streamline inventory and logistics management
- Facilitate real-time verification through QR-code scanning
- Integrate supply chain operations with eAbkari
- Improve operational efficiency and inventory control

Stakeholders Involved

The system integrates:

- Excise Department, Government of Manipur
- Distilleries / Suppliers
- Bottlers
- Bonded Warehouses
- Wholesalers
- Retailers

All stakeholders are registered through the eAbkari-Manipur system.

Role of the Excise Department

The Excise Department functions as the regulatory authority and administrator of eSCMS.

Its responsibilities include:

- Stakeholder registration and management
- Maintenance of master data for suppliers, bottlers, brands, labels, warehouses, wholesalers, retailers, and pricing
- Creation of stakeholder user accounts.
- Management and approval of Excise Adhesive Label (EAL) requisitions
- Monitoring stock movement across the supply chain

System Architecture Overview

eSCMS is a centralized web-based platform integrated with handheld Android scanning devices.

The system uses standardized identification mechanisms to track liquor at both case and bottle levels. Each case is assigned a unique SSCC-based identity, while each bottle is linked to a unique EAL number.

Excise Adhesive Label (EAL) Management

The EAL serves as the primary identifier for bottle-level traceability.

- **EAL Requisition:** Distilleries or suppliers submit EAL requisitions to the Excise Department.

- **Approval Process:** Approved EALs are issued by the Excise Department to the concerned distillery.
- **Distribution to Bottlers:** Distilleries distribute EALs to bottlers for use during bottling operations.

Bottling and XML Upload Process

Bottlers affix EALs to bottles and upload production and packaging data through XML files. The XML file includes:

- Import Permit Number
- SSCC
- Bottle GTIN
- Case GTIN
- Pack Size
- Bottle Quantity
- Expiry Date
- EAL Numbers

After validation, the import permit becomes available for shipment processing.

Shipment and Transportation Process

Shipment details recorded in the system include:

- Import Permit Number
- Invoice Number and Date
- Transporter Details
- Vehicle Information
- Destination Warehouse

Each dispatched case carries a QR code linked to its SSCC for tracking and verification.

Receipt at Bonded Warehouse

Bonded warehouses receive consignments using handheld scanning devices.

QR Code Verification

The system:

- Scans QR codes on cases
- Verifies shipment data against uploaded records
- Confirms warehouse destination and shipment authenticity

Stock Update

Upon successful verification:

- Warehouse inventory is updated automatically
- Stock becomes available for further distribution

Purchase Order and Dispatch to Wholesaler

In Manipur, wholesaler operations are managed by Manipur State Beverages Corporation Limited (MSBCL).

Purchase Order Submission

- Purchase orders are generated through the system

Dispatch from Bonded Warehouse

During dispatch:

- Cases are scanned and verified
- Movement records are generated
- Stock levels are updated automatically

Receipt at Wholesaler

Wholesalers verify consignments using handheld scanners.

The system validates:

- Shipment authenticity
- Purchase order mapping
- Case details
- Destination information

Verified stock is automatically added to wholesaler inventory.

Retailer Indent and Supply Process

Retailers submit stock indents through the system.

Stock Monitoring by Wholesaler

Scenario 1: Stock Available

- Orders are processed immediately
 - Cases are scanned and dispatched
- Scenario 2: Stock Not Available
- Replenishment orders are placed with bonded warehouses

Dispatch and Receipt at Retailer

Cases are scanned before dispatch and again upon receipt.

Receipt Verification

The system validates:

- Consignment authenticity
- Retailer mapping
- Shipment details
- Product information

After verification, retailer inventory is updated automatically.

Bottle-Level Sales and Traceability

eSCMS enables bottle-level sales verification using EAL or barcode scanning.

Before sale, each bottle is authenticated through the scanning system to confirm ownership and inventory status.

After validation, sales are processed through the POS system, which supports billing, payment collection, invoice generation, and digital payments through Razorpay-integrated channels.

Real-time sales recording automatically updates inventory.

Retail Validation

The system ensures:

- Only assigned bottles can be sold by a retailer.
- Cross-retailer sales are blocked.
- Unauthorized diversion is prevented.

Benefits of Bottle-Level Tracking

- End-to-end traceability
- Counterfeit prevention
- Diversion control
- Accurate sales monitoring
- Improved regulatory compliance

Key Features

- Centralized supply chain management
- Real-time stock tracking
- QR code-based verification

- Bottle-level traceability
- XML-based data integration
- Automated inventory updates
- Role-based access control
- Handheld device integration
- eAbkari integration
- Diversion prevention
- Audit trail and monitoring

Key Benefits

Administrative Benefits

- Improved regulatory oversight
- Greater transparency and accountability
- Stronger compliance monitoring
- Better audit management

Operational Benefits

- Faster stock handling
- Reduced manual processes
- Efficient inventory management
- Real-time stock visibility

Security Benefits

- Prevention of unauthorized movement
- Detection of diversion and counterfeit products
- Secure bottle level authentication

Financial Benefits

- Improved revenue assurance
- Reduced revenue leakage
- Better tax and duty monitoring

Future Scope

The eSCMS is designed to support future enhancements such as damaged stock management, stock transfers and returns, reconciliation modules, advanced analytics dashboards, mobile monitoring applications, and AI-based anomaly detection to further strengthen supply chain efficiency and regulatory oversight.

Conclusion

The eSCMS provides a comprehensive digital framework for monitoring liquor distribution in Manipur. By integrating all stakeholders into a single platform and enabling bottle-level traceability through EALs, QR code verification, and real-time inventory management, the system strengthens regulatory control, improves operational efficiency, prevents diversion, and enhances revenue assurance.

Its integration with eAbkari further supports effective governance and streamlined excise administration across the State.

Contact for more details

State Informatics Officer

NIC Manipur State Centre
NKN Block, New Secretariat
Imphal, Manipur - 795001
Email: sio-man@nic.in, Phone: 0385-2225206

UMPS

Single Window System for Mountaineering Activities in Uttarakhand

Edited by VINOD KUMAR GARG



Uttarakhand, home to some of India's most prominent Himalayan peaks and trekking routes, attracts thousands of mountaineers and adventure enthusiasts every year. Managing expeditions in remote and ecologically sensitive regions, traditionally involved lengthy manual procedures, multiple departmental approvals, and limited visibility into expedition activities.

To address these challenges, the Government of Uttarakhand launched the Uttarakhand Mountaineering Permission System (UMPS) on 26 September 2021 during the Uttarakhand Adventure Festival. The portal serves as a centralized platform for managing mountaineering permissions and related services, making Uttarakhand one of the first states in India to comprehensively digitize mountaineering governance.

Need for the Initiative

The growing popularity of adventure tourism highlighted the need for a transparent, efficient, and technology-driven system to:

- Simplify permit approvals
- Improve inter-departmental coordination
- Enhance climber safety and expedition tracking
- Strengthen environmental compliance
- Enable faster emergency response
- Support data-driven planning and policy making

UMPS was conceived to eliminate fragmented processes and create a seamless digital ecosystem for adventure tourism management.



Arun Sharma
Technical Director
sharma.arun@nic.in



Shakti Prasad Raturi
Scientist - D
shakti.raturi@nic.in



The UMPS is a Single Window digital platform that streamlines the regulation, facilitation, and monitoring of mountaineering expeditions and trekking activities in Uttarakhand. By digitizing permit approvals and integrating all stakeholders on a unified platform, the system enhances operational efficiency, tourist safety, transparency, and sustainable tourism while enabling data-driven governance in the adventure tourism sector.



Overview of the Portal

UMPS integrates all key stakeholders—including mountaineers, expedition teams, the Indian Mountaineering Foundation (IMF), Forest Department, Tourism Department, and District Authorities—on a single platform.

The portal enables users to:

- Access information on 83 identified peaks
- Apply for expedition permits online
- Upload required documents
- Make digital payments
- Track application status in real time
- Receive notifications and approvals electronically

Challenges in the Traditional System

Prior to the implementation of UMPS, expedition organizers had to navigate a lengthy and often complex approval process.

Key Challenges

- Multiple physical visits to government offices
- Submission of duplicate documents to different authorities
- Manual scrutiny and verification processes
- Lack of real-time status tracking
- Delays in inter-departmental communication
- Limited visibility into ongoing expeditions
- Difficulty in maintaining historical expedition records
- Absence of centralized data for planning and analysis

These challenges often discouraged expedition organizers and increased the administrative burden on government agencies.

Key Features of the System

Online Registration and User Management

The portal provides role-based access to different categories of users, enabling secure and controlled participation by expedition organizers, officials, and administrators.

Digital Permit Management

A fully automated permit management framework facilitates application processing, verification, approval, and issuance without manual intervention.

Peak Information Repository

A centralized database provides comprehensive information on identified peaks, climbing seasons, routes, regulations, and applicable guidelines.

Expedition Monitoring System

Authorities can monitor expedition activities and maintain updated records, enhancing safety management and operational oversight.

Integrated Digital Payment System

The platform supports secure online payment of expedition fees, permit charges, and applicable local taxes, ensuring convenience and transparency.

Automated Notifications

Applicants receive alerts and updates regarding application status, approvals, deficiencies, and permit issuance.

Administrative Dashboard

A comprehensive dashboard enables officials to:

- Review applications
- Track expedition activities
- Generate analytical reports
- Monitor peak utilization
- Analyze tourism trends
- Support policy formulation

Centralized Data Management

The portal serves as a single source of truth for all expedition-related information, improving accuracy, consistency, and accessibility.

Technology Architecture

The solution has been designed using a scalable and robust technology stack capable of supporting growing user demand and future enhancements.

Application Architecture

- Web-based centralized platform
- Modular and scalable design
- Service-oriented workflow architecture
- Responsive user interface for multiple devices

vision of establishing Uttarakhand as a model state for technology-enabled adventure tourism governance.

• **Unified Digital Ecosystem:** To provide a single-window platform covering the complete adventure tourism lifecycle.

• **Operational Excellence:** To ensure transparency, efficiency, and accountability through automation.

• **Enhanced Safety:** To improve expedition tracking and strengthen emergency response capabilities.

• **Sustainable Tourism:** To encourage environmentally responsible tourism practices and preserve fragile Himalayan ecosystems.

• **Data-Driven Governance:** To equip administrators and policymakers with real-time information and analytical insights for informed decision-making.

Benefits to Stakeholders

For Mountaineers

- Faster approvals
- Simplified procedures
- Reduced paperwork
- Online access to information
- Greater transparency

Impact and Achievements

Since its launch in 2021, the portal has significantly improved the management of mountaineering activities in Uttarakhand.

Key Outcomes

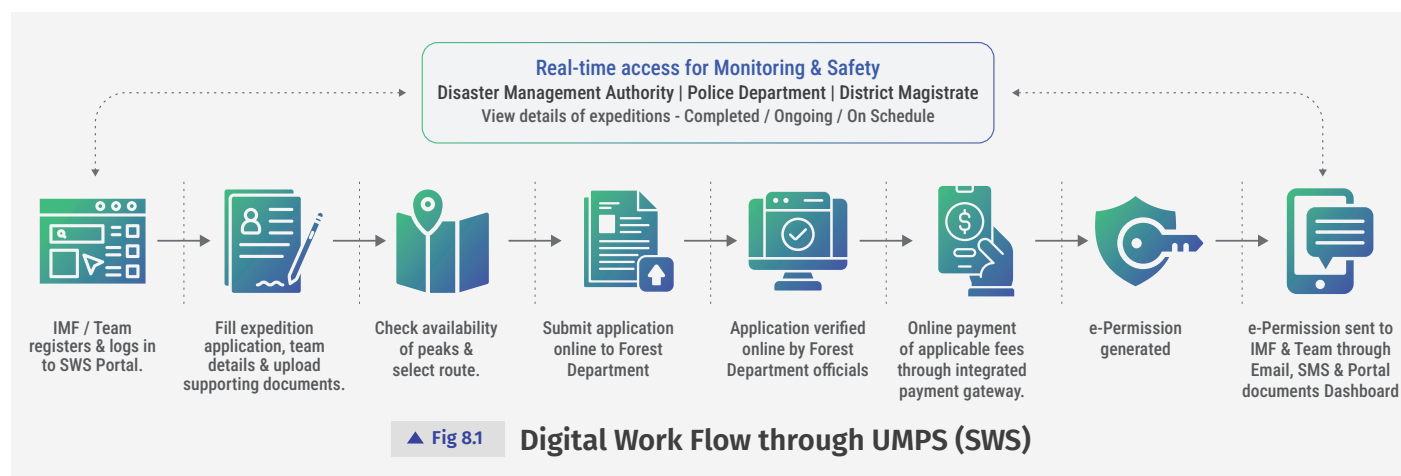
- Standardized expedition approval workflows
- Elimination of fragmented approval mechanisms
- Enhanced transparency and accountability
- Improved tourist safety and expedition tracking
- Centralized repository of mountaineering information
- Greater operational efficiency among departments
- Strengthened environmental monitoring and compliance

Success Indicators

- Operational successfully since 2021
- More than 100 expedition permits issued
- Over 500 mountaineers facilitated
- Comprehensive coverage of 83 identified mountaineering peaks

Conclusion

The UMPS is a pioneering e-Governance initiative that has streamlined mountaineering



Technologies Used

Front End

- ASP.NET
- AJAX
- jQuery
- Bootstrap

Back End

- PostgreSQL Database

Cloud Infrastructure

- Hosted on the State Data Centre Cloud
- High availability architecture
- Backup and disaster recovery mechanisms
- Secure hosting environment
- Centralized monitoring and maintenance

Vision and Objectives

The initiative has been guided by a long-term

For Government Departments

- Improved coordination
- Standardized workflows
- Better monitoring capabilities
- Reduced administrative burden
- Enhanced record management

For Local Communities

- Increased tourism opportunities
- Economic growth through adventure tourism
- Improved visibility of local services and support systems

For Policymakers

- Access to accurate and real-time data
- Better planning and resource allocation
- Improved environmental and tourism management

management through a transparent, efficient, and integrated digital platform. By digitizing permit workflows and connecting all stakeholders, it enhances operational efficiency, tourist safety, regulatory oversight, and sustainable tourism. Designed for scalability, the platform can be further enhanced with advanced tracking and analytical capabilities and replicated across other Himalayan states, making it a model for technology-driven adventure tourism governance in India.

Contact for more details

State Informatics Officer

NIC Uttarakhand State Centre
Secretariat Compound, Subhash Road
Rajpur Road, Dehradun, Uttarakhand – 248001
Email: sio-ua@nic.in, Phone: 0135-2713739

VEDIKA

Enabling Secure, Searchable & Sustainable Digital Records for Governance

Edited by **AMIT AGARWAL**



Every government decision, policy, notification, report, debate and administrative record contributes to the institutional memory of the nation. Preserving these records and making them easily discoverable is essential for effective governance, transparency and accountability.

For decades, government organizations have relied on physical files and dispersed document repositories to manage information. While these systems served their purpose, growing volumes of records have made storage, retrieval and preservation increasingly challenging. Files may become difficult to trace, physical records can deteriorate over time, and information stored across multiple systems often remains difficult to access.

Digital archiving addresses these challenges by enabling records to be preserved, organized and accessed in a structured digital environment.



Ashish Vikram Asthana
Dy. Director General & HoG
avasthana@nic.in



Brijesh Krishna Sharma
Sr. Technical Director
brijesh@nic.in



Md. Iftekhar Khan
Scientist - C
md.iftekh@nic.in



Nivedita Aggarwal
Scientist - C
nivedita.aggarwal@nic.in

VEDIKA is NIC's Digital Archiving and Document Management Platform designed to help ministries, departments and public sector organizations preserve, organize and manage records throughout their lifecycle. Built on DSpace, a globally adopted open-source repository platform, and customized to meet the specific requirements of government organizations, VEDIKA transforms fragmented document collections into structured, searchable and enduring digital repositories.

It ensures that information remains available for future reference while significantly improving discoverability and operational efficiency.

From Document Storage to Knowledge Preservation

Digital archiving is more than simply converting paper records into electronic files. The real value lies in creating repositories where information can be systematically organized, searched and retrieved whenever required.

This is where a Document Management System (DMS) plays a critical role. A DMS provides structured storage, search capabilities, version tracking, access control, auditability and workflow support, ensuring that archived records remain useful long after they have been created.

VEDIKA (Virtual Electronic Document Indexing & Knowledge Archive) combines these capabilities into a unified platform that enables organizations to preserve institutional knowledge while making information available to the right users at the right time.

The VEDIKA Platform

Developed by the NIC, VEDIKA provides a configurable platform for digital archiving and document management across government organizations. At its core, the platform is built on DSpace, one of the world's most widely adopted open-source repository platforms. Originally developed through a collaboration between MIT Libraries and Hewlett-Packard Laboratories, DSpace is used by thousands of institutions worldwide for long-term digital preservation and repository management.

NIC leverages this proven foundation and customizes it to meet the unique requirements of ministries, departments and public sector organizations. The result is a government-tested platform that combines international best practices with domain-specific customization.

Designed Around Organizational Needs

Every organization manages information differently. A legislative repository may require classifications for Acts, Rules and Notifications, while a parliamentary repository may organize content around sessions, debates and members.

VEDIKA accommodates these differences through configurable repository structures, metadata schemas, collection hierarchies, workflows and role-based access policies. Organizations define their document classifications, metadata requirements and access rules, while NIC configures the platform to align with these requirements. Where necessary, custom interfaces and specialized portals can also be developed to support specific operational needs.

Key Capabilities

VEDIKA provides a comprehensive set of document management and archiving capabilities, including:

- Structured organization of documents

through configurable repository hierarchies.

- Advanced search using metadata and full-text indexing.
- Controlled access based on user roles and organizational requirements.
- Version tracking and auditability of document activities.
- Workflow support for submission, review and approval processes.
- Long-term preservation of digital records.

Together, these capabilities enable organizations to move beyond simple document storage and establish sustainable digital knowledge repositories.

Implementation Approach

The implementation of VEDIKA follows a structured and collaborative process.

several significant government repositories, demonstrating its versatility across both public-facing and internal archival environments.

Parliament Digital Library

The Parliament Digital Library provides a unified repository of parliamentary records, enabling users to search debates, committee reports, budget speeches and other parliamentary documents through a single platform. The repository improves accessibility while supporting transparency and public engagement.

India Code

India Code serves as a centralized legislative repository containing Acts, Rules, Regulations and Notifications from Central and State Governments. Through authenticated

institutional repositories through configuration-driven access management.

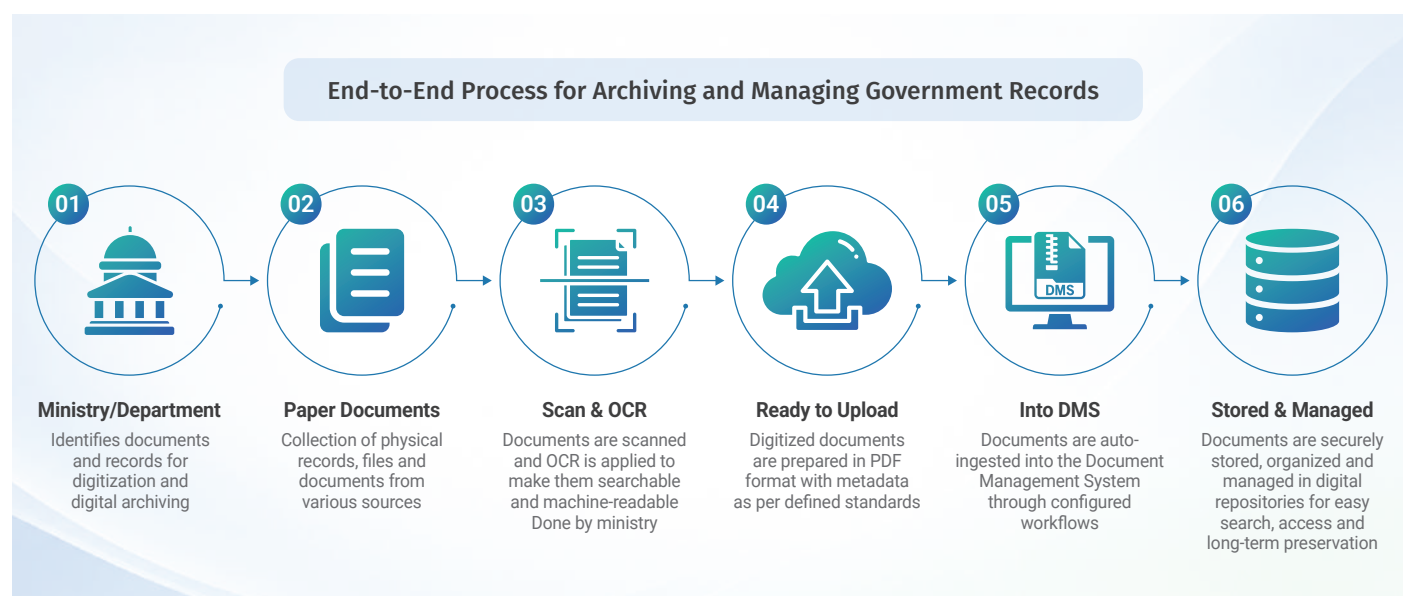
Impact

By enabling systematic preservation and efficient retrieval of records, VEDIKA helps government organizations reduce dependence on physical storage, improve access to information and preserve institutional memory for future generations.

More importantly, it transforms records from static archives into accessible knowledge resources that support governance, research, transparency and informed decision-making.

Conclusion

As governments continue to embrace digital-first administration, preserving and managing information effectively has become a strategic



▲ Fig 9.1 VEDIKA Digital Repository Implementation Framework

Organizations begin by identifying records for archival and digitization. Physical documents can be scanned and processed using OCR technologies, while digital records may be ingested directly into the repository. The organization then defines document classifications, metadata structures, user roles and access policies.

Based on these inputs, NIC configures the repository, establishes workflows and collection structures, conducts testing and validation, and deploys the solution on NIC's cloud infrastructure. Following deployment, users are onboarded and supported for ongoing operations.

VEDIKA in Action

VEDIKA has already been deployed across

publication workflows, the repository ensures that users have access to verified and up-to-date legislative information.

Rajya Sabha Digital Repository

The Rajya Sabha Digital Repository preserves parliamentary debates and proceedings dating back to 1952. Its advanced search capabilities allow users to locate records across decades of parliamentary history using multiple search parameters.

Rajya Sabha Secretariat Internal Repository

The same platform also supports secure internal repositories where access is restricted according to organizational requirements. This deployment demonstrates how VEDIKA can support both public archives and confidential

imperative. VEDIKA provides a structured, adaptable and proven platform for digital archiving and document management, helping organizations create repositories that preserve knowledge, improve discoverability and strengthen governance.

Built on a globally trusted repository foundation and tailored to the needs of government institutions, VEDIKA is enabling the transition from document storage to long-term digital knowledge preservation.

Contact for more details

Ashish Vikram Asthana

Deputy Director General & HoG
NIC HQ, A-Block, Lodhi Road
CGO Complex, Delhi – 110003

Email: avasthana@nic.in, Phone: 011-24305887

JOG Framework

Enabling Secure, SSH-Less Application Deployment and Monitoring

Edited by **C. J. ANTONY**



The National Informatics Centre (NIC) develops and maintains a wide range of e-Governance applications for government departments across the country. A fundamental principle guiding these initiatives is that ownership, control and stewardship of data must remain entirely with the concerned department.

Traditionally, application deployment and maintenance often required development teams to access production environments through mechanisms such as SSH or FTP. While operationally convenient, such practices can raise concerns regarding data integrity, accountability and transparency, particularly in government systems handling sensitive information.

To address these challenges, NIC Kerala has developed the JOG (Jenkins, OpenSearch and Gitea) Framework—a secure deployment and application management framework that enables end-to-end software delivery without granting developers direct access to production servers. Built using open-source technologies including Jenkins, OpenSearch and Gitea, the framework supports automated deployment, centralized observability and controlled operational workflows while preserving departmental control over infrastructure and data.

Framework Overview

JOG is designed around a simple principle: application delivery should be possible without remote server access.



The JOG Framework, developed by NIC Kerala, is a secure application deployment and management framework built on Jenkins, OpenSearch and Gitea. Designed to support departmental ownership of data and infrastructure, the framework eliminates the need for SSH or remote access to production servers while enabling automated deployments, centralized monitoring and real-time operational visibility. By integrating source control, deployment automation and log analytics into a unified workflow, JOG enhances transparency, security and efficiency in managing e-Governance applications.



The framework integrates source code management, deployment automation and log analytics into a unified workflow. Developers continue using their existing Git-based development practices, while all deployment activities are executed through automated pipelines triggered by repository events.

Whenever code is pushed to a designated branch in Gitea, a secure webhook initiates a deployment workflow in Jenkins. The framework automatically retrieves source code, fetches required dependencies and resources, executes

build processes and deploys the application to production environments. Each stage is logged and audited, ensuring complete traceability of deployment activities.

Simultaneously, application logs, server logs and deployment logs are streamed to OpenSearch, providing development and operational teams with comprehensive visibility into application behaviour and infrastructure performance. As a result, troubleshooting and operational support can be performed through centralized dashboards rather than through direct server access.

Key Features

The JOG Framework offers several capabilities that strengthen security, governance and operational efficiency:

- SSH-less and access-free deployment to production environments
- Support for existing Git-based branching and development workflows
- Webhook-triggered deployment pipelines over secure HTTPS channels
- Configurable automatic and approval-based deployment mechanisms
- Real-time deployment notifications through SANDES integration
- Secure source retrieval using IP-whitelisted HTTPS connections
- Centralized collection of application, server and deployment logs
- Direct dashboard-based monitoring for development teams
- Complete auditability of deployment activities
- Fully open-source architecture with no licensing or subscription costs

Deployment Workflow

The deployment lifecycle begins when developers push code to designated branches in Gitea. A webhook event securely triggers the corresponding Jenkins pipeline.

The pipeline executes a sequence of atomic deployment stages, including:

- Source code checkout
- Retrieval of shared resources and dependencies



Bindu S. Kumar
Dy. Director General
bindu.sk@nic.gov.in



Vipin Bose
Scientist-C
bose.vipin@nic.gov.in

- Application build and packaging
- Validation and deployment
- Deployment status reporting

Depending on departmental requirements, deployments may be fully automated or routed through approval workflows before release to production environments.

Upon successful completion, Jenkins communicates deployment outcomes to the PROMPT Portal, which subsequently delivers notifications to project stakeholders through SANDES. This ensures that all production changes are immediately communicated to the project team.

Every deployment activity is recorded in OpenSearch, creating a complete audit trail and enabling detailed operational analysis.

Centralized Monitoring and Observability

A distinguishing feature of the JOG Framework is its integrated observability architecture.

Beyond deployment logging, the framework continuously collects application logs and server logs and streams them to a department-owned OpenSearch cluster. Development teams are provided controlled access to monitoring dashboards, allowing them to observe application health, identify anomalies and analyse performance trends in real time.

This approach shifts operational support from reactive troubleshooting to proactive monitoring. Issues such as application errors, service disruptions and performance bottlenecks can be identified and addressed through dashboard analytics, significantly reducing the need for server-level intervention.

The result is a secure operational model that maintains separation between application management and infrastructure access while preserving full visibility into system behaviour.

Benefits and Impact

Implementation of the JOG Framework has

Technical Architecture

The framework is deployed entirely within departmental data centres using existing government infrastructure. All components are open-source and operate on-premise, eliminating dependency on external cloud services.

The architecture comprises the following major components:

Component	Function
Gitea	Self-hosted source code management platform
Jenkins	Automated build and deployment orchestration
OpenSearch & OpenSearch Dashboards	Centralized log aggregation, analytics and monitoring
PROMPT Portal	Project Resource Organisation and Management Planning platform for project administration and notifications
Resource Server	Repository for versioned libraries, dependencies and build assets
Fluent Bit	Log collection and forwarding
NGINX on Ubuntu LTS	Secure web serving and reverse proxy services
Communication between components is secured using HTTPS, IP whitelisting and locally trusted certificate authorities.	

delivered several tangible benefits:

- Elimination of SSH and direct server access to production environments
- Enhanced protection of departmental data and infrastructure
- Improved transparency and accountability through fully auditable deployment workflows
- Reduction in deployment-related human errors through automation
- Faster issue identification and resolution through centralized monitoring
- Improved collaboration through automated notifications and shared operational visibility
- Lower operational costs through the use of

open-source technologies

- Complete deployment within existing on-premise government infrastructure

By combining automation, observability and governance, the framework establishes a secure and scalable model for managing e-Governance applications.

Way Forward

NIC Kerala is progressively extending the JOG Framework across additional departmental applications and service platforms. Future enhancements will focus on advanced alerting mechanisms, anomaly detection capabilities, expanded approval workflows and deeper integration between deployment automation and operational analytics.

These developments will further strengthen secure application delivery practices while reducing operational dependencies on direct server access. As government systems continue to scale, frameworks such as JOG provide a robust foundation for transparent, secure and efficient management of digital public services.

Contact for more details

Bindu S. Kumar

Dy. Director General

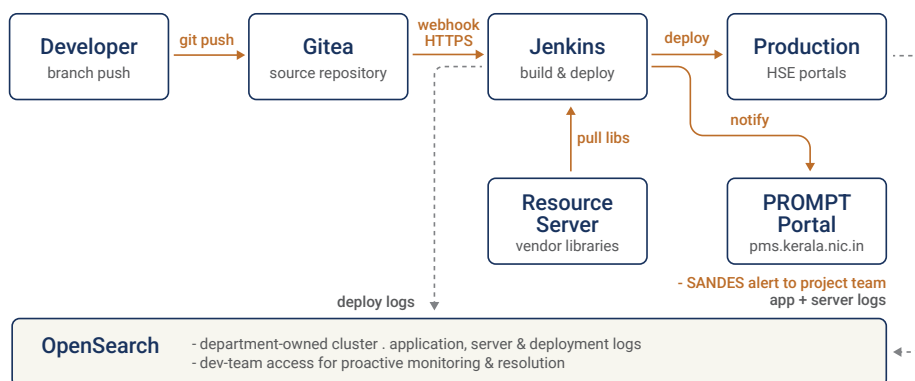
NIC Keralam State Centre

CDAC Building Vellayambalam, Thiruvananthapuram

Keralam - 695033

Email: bindu.sk@nic.gov.in, Phone: 0471-2725495

▼ Fig 10.1 JOG Architecture



NICDSign 3.0

Enabling Secure and Seamless Digital Signatures for e-Governance

Edited by **C.J. ANTONY**

Digital signatures play a critical role in ensuring the authenticity and integrity of government documents. For several years, NICDSign has served as a trusted digital signing solution across government applications. It supports Windows, Linux, and macOS, and integrates seamlessly with applications developed using Java, PHP, .NET, and other technologies.

With the rapid expansion of online government services and growing document volumes, the earlier version of NICDSign began to face scalability and usability challenges. Its dependence on Java increased installation complexity and impacted performance. A faster, more secure, and user-friendly solution became necessary.

NICDSign 3.0 was developed to address these requirements. Built using Rust, a high-performance, memory-safe programming

NICDSign 3.0 is a redesigned digital signing solution built as a lightweight native desktop application using Rust and Tauri 2, supported by server-side APIs. By eliminating the need for Java on the client side, it delivers significantly improved performance, enabling signing speeds of up to 12 documents per second. The platform introduces features such as Fill and Sign, flexible signature placement, local audit logging, simplified installation, and an enhanced user experience.

language, and powered by the Tauri 2 framework, it operates as a lightweight native desktop application. Designed as a drop-in replacement for earlier versions, it requires no changes to existing application integrations. NICDSign 3.0 delivers improved performance, enhanced security, and a streamlined signing experience for e-Governance applications.

Features of NICDSign 3.0

Flexible Signature Placement and Visual Customisation

NICDSign 3.0 offers multiple options for placing visible signatures on documents. Users can double-click anywhere on a document to place a signature or drag it to fine-tune the position. Developers can also use a keyword-based API to automate signature placement, particularly useful for standardised forms where signatures must appear at predefined locations.

The size and appearance of signatures can be

customised using scale values and themes. For applications requiring signatures across multiple pages or locations, multi-widget and all-page stamping options are also available.

Simple Setup with Automatic Token Detection

NICDSign 3.0 can be installed and configured with minimal effort. On first launch, the application automatically detects connected DSC tokens. If the required driver is unavailable, the application identifies the token model and prompts users to install the appropriate driver.

The simplified setup process enables users to get started quickly, while detailed and user-friendly error messages facilitate faster issue resolution.

Signer Preview, Certificate Details, and Audit Log

Before signing, users can view certificate details along with a thumbnail preview of the document showing the signature placement. The main application window displays certificate information, including issuer details and validity status, along with a list of recently signed documents.

NICDSign 3.0 also maintains a local audit log containing details such as document name, date, and time of signing, providing an additional layer of accountability.

Fill and Sign

The Fill and Sign feature enables applications to send PDF forms with AcroForm fields directly to NICDSign 3.0. Users can review or update form fields, place their digital signature, and submit the completed document without printing, manually signing, or scanning.

This feature is particularly useful for online service delivery workflows where forms require both verification and digital signing.

JSON Data Signing

In addition to PDF and XML documents, NICDSign 3.0 supports digital signing of JSON data. Users can review the content in tree or grid format before signing, ensuring transparency and verification of the information being approved.



V.T. Santhosh
Dy. Director General & SIO
vt.santhosh@nic.in



T. Edward Sam
Sr. Technical Director
edwardsam@nic.in



Beena G.
Technical Director
beena.g@nic.in



Cebil T.A.
Scientist-B
cebil.ta@nic.in

Technologies Used

- **Tauri 2:** Tauri leverages the operating system's native web engine instead of bundling a large runtime such as Java. This significantly reduces application size, startup time, and resource consumption.
- **Rust:** The signing engine is developed using Rust, known for its performance, reliability, and memory safety. It supports concurrent processing of signing operations while maintaining application responsiveness.
- **PKCS#11 Token Support:** NICDSign 3.0 supports standard PKCS#11-compliant DSC hardware tokens used across government deployments on Windows, Linux, and macOS.

Document Signing Flow

One of the key enhancements in NICDSign 3.0 is its ability to process bulk signing requests efficiently. Through REST APIs, applications can submit batches of documents for signing. The Rust-based signing engine processes these requests in parallel and communicates with the PKCS#11 token to digitally sign each document.

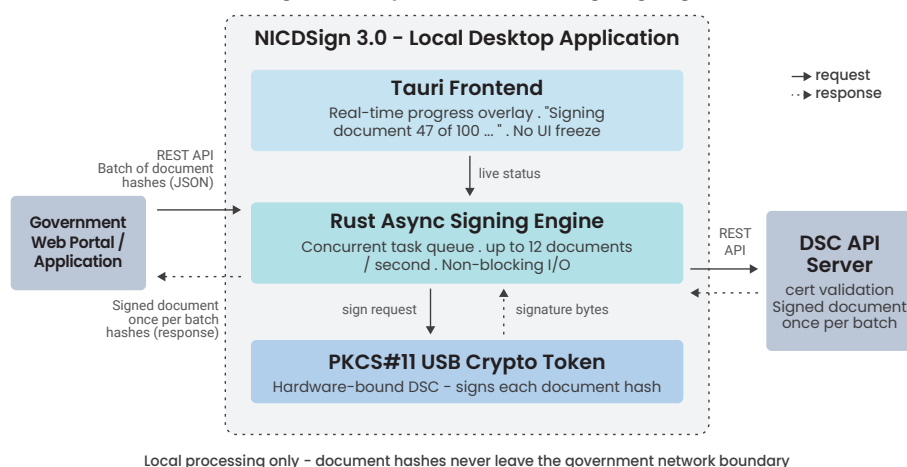
The solution can process up to 12 documents per second. During execution, a live progress indicator displays the status of completed documents. The application remains fully responsive throughout the process, ensuring a smooth user experience without interface freezes or delays.

NICDSign 3.0 also supports the What You See Is What You Sign (WYSIWYS) feature, allowing users to view documents before signing. This feature can be enabled or disabled through application settings.

Benefits and Impact

- **Faster Document Processing:** High-speed bulk signing improves efficiency and accelerates service delivery.
- **Ease of Use:** Automatic token detection and

NICDSign 3.0 – Asynchronous Bulk Signing Engine



▲ Fig 11.2 : How NICDSign 3.0 processes a bulk signing request from a government web portal

simplified installation make the solution accessible to both technical and non-technical users.

- **Seamless Migration:** As a drop-in replacement for earlier versions, existing integrations continue to function without requiring modifications.
- **Enhanced Security:** Removal of Java dependencies and the use of Rust's memory-safe architecture reduce the application's attack surface. Local audit logs ensure signing records remain on the user's device.
- **Dedicated Support:** The NICDSign team provides assistance for both new integrations and migration from earlier versions.

Getting Started with NICDSign

All resources related to NICDSign are available through the NICDSign portal.

Integrating NICDSign with Web Applications

Requests for integration can be submitted

through the NICDSign portal. Following review and approval, the NICDSign team provides the required documentation and technical support.

Try the Demo

A live demonstration environment is available on the portal. Users can explore key features and test signing workflows using a valid DSC token after installing the NICDSign client application.

Installing NICDSign 3.0 on Windows

For a clean installation:

- Uninstall any existing version of NICDSign and ensure the appropriate token driver is installed.
- Download and run the NICDSign 3.0 installer from the portal.

During installation, approve the certificate installation prompt. This adds the required certificate to the Windows Certificate Store and enables secure HTTPS communication.

Way Forward

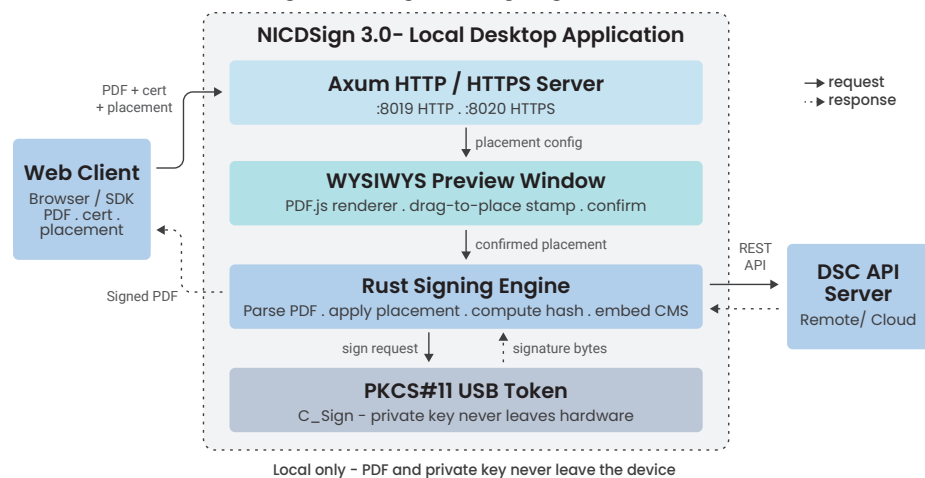
Efforts are underway to further strengthen the robustness and stability of NICDSign across Windows, Linux, and macOS, ensuring a consistent and reliable user experience.

Future enhancements include integration with Aadhaar-based eSign services, enabling citizens without DSC hardware tokens to digitally sign documents. Support for cloud-based digital signatures is also being explored, offering greater flexibility and device-independent signing capabilities.

Contact for more details

V.T. Santhosh
Deputy Director General & SIO
NIC Keralam State Centre
CDAC Building Vellayambalam, Thiruvananthapuram
Keralam - 695033
Email: vt.santhosh@nic.in, Phone: 0471-2729894

NICDSign 3.0 – Single PDF Signing with WYSIWYS



▲ Fig 11.1 : How NICDSign 3.0 processes a single signing request from a web client

Appscape

Mobile 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 Education.



CMIS Employee Corner

CMIS Employee Corner is a Government-to-Employee (G2E) service designed to provide Government of Manipur employees with convenient access to personnel and payroll-related information through a secure digital platform. The application enables employees to register themselves in the Central Management Information System (CMIS), an integrated Personnel Management and Payroll System developed for the Government of Manipur.

During registration, employees can update and submit additional personal and service-related information, ensuring that records remain accurate and up to date. Once registered, employees can access a wide range of services online, including employee profiles, payslips, annual salary statements, salary bill status, service history, and other employment-related information from anywhere with internet connectivity.

The system also captures essential information required for generating employee identity cards, helping streamline administrative processes. By allowing employees to directly access and manage their information, the application significantly reduces the administrative workload on Drawing and Disbursing Officers (DDOs), Heads of Departments (HODs), and District Management Information System (DMIS) officials.

 N. Binod Singh (sio-man@nic.in)

For NIC apps related query, please contact

Android

Sandeep Sood

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

iOS

Roy Joseph

Email: macckan-ker@nic.in | Phone: 0497-2700761

APSTS Mobile App

The APSTS Mobile App is a citizen-centric digital platform developed to provide convenient and seamless access to public transport services across the state. Developed by the National Informatics Centre (NIC) in collaboration with Arunachal Pradesh State Transport Services (APSTS), the application enables travelers to access a range of transport-related services anytime and from anywhere.

The app allows users to search bus routes, check schedules, and book tickets online through an intuitive and user-friendly interface. Travelers can also cancel tickets electronically, eliminating the need to visit booking counters and making the ticketing process more efficient. To support secure and hassle-free transactions, the platform integrates wallet-based payments and payment gateway services.

Beyond ticketing, the application offers several value-added features aimed at improving passenger convenience and safety. These include a journey alert mechanism that enables passengers to raise alerts during travel, as well as an integrated grievance redressal system for reporting issues and seeking timely resolution.

By digitizing transport services, the APSTS Mobile App enhances accessibility, transparency, operational efficiency, and overall passenger experience across Arunachal Pradesh.

 Jyotish Roy (sio-arn@nic.in)

NICler

NICler is an innovative assessment solution developed by NIC Chhattisgarh to enable teachers to conduct Multiple Choice Question (MCQ) quizzes in traditional classrooms without requiring electronic devices for students. The system uses ARUco marker-based identification cards, known as NICler IDs, which students display in different orientations to indicate their answers. Teachers can capture responses instantly using an Android smartphone equipped with the NICler application.

Designed as a highly cost-effective tool, NICler significantly reduces the time and effort involved in paper-based assessments and manual evaluation. It supports formative assessments, customized quizzes, attendance management, and performance tracking, helping teachers gain valuable insights into student learning outcomes. By generating individual learning profiles, the platform also facilitates adaptive teaching practices.

NICler promotes student engagement through gamified learning techniques, making classroom assessments more interactive and enjoyable. Widely adopted across more than 30,000 schools in Chhattisgarh, the solution has demonstrated its effectiveness in enhancing learning experiences while minimizing implementation costs. NICler exemplifies how innovative use of technology can transform educational assessment and improve classroom efficiency.

 Tej Narayan Singh (sio-cg@nic.in)

e-Employment Exchange Kerala

e-Employment Exchange Kerala is a mobile application developed by the Employment Services Department, Government of Kerala, to provide citizens with convenient access to employment exchange services through a digital platform. The department serves as a bridge between employers and job seekers by facilitating registration, candidate selection, renewal, and placement services against notified vacancies.

The application enables registered job seekers to access and manage employment-related services online. Users can renew their employment registration, apply for special renewals, update personal and communication details, and request employment exchange transfers when relocating. All requests are processed through a structured workflow and reflected in the user profile upon approval.

The platform also provides comprehensive employment information, including candidate profiles, educational qualifications, seniority status, current job offers, and records of previously accepted opportunities. In addition, it publishes private-sector vacancies, helping users explore a wider range of employment options.

By digitizing employment exchange services, the application improves accessibility, transparency, and operational efficiency while enhancing citizen convenience and supporting effective employment facilitation across Kerala.

 Santhosh V T (sio-ker@nic.in)

Jeevan Pramaan

Jeevan Pramaan is a digital service designed for service pensioners and family pensioners to submit their Digital Life Certificate (DLC) electronically, eliminating the need for physical submission and simplifying the pension verification process. The application leverages Aadhaar-based biometric authentication to securely verify the identity of pensioners and facilitate seamless certification.

The Jeevan Pramaan platform supports multiple advanced biometric authentication methods, including secure face, fingerprint, and iris scanning. Pensioners can seamlessly authenticate using the official Aadhaar Face RD service directly from their personal smartphones, completely eliminating the need for expensive or cumbersome external biometric hardware. Alternatively, they can utilize registered fingerprint or iris scanners alongside standard RD services.

Once authentication succeeds, the system instantly generates a unique Pramaan ID and sends a confirmation message to the pensioner for easy tracking. The Digital Life Certificate is automatically forwarded to the Pension Disbursing Office, entirely removing the requirement for physical paperwork. Ultimately, this modern digital approach vastly enhances convenience, security, and efficiency across the nation.

 Sanjay Kumar Pandey (hog-asd@nic.in)

e-Jagriti

e-Jagriti is a flagship digital initiative of the Government of India designed to modernize and integrate consumer dispute redressal mechanisms across the country. The platform enhances efficiency, accessibility, and transparency by enabling consumers to engage with redressal institutions through digital channels. Under the Consumer Protection Act, 2019, consumer disputes are addressed through a three-tier quasi-judicial system comprising the District Consumer Disputes Redressal Commissions (DCDRCs), State Consumer Disputes Redressal Commissions (SCDRCs), and the National Consumer Disputes Redressal Commission (NCDRC).

e-Jagriti digitally links these institutions, ensuring seamless case management and improved service delivery. Consumers can file complaints online, track case progress, access case records, and receive timely updates without frequent physical visits. The accompanying mobile application provides information on consumer rights, responsibilities, and public distribution services.

By leveraging digital technology, e-Jagriti empowers consumers, promotes transparency, minimizes procedural delays, strengthens coordination among redressal agencies, and contributes to a more efficient, responsive, and citizen-centric consumer protection ecosystem across India.

 G. Mayil Muthu Kumaran (hog-consumeraffairs@nic.in)

Chhattisgarh Vidhan Sabha Mobile App

The Chhattisgarh Vidhan Sabha Mobile App is an official digital platform developed to provide transparent, timely, and convenient access to information related to the functioning of the Chhattisgarh Legislative Assembly. Created as part of the Assembly's digitization initiative, the application enables legislators, government officials, media representatives, and citizens to stay informed about legislative activities through their mobile devices.

The app serves as a centralized repository of authenticated Assembly information and provides access to key legislative documents and proceedings. Users can view the daily business agenda (Karyasoochi), Assembly proceedings, questions and answers, official notices, committee meeting schedules, member profiles, and ballot-related information.

The platform also offers access to important documents, including the Hon'ble Governor's Address, Budget Speech, budget documents, and details of cut motions. By making legislative information readily accessible, the app promotes transparency, accountability, and public participation. It supports paperless governance, strengthens communication between the Assembly and citizens, enhances awareness of legislative activities, and encourages informed civic engagement across Chhattisgarh.

 Tej Narayan Singh (sio-cg@nic.in)

India–Vietnam Deepen Cooperation in Critical and Emerging Technologies

India and Vietnam have reaffirmed their commitment to strengthening cooperation in critical and emerging technologies as part of their Enhanced Comprehensive Strategic Partnership. Recognizing the transformative role of digital innovation in economic growth and sustainable development, both countries agreed to expand collaboration across a wide range of technology domains.

A key development is the signing of a Memorandum of Understanding between the Reserve Bank of India and the State Bank of Vietnam on financial innovation and digital payments. The partnership aims to facilitate linkages between retail payment platforms through QR code-based systems, making cross-border tourism and business transactions more seamless.

The two countries will enhance collaboration in Digital Public Infrastructure (DPI), 6G communications, Artificial Intelligence (AI), space technology, nuclear technology, marine sciences, biotechnology, pharmaceuticals, advanced materials, and critical minerals. Cooperation will focus on practical initiatives including joint research projects, establishment of R&D centres, technology development, and innovation-driven partnerships.

India and Vietnam also agreed to promote the use of digital and advanced technologies in climate action and sustainable development. Areas of cooperation include clean and renewable energy, climate-resilient technologies, smart agriculture, sustainable water management, disaster resilience, and air pollution control. In the space sector, both sides welcomed progress towards establishing the ASEAN-India tracking, data reception, and processing facility in Vietnam, which is expected to strengthen regional space-based services and scientific cooperation.



The leaders further welcomed cooperation in the field of rare earths and critical minerals through a new agreement between IREL (India) Limited and Vietnam's Institute for Technology of Radioactive and Rare Elements. This partnership is expected to support resilient supply chains and advanced technology manufacturing in both countries.

Through these initiatives, India and Vietnam have laid the foundation for a robust technology partnership that supports innovation, digital transformation, economic growth, and sustainable development while strengthening their strategic cooperation in the Indo-Pacific region.

Source- Press Information Bureau

India and South Africa Deepen Collaboration in Emerging Technologies

India and South Africa have agreed to strengthen cooperation in emerging technologies, with Artificial Intelligence (AI), Digital Infrastructure and Advanced Manufacturing identified as priority areas for future collaboration.

During a bilateral meeting in New Delhi on June 3, 2026, Union Minister Dr Jitendra Singh and South Africa's Deputy Minister of Science, Technology and Innovation, Dr Nomalungelo Gina, discussed expanding partnerships in digital technologies, quantum technologies, biotechnology, geospatial technologies and hydrogen energy.

Dr Jitendra Singh highlighted India's advancements in AI, Digital Public Infrastructure (DPI), Quantum Technologies and startup-led innovation, and emphasized the need to translate research collaborations into innovation, commercialization and industry-led outcomes.

Both sides agreed to intensify cooperation in Advanced Materials and Manufacturing, Geospatial Technologies and Digital Infrastructure through greater engagement among scientists, research institutions and technical experts.

The discussions also explored opportunities in biotechnology, genomics, vaccine development, health technologies and pandemic preparedness. South Africa expressed interest in expanding collaboration in digital technologies, renewable energy, advanced manufacturing, health sciences and skills development.



The two countries also reviewed ongoing cooperation in astronomy, particularly the Square Kilometre Array (SKA) project, and discussed strengthening collaboration through BRICS initiatives in areas such as artificial intelligence, high-performance computing, biotechnology and renewable energy.

The meeting reaffirmed the commitment of both countries to build a future-ready technology partnership driven by innovation, startup collaboration, research excellence and digital transformation.

Source- Press Information Bureau

India-Nordic Partnership to Drive Collaboration in Digital Innovation, Emerging Technologies and Green Tech

India and the Nordic countries have elevated their bilateral engagement into a Green Technology and Innovation Strategic Partnership, placing digital innovation, advanced technologies, research collaboration and sustainable technology development at the centre of future cooperation. The decision was taken during the Third India-Nordic Summit held in Oslo on 19 May 2026.

The partnership seeks to combine Nordic technological expertise with India's scale, talent pool and manufacturing capabilities to accelerate innovation-led growth. Key areas of collaboration include digital technologies, telecommunications, cybersecurity, health-tech, advanced manufacturing, research and innovation, and next-generation communication technologies.

A major outcome of the summit is the launch of the India-Nordic Green Technology and Innovation Strategic Partnership, which aims to promote the adoption of sustainable technologies, strengthen digital infrastructure, and support data-driven governance and service delivery. The initiative is expected to foster innovation, optimize resource utilization, enhance energy security and create new opportunities for technology-driven economic growth.

The two sides also agreed to deepen cooperation in STEM research, with a focus on technology transfer, joint R&D initiatives and academic collaboration. Research in emerging fields such as 6G communications is expected to contribute to the development of robust digital infrastructure and strengthen the digital economy.

India's technology engagement with Nordic countries is already significant. Around 40 Indian companies operate in Denmark across IT, engineering and renewable energy sectors, while Finland has acknowledged the grow-



ing contribution of Indian professionals to its technology and innovation ecosystem. The Indian community in Finland also has a strong presence in the IT sector, reflecting the increasing role of talent mobility in strengthening technology partnerships.

The summit further emphasized collaboration in cyber security, health-tech, Arctic and Polar research, resilient supply chains and digital innovation. These initiatives are expected to support technological advancement, strengthen innovation ecosystems, and create new opportunities for start-ups, researchers and technology enterprises in both regions.

Source- ddnews.gov.in

India and Nepal Collaborate on Multilingual AI and Digital Public Infrastructure

The Digital India BHASHINI Division (DIBD), Ministry of Electronics and Information Technology (MeitY), has signed an MoU with Kathmandu University's Centre for Digital Public Infrastructure and Artificial Intelligence (DPI-AI), Nepal, to collaborate on multilingual AI and Digital Public Infrastructure (DPI).

The partnership will focus on developing Nepali language datasets, speech corpora, and AI resources for Speech-to-Text, Text-to-Speech, Machine Translation, and multilingual conversational AI applications. Leveraging BHASHINI's open and interoperable language technology ecosystem, the initiative aims to support multilingual digital service delivery in Nepal and reduce language and literacy barriers in accessing public services.

The two institutions will also undertake joint research, pilot projects, training programmes, and capacity-building initiatives in Natural Language Processing (NLP), multilingual AI, and Digital Public Infrastructure.

A key component of the collaboration is the digitization and preservation of low-resource and underrepresented languages in the India-Nepal region through the creation of language datasets and AI tools.

BHASHINI, India's national platform for AI-driven multilingual digital inclusion, currently supports 36 Indian text languages, 23 Indian voice languages, and 35 international languages. The platform powers over 800 government websites and processes more than 15 million AI inferences daily.



The partnership marks a step towards expanding multilingual AI capabilities and strengthening cross-border cooperation in language technologies and digital public infrastructure.

Source- [Press Information Bureau](https://pressinformationbureau.gov.in)

India Joins Pax Silica Initiative to Strengthen Trusted Semiconductor and AI Ecosystem

India formally joined the Pax Silica coalition during the India AI Impact Summit 2026, marking a significant step in advancing strategic technology cooperation with the United States and strengthening resilient global semiconductor and artificial intelligence supply chains.

Pax Silica is a strategic coalition of trusted nations committed to securing the entire silicon value chain—from critical minerals and semiconductor manufacturing to advanced AI systems and deployment infrastructure. The initiative seeks to build resilient, diversified, and democratically governed technology ecosystems while reducing dependence on concentrated global supply chains.

Speaking at the signing ceremony, Shri Ashwini Vaishnaw, Hon'ble Union Minister for Electronics and Information Technology, highlighted India's growing role in the global semiconductor ecosystem. He noted that the country's expanding semiconductor capabilities, combined with its engineering talent, position India to play a pivotal role in the next phase of AI-led technological transformation. Emphasising the opportunities ahead, he observed that the global semiconductor industry is expected to require nearly one million skilled professionals, presenting a significant opportunity for India's workforce.

Senior U.S. officials described the agreement as a strategic roadmap for deepening collaboration in economic security, advanced technology, and resilient supply chains. The initiative aims to strengthen cooperation across critical minerals, semiconductor fabrication, data infrastructure, and frontier AI technologies while promoting innovation within democratic and trusted partnerships.

Following the signing ceremony, a high-level fireside discussion brought



together Shri S. Krishnan, Secretary, Ministry of Electronics and Information Technology (MeitY); Sergio Gor, U.S. Ambassador to India; Sanjay Mehrotra, President and CEO of Micron Technology; and Randhir Thakur, CEO and Managing Director of Tata Electronics.

The discussion highlighted the growing convergence of artificial intelligence, semiconductors, and critical minerals in shaping the future digital economy. The speakers underscored the importance of trusted international partnerships, resilient semiconductor supply chains, and collaborative innovation to support the responsible development and deployment of advanced AI technologies.

India's participation in the Pax Silica initiative reinforces its commitment to building secure, trusted, and resilient technology ecosystems while strengthening international cooperation in semiconductors, artificial intelligence, and critical digital infrastructure.

Source- Press Information Bureau

Bharat Innovates 2026 to Strengthen India–Europe Deep-Tech Collaboration

The inaugural edition of Bharat Innovates 2026 commenced in Nice, France, with Prime Minister Shri Narendra Modi and French President Emmanuel Macron jointly inaugurating the event at the Palais des Expositions. Organised by the Government of India through the Ministry of Education, the initiative aims to strengthen innovation-led partnerships between India's deep-tech ecosystem and global academia, industry, investors, and research institutions.

The event showcases India's rapidly expanding innovation landscape through the participation of 120 Indian innovators, more than 15 higher education institutions, and over 500 global stakeholders, including industry leaders, venture capital firms, researchers, and technology entrepreneurs. Innovations across 13 strategic sectors—including artificial intelligence, semiconductors, advanced computing, biotechnology, healthcare, space technology, energy, and advanced manufacturing—are being showcased to foster global collaboration and technology partnerships.

A major highlight of the opening day was the signing of over 30 strategic partnerships, including innovation-focused Memorandums of Understanding (MoUs) and joint declarations aimed at strengthening research, entrepreneurship, technology commercialisation, and startup collaboration. These include partnerships between Indian higher education institutions and international incubators, agreements with leading global corporations to facilitate technology development and market access, and academic collaborations between Indian Institutes of Technology (IITs), the Indian Institute of Science (IISc), and French universities to promote joint research, student exchanges, and talent development.

The event also marked the launch of the India-France ATL Bridge, an initiative of the Atal Innovation Mission, NITI Aayog, and La Fondation Dassault Systèmes. The programme will establish the first School Innovation Lab in France based on India's Atal Tinkering Lab model, fostering innovation and collaboration among young students from both countries.

Delivering the inaugural keynote, Shri N. R. Narayana Murthy, Founder of Infosys, highlighted the pivotal role of higher education and research institutions in nurturing value-driven entrepreneurs and technology leaders. He emphasised that enduring technology enterprises are built on strong institutional values, collaborative talent, disciplined innovation, transparent governance, and trust.

The conference featured several high-level discussions on emerging technologies and global innovation ecosystems, including sessions on AI for Global Good, India and Europe: Deep Tech Without Borders, and Global Deep-Tech Capital Corridors. The deliberations focused on responsible artificial intelligence, sovereign AI capabilities, venture financing, cross-border innovation, technology commercialisation, and the development of resilient global technology ecosystems through trusted international partnerships.

By bringing together policymakers, researchers, startups, investors, and industry leaders, Bharat Innovates 2026 has established a new platform for strengthening India–Europe cooperation in deep technology, research, innovation, and entrepreneurship, reinforcing India's position as a leading global innovation hub.

Source- Press Information Bureau

Ministry of Rural Development Launches AI-Enabled Rural Internal Audit Portal

The Ministry of Rural Development (MoRD) has launched an Artificial Intelligence (AI)-enabled Rural Internal Audit Portal to modernise internal audit processes and strengthen transparency, accountability, and efficiency in the implementation of rural development programmes. The portal was inaugurated by Shri Shivraj Singh Chouhan, Union Minister for Rural Development, during the National Rural Development Conference held at the Pusa Campus, New Delhi, on 28 June 2026.

Conceptualised by the Office of the Chief Controller of Accounts (CCA), Ministry of Rural Development, and developed with technical support from the National Informatics Centre (NIC), the portal provides a unified digital platform for managing the complete internal audit lifecycle—from audit planning and execution to reporting, compliance monitoring, and closure of audit observations.

The initiative replaces fragmented, paper-based audit processes with an integrated digital system, enabling risk-based and compliance audits across rural development programmes. By centralising audit records, reports, and compliance data, the portal enhances transparency, improves institutional learning, and enables timely monitoring of audit findings.

The portal supports end-to-end digital audit management, including audit scheduling, preparation of audit memoranda, report generation, approval workflows, and digital record management. It also features a centralised repository for audit observations and action taken reports, ensuring that historical records are readily available for future reference and analysis.

A role-based access framework enables secure participation by auditors, auditee organisations, programme divisions, state governments, district

authorities, and approving officials. Interactive dashboards provide real-time insights into audit coverage, pending observations, compliance status, and financial irregularities, while a GIS-enabled interface helps identify unaudited locations to facilitate risk-based audit planning.

The portal was developed using a scalable technology architecture aligned with Government of India standards for digital governance. It incorporates robust security features, including role-based access control, secure API integration, audit logging, automated exception handling, regular security assessments, and disaster recovery mechanisms to ensure the integrity and availability of audit data.

The ministry also plans to progressively integrate advanced AI capabilities into the platform to support predictive analytics, pattern recognition, automated risk assessment, and intelligent audit planning. These capabilities are expected to help auditors identify high-risk entities, prioritise audit activities, and strengthen evidence-based decision-making.

The Rural Internal Audit Portal has already received in-principle approval from the Office of the Controller General of Accounts (CGA), Ministry of Finance, for adoption across Principal Chief Controller and Controller of Accounts offices in civil ministries and departments, recognising its potential as a model digital audit governance platform.

By leveraging digital technologies and artificial intelligence, the Rural Internal Audit Portal marks a significant step towards strengthening public financial management, improving programme oversight, and fostering transparent, accountable, and data-driven governance across India's rural development ecosystem.

Source- Press Information Bureau

UIDAI Completes Biometric SDK Benchmarking Challenges, Recognises Winners

The Unique Identification Authority of India (UIDAI), in collaboration with the International Institute of Information Technology Hyderabad (IIIT Hyderabad), has recognised the winners of its Face and Iris Biometric SDK Benchmarking Challenges. The initiative is part of UIDAI's continued efforts to promote indigenous biometric solutions and strengthen research and innovation in biometric technologies.

Following the success of the fingerprint challenge, UIDAI conducted the Face and Iris Age Variance Challenges between December 2025 and February 2026. The two challenges received a total of 531 registrations from technology providers and research institutions.

Based on comprehensive performance evaluations, Innovatrics of Slovakia secured the first position in the Face Challenge, followed by IDBio of the United States and Neurotechnology of Lithuania. In the Iris Challenge, IDBio emerged as the winner, with Neurotechnology and Innovatrics securing the second and third positions, respectively.

The competition also witnessed participation from several Indian companies and academic institutions, including Perfios, Ooru, and IIIT Hyderabad.

The challenges were designed to identify high-performing 1:1 face and iris matching solutions from leading technology providers and research organisations in India and abroad. Performance assessments were conducted using large anonymised biometric datasets in a controlled testing environment.



A distinctive feature of the benchmarking exercise was the use of long-term biometric datasets of children aged 5 to 10 years, with samples collected five years apart. This enabled the evaluation of how accurately biometric verification systems perform as children grow. The use of such datasets to address real-world challenges related to children's biometric identity is considered a unique initiative at the global level.

To encourage continued innovation in the biometric ecosystem, UIDAI recognised the top-performing participants while appreciating the contribution of all organisations that took part in the challenges.

Source- Press Information Bureau

Hon'ble Agriculture Minister Launches AI-Enabled Dynamic Web Portal of MGUVV

In a significant step towards strengthening digital governance in higher agricultural education, the Hon'ble Agriculture Minister of Chhattisgarh, Shri Ramvihar Netam, launched the AI-enabled dynamic web portal of Mahatma Gandhi Udyanikee Evam Vanikee Vishwavidyalaya (MGUVV).

The newly launched portal, available at mguvv.ac.in, has been designed as a comprehensive digital platform to provide students, faculty members and other stakeholders with seamless access to academic information and services. Equipped with an interactive user interface, the portal offers round-the-clock access to university resources and incorporates multilingual capabilities to cater to a diverse user base.

The portal serves as a centralized academic information repository, providing details of undergraduate, postgraduate and doctoral programmes in horticulture and forestry. It also features faculty profiles, research achievements, patents, publications and academic activities, enhancing transparency and accessibility. In addition, a digital scholarship management system enables students to submit applications online, upload supporting documents and track the status of their applications in real time.

The initiative marks a major milestone in advancing smart academic administration and digital transformation at MGUVV. The implementation of centralized digital modules, automated academic processes and citizen-centric e-Governance features was undertaken under the leadership of Dr. (Prof.) Ravi R. Saxena, Vice Chancellor, MGUVV.



Hon'ble Agriculture Minister of Chhattisgarh, Shri Ramvihar Netam, launching the AI-enabled dynamic web portal of Mahatma Gandhi Udyanikee Evam Vanikee Vishwavidyalaya (MGUVV)

The project was successfully executed by the National Informatics Centre (NIC), Raipur. The portal was developed under the guidance of Shri T. N. Singh, Deputy Director General and State Informatics Officer, Chhattisgarh, and Shri P. Rama Rao, Senior Technical Director, with support from Shri Abhijeet Kaushik, Joint Director (IT), NIC Chhattisgarh.

– Satyesh Kumar Sharma, Chhattisgarh



Shri Mohan Charan Majhi, Hon'ble Chief Minister of Odisha, launching the e-Panchayat Sabha and Panchayati Raj-Samikshya during the State-level National Panchayati Raj Day celebrations at Bolangir, Odisha

Odisha Unveils Smart Governance Tools to Strengthen Panchayati Raj Administration

On the occasion of the State-level celebration of National Panchayati Raj Day 2026 at Bolangir, the Government of Odisha launched two innovative digital platforms—e-Panchayat Sabha for Zilla Parishads and Panchayati Raj-Samikshya—to enhance transparency, accountability and efficiency in Panchayati Raj Institutions (PRIs).

The applications were inaugurated by Shri Mohan Charan Majhi, Hon'ble Chief Minister of Odisha, in the presence of Shri Kanak Vardhan Singh Deo, Hon'ble Deputy Chief Minister; Shri Rabi Narayan Naik, Hon'ble Minister, Panchayati Raj & Drinking Water and Rural Development; and Dr. Mukesh Mahaling, Hon'ble Minister, Electronics & Information Technology, Parliamentary Affairs and Health & Family Welfare.

Developed by NIC Odisha State Centre, Bhubaneswar, e-Panchayat Sabha streamlines the management of Zilla Parishad meetings through end-to-end

digital workflows covering scheduling, agenda management, proceedings and dissemination of minutes. The platform improves communication, record management and monitoring of development programmes.

Panchayati Raj-Samikshya digitizes the audit process of Panchayati Raj Institutions and departmental offices by enabling real-time tracking of audit observations, compliance status and report finalization. The application strengthens transparency in fund utilization and promotes financial discipline.

The launch marks a significant step towards the digital empowerment of Panchayati Raj Institutions and the advancement of transparent, accountable and citizen-centric rural governance in Odisha.

– Jayanta Kumar Mishra, Odisha

NIC Assam Launches Agentic AI-Driven Grievance Management Framework for Sewa Setu

On April 22, 2026, the National Informatics Centre (NIC), Assam launched an Agentic AI-driven Grievance Management Framework for Sewa Setu, Assam's flagship citizen service platform. The framework was inaugurated by Shri Pranjal Bezbaruah, DDG & SIO, Assam, followed by a live demonstration by Shri Rahul Deka, Scientist-D.

The solution has been deployed to streamline and automate grievance handling on Sewa Setu (sewasetu.assam.gov.in), which processes more than 10,000 citizen service applications daily, along with a large volume of grievances received through multiple channels.

Traditionally, grievance management required extensive manual effort, with each complaint being reviewed, categorized and routed individually. The newly implemented AI-powered framework transforms this process through end-to-end automation. Built on a custom-trained grievance classification model and orchestrated using n8n, the system intelligently classifies and routes grievances to the appropriate stakeholders, automatically resolves routine issues such as payment reconciliation, and generates support tickets for technical intervention whenever required.

The framework has significantly reduced manual workload, improved response times and enhanced the overall efficiency of grievance redressal under the Sewa Setu project.

Encouraged by its success, NIC Assam plans to extend the Agentic AI-driven



Shri Pranjal Bezbaruah, DDG & SIO, Assam, launching the Agentic AI-driven Grievance Management Framework at NIC Assam

en grievance management framework to other major e-Governance initiatives in the State, enabling intelligent automation and improved citizen service delivery across government platforms.

– Maitreyee Sarma, Assam



Shri Damodar Raja Narasimha, Hon'ble Minister for Health, Medical & Family Welfare, Telangana, launched the Clinical Establishment Act, 2010 Web Application in order to strengthen digital governance in healthcare sector



Telangana Launches Clinical Establishment Act Web Application

In a significant step towards strengthening digital governance in the healthcare sector, Shri Damodar Raja Narasimha, Hon'ble Minister for Health, Medical & Family Welfare, Telangana, launched the Clinical Establishment Act, 2010 Web Application developed by the National Informatics Centre (NIC), Telangana for the Department of Public Health & Family Welfare (DPHFW).

The web application has been designed to provide a streamlined, transparent and accountable system for the registration and regulation of clinical establishments across the State. By digitizing key processes, the platform simplifies interactions between healthcare professionals and regulatory authorities while ensuring greater efficiency and compliance.

The application enables healthcare professionals to submit online applications for registration and licensing of clinics and other clinical estab-

lishments. It also facilitates the issuance and download of digitally certified licenses, reducing paperwork and minimizing processing time.

The launch marks an important milestone in the modernization of healthcare administration in Telangana. The platform is expected to enhance service delivery, improve regulatory oversight and promote ease of compliance for medical practitioners through a secure and citizen-centric digital framework.

Developed by NIC Telangana, the initiative reflects the continued commitment of the State Government towards leveraging technology to improve governance and strengthen public health systems.

– Raynil John, Telangana

NALSA Launches NIC-Developed E-Prisons Early Release Processing Module

On May 27, 2026, the National Legal Services Authority (NALSA) launched the E-Prisons Early Release Processing Module at the pan-India level in virtual mode, marking a significant step towards ensuring timely, transparent, and technology-driven consideration of remission and premature release of eligible prisoners across the country.

The module was launched by Hon'ble Mr. Justice Surya Kant, Chief Justice of India and Patron-in-Chief, NALSA, in the presence of Hon'ble Mr. Justice Vikram Nath, Judge, Supreme Court of India and Executive Chairman, NALSA, and Hon'ble Mr. Justice J.K. Maheshwari, Judge, Supreme Court of India and Chairman, Supreme Court Legal Services Committee (SCLSC).

Developed by the National Informatics Centre (NIC) within the existing e-Prisons platform, the module has been designed to address delays in processing remission and premature release cases. The initiative was undertaken pursuant to the directions of the Hon'ble Supreme Court in *Surendra @ Sunda vs. State of Uttar Pradesh* (2026 INSC 414).

The digital system enables automatic identification of eligible prisoners before their eligibility date, online initiation and processing of proposals, real-time status alerts through SMS and WhatsApp, colour-coded monitoring mechanisms, and centralized dashboards for effective oversight. By digitizing the workflow, the module enhances transparency, accountability, and coordination among prison authorities, police departments, legal services institutions, and other stakeholders.



Hon'ble Justice Sri Surya Kant, Chief Justice of India and Patron-in-Chief, NALSA launching the e-Prisons Early Release Processing Module at the pan-India level in virtual mode

The solution was initially piloted at Central Jail, Agra and District Jail, Lucknow. Following the successful implementation of the pilot phase, the module is now ready for adoption by States and Union Territories in accordance with their respective remission and premature release policies.

– Archana Sharma, NIC-HQ



Hon'ble Chief Minister of Bihar Shri Samrat Choudhary launching the Sahyog Portal and Helpline Number 1100 across the state



Bihar Launches 'Sahyog Portal' & Helpline 1100 for Citizen Grievance Redressal

Hon'ble Chief Minister of Bihar Shri Samrat Choudhary launched the Sahyog Portal and Helpline Number 1100 to facilitate effective and timely resolution of grievances related to Sahyog Camps across the state. The initiative marks a significant step towards strengthening transparency, accountability, and citizen-centric governance.

Developed by the National Informatics Centre (NIC) for the Government of Bihar, the Sahyog Portal is a real-time monitoring system designed as a centralized digital platform for grievance registration, tracking, and resolution. The portal aims to ensure timely, transparent, and accountable redressal of public grievances while enabling efficient monitoring by the administration.

Through the portal, citizens can lodge grievances online, track the status of their complaints, send reminders for pending cases, and share feedback on the resolution provided. The newly launched Helpline 1100 further en-

hances accessibility by offering citizens a convenient channel to seek assistance and register their concerns.

The portal's real-time monitoring capabilities enable authorities to closely track grievance resolution processes, ensuring prompt action and improved accountability. By digitizing the entire workflow, the system enhances administrative efficiency and provides greater transparency in public service delivery.

The launch of the Sahyog Portal reflects the Government of Bihar's commitment to leveraging technology for responsive governance and improved citizen services. The NIC-developed platform is expected to play a pivotal role in strengthening the state's grievance redressal mechanism and fostering greater trust between citizens and the administration.

– Syed Mumtaz Husain, Bihar



Hon'ble Finance Minister of Punjab, Sardar Harpal Singh Cheema, launching the Unified Sanction Management System (USMS)

Punjab Launches Unified Sanction Management System to Digitize Government Sanctions

Hon'ble Finance Minister of Punjab, Sardar Harpal Singh Cheema, launched the Unified Sanction Management System (USMS), a digital platform designed to streamline the processing of administrative, technical, and financial sanctions while enabling seamless integration with the State's payment systems.

The e-Sanction Module, developed by the Department of Treasuries and Accounts in collaboration with NIC, replaces the conventional paper-based sanction process with a fully digital workflow. The initiative aims to enhance efficiency, transparency, accountability, and financial discipline across government departments.

Launched at the Punjab Municipal Bhawan in Chandigarh, the platform facilitates the online issuance of sanctions and their automatic integration with the Integrated Financial Management System (IFMS) for bill generation and payment processing. By creating a unified digital workflow, the system significantly reduces manual intervention and expedites the sanctioning process.

A key feature of USMS is its comprehensive audit trail mechanism. Every stage of sanction processing is digitally recorded with timestamps, user

credentials, and approval hierarchies, ensuring complete traceability and accountability. The platform also validates budget availability before sanctions are issued, helping departments avoid excess expenditure and ensuring adherence to approved budget provisions.

The system introduces standardized sanction formats and incorporates automated validation checks to minimize procedural inconsistencies and clerical errors related to account heads, scheme mapping, and beneficiary details. These measures are expected to improve the accuracy and reliability of financial transactions across departments.

The initiative has been developed in accordance with the Government of India's financial reform guidelines under the Special Assistance to States for Capital Investment (SASCI) Scheme 2026-27. The successful implementation of the system is expected to make Punjab eligible for an incentive of ₹50 crore under the scheme while strengthening end-to-end monitoring of government sanctions.

– Parminder Kaur, Punjab

JEEVAN App Launched to Strengthen Support and Welfare Services for Senior Citizens

In a significant initiative to enhance the quality of life of senior citizens through technology-enabled services, Dr. Virendra Kumar, Hon'ble Union Minister for Social Justice and Empowerment, launched the JEEVAN (Joint Elderly Empowerment & Virtual Assistance Network) mobile application. The initiative marks an important step towards creating a safer, more inclusive, and supportive ecosystem for elderly citizens across the country.

Developed as a dedicated digital platform for senior citizens, the JEEVAN app provides easy access to welfare services, healthcare support, emergency assistance, and information on government initiatives. Designed as a one-stop resource, it enables senior citizens to conveniently access essential services and support mechanisms through a single platform.

A key feature of the app is its provision of information on government schemes and welfare programmes for senior citizens. Users can explore benefits, understand eligibility criteria, and access relevant information with ease. The app also provides details of senior citizen homes supported by the Department of Social Justice and Empowerment, helping elderly individuals and their families identify suitable care facilities.

The JEEVAN app also offers information on emergency support services, ensuring timely assistance when needed. Developed with a strong focus on



Dr. Virendra Kumar, Hon'ble Union Minister for Social Justice and Empowerment, launching the JEEVAN mobile application

accessibility, the platform features simplified navigation and a user-friendly interface tailored to the needs of elderly users. By improving awareness of available services and facilitating access to support systems, JEEVAN promotes the safety, dignity, inclusion, and empowerment of senior citizens.

– Archana Sharma, NIC-HQ

NIC Receives Multiple Honours at NIXI's 23rd Foundation Day Celebration



NIC has been conferred with multiple prestigious awards at the 23rd Foundation Day celebration of the National Internet Exchange of India (NIXI), recognizing its contributions towards strengthening India's digital infrastructure, internet security, and content delivery ecosystem.

NIC received the "Registrar of the Year – Highest DNSSEC" Award for its significant efforts in promoting and implementing Domain Name System Security Extensions (DNSSEC), thereby enhancing the security and integrity of internet-based services. The award was received by Smt. Sunita Singh of the NIC Web Technology Division on behalf of the organization.

In addition, NIC was honoured with the "Best Resource Managed Account Award" for the successful deployment of Resource Public Key Infrastructure (RPKI) in Border Gateway Protocol (BGP) routing, a key initiative that

strengthens the security and reliability of internet traffic routing. NIC also received the "Internet Service Provider Award" for providing the highest volume of Content Delivery Network (CDN) traffic to NIXI, underscoring its pivotal role in delivering digital services efficiently across the country.

Both awards were received by Shri Karunakar Gupta, Head of Department, NIC Networks Division, on behalf of NIC.

These recognitions highlight NIC's continued commitment to adopting advanced internet technologies, strengthening cybersecurity, and ensuring robust, secure, and high-performance digital services for citizens and government stakeholders alike. The awards further reinforce NIC's position as a leading force in building and managing India's digital public infrastructure.

MeitY Celebrates International Yoga Day 2026



To commemorate International Yoga Day 2026, the Ministry of Electronics and Information Technology (MeitY) organized a yoga session at Electronics Niketan, CGO Complex, New Delhi. The event witnessed enthusiastic participation from the Secretary, MeitY, the Director General, National Informatics Centre (NIC), the Managing Director, National Informatics Centre Services Incorporated (NICS), senior officials, and employees of the Ministry.

The participants performed various yoga asanas and breathing exercises,

reaffirming their commitment to adopting a healthy and balanced lifestyle. The session underscored the importance of yoga in promoting physical fitness, mental well-being, and holistic health, while encouraging its integration into daily life.

The observance reflected MeitY's continued emphasis on fostering a culture of wellness and mindfulness in the workplace, in line with the spirit of International Yoga Day and the message, "Health through Yoga, Prosperity through Health."