

Andhra Pradesh

Empowering through Innovation – Driving Digital Transformation with IT

Edited by **NISSY GEORGE**

Andhra Pradesh, the 7th largest and 10th most populous state of India, is known for its rich cultural heritage, spiritual hubs, agricultural backbone, and a rapidly evolving technology landscape. Located in the southern part of the country, the state has emerged as a vibrant ground for digital governance.

NIC's journey in Andhra Pradesh began in the mid-1980s from Hyderabad. Following the 2014 bifurcation, the NIC State Centre was formally established in Vijayawada in 2017 under an MoU with the Government of Andhra Pradesh. Since then, NIC Andhra Pradesh has been instrumental in fostering robust digital infrastructure, promoting widespread e-Governance, and enabling data-driven governance across the state.

The State Centre supports key administrative offices, including the Secretariat at Velagapudi, all 13 District Collectorates, the High Court, and critical departments such as Revenue, Registration, Agriculture, Survey, Education, Health, Rural Development, Transport, Civil Supplies, Customs, and IVFRT.



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NIC Andhra Pradesh plays a pivotal role in delivering cutting-edge ICT solutions to the citizens' doorsteps by harnessing emerging technologies. As the technological backbone of the state, the NIC AP State Centre seamlessly integrates advanced digital tools across government departments—driving efficiency, transparency, and accessibility in governance. From pioneering initiatives like WhatsApp Governance and the State Data Lake to developing AI-driven platforms and the Property Chain system, NIC AP continues to empower the Andhra Pradesh Government in making public services more citizen-centric, scalable, and inclusive.

NIC AP has led the implementation of several flagship e-Governance solutions such as: Land Records Management System, CARD (Computer-Aided Administration of Registration Department), Bhunaksha, D-Krishi, e-Panta, Vahan & Sarathi, eHospital, eOffice, ePension, Medhas, eDoctor, eCounselling, ePDS, eCabinet, AEBAS, AYUSH Drug Licensing and Doctor Registration System, among others.

Through NICNET, NIC AP ensures secure, high-

speed connectivity across the state. NICNET and the National Knowledge Network (NKN) provide seamless network access to government departments and connect seven research and academic institutions, including the State Data Centre. All 13 district offices are linked via 100 Mbps leased circuits in a triangular topology, backed by a 1 Gbps link to the Integrated Network Operations Centre (INOC) with 10 Gbps uplinks—ensuring uninterrupted, secure digital operations across Andhra Pradesh.

ICT Initiatives in the State

NIC AP has been a pioneer in implementing innovative ICT solutions that enhance governance and simplify access to public services for citizens. Some of the key initiatives that have transformed governance in the Andhra Pradesh State include:

WEBLAND

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

NIC AP has been instrumental in designing and managing WEBLAND, a secure, workflow-based system for land record management, operational for over two decades. The Webland 1.0 portal introduced a secure, role-based, and workflow-driven digital ecosystem for managing land records, enhancing transparency and service delivery. Integrated with key modules such as: MeeBhoomi, Online Case Management System (ORCMS), Loan Charge Module, and Crop Cultivation Rights Card (CCRC), they enable seamless handling of services like mutations, corrections to ROR/Adangal, and generation of key land documents by designated revenue officials including Tahsildars, RDOs, SDMs, and JCs. Every transaction—by officials or citizens—is logged and auditable.

Key Features

- Online updates of village, pattadar, and land-holding details
- Generation of Adangal and ROR documents
- Biometric-authenticated digital signatures by officials
- Integrated mutation processing via Meeseva and SRO

- Unique Khata numbers for private and government lands
- Coverage of Government, Endowment, and Forest lands
- Land conversion module for agricultural-to-non-agricultural use
- Issuance of e-Pattadar Passbooks

WEBLAND streamlines land governance, bringing efficiency, accountability, and transparency to the doorstep of every landholder.

WEBLAND 2.0

The Government of Andhra Pradesh, with support from NIC, is undertaking a state-wide resurvey of all land parcels, assigning each a Unique Land Parcel Number (LPM). Once verified, these LPMs are integrated into WEBLAND, which acts as the single source of truth for departments including:

- Grama Sachivalayam (GSWS)
- Banks (loan processing)
- Agriculture, Crop Insurance
- Forest, Civil Supplies, AgriStack
- Revenue, Registration, and Survey

Auto-Mutation

To eliminate delays, auto-mutation has been introduced. Upon completion of land registration, mutation is triggered instantly—transferring ownership in seconds without manual intervention, ensuring speed, accuracy, and transparency.

Property Chain

Property Chain, powered by Blockchain Technology, securely records property transactions across stakeholders. The process includes:

- Blockchain ID creation by Survey & Revenue
- LPM-based records pushed to Blockchain CoE server
- Blockchain records integrated with WEBLAND
- Append-only update of ROR fields for tamper-proof history

All transactions are distributed and synchronized, making unauthorized changes virtually impossible.

CCRC

The CCRC (Crop Cultivator Rights Card) empowers tenant farmers by formally recognizing their cultivation rights. It enables access to:

- Subsidized seeds and manure
- Crop insurance
- Compensation for calamity-induced losses

AgriStack

In line with Government of India's digital agri-mission, AP has generated 3.27 crore Farm IDs from land records, integrated with the Central Project Monitoring Unit (CPMU) to streamline scheme delivery and farmer identification.

ORCMS

ORCMS (Online Revenue Court Management System) handles land-related disputes such as encroachments, PTOs, and ROR Act cases. Features include:

- Online filing

- Notice and order generation
- Hearing details with SMS alerts
- End-to-end case tracking

WEBLAND 2.0 positions Andhra Pradesh at the forefront of digital land governance—secure, citizen-centric, and future-ready.

D-Krishi

<https://eseed.ap.gov.in/eseednew>

D-Krishi is Andhra Pradesh's unified, Aadhaar-enabled platform for subsidized seed distribution, ensuring that only genuine farmers receive their entitled quantity in a transparent, technology-driven manner. Launched in 2017, the system replaces the earlier manual, error-prone process that was vulnerable to middlemen, bogus passbooks, and stock misuse.

The system operates through a web and mobile application, enabling village-level implementation and real-time monitoring. Farmers authenticate using OTP or biometric verification, while land details and eligibility are fetched automatically via integration with Webland, GSWS, CCRC, and e-Crop databases. Stock data is updated in real time, ensuring proper planning, tracking, and utilization of government subsidies.

Key Features

- OTP-based Aadhaar authentication with digital record-keeping
- Accessible via 11,000+ Rythu Seva Kendras across 26 districts
- Eliminates misuse and enables proactive planning
- Consolidates landholding data across the district
- Ensures direct benefit transfer for seeds and micronutrients
- Support for 59 crop varieties and 4 micronutrients at subsidized rates
- Works even with 2G/3G connectivity in rural areas
- OTP, biometric fallback, and restricted multiple transactions

Impact

Since 2017, over 20 lakh farmers have received hassle-free access to subsidized seeds every season.

- Bogus passbooks and double benefits eliminated
- Middlemen removed; queues vanished
- Seamless, farmer-friendly experience
- Extensive media and public appreciation

Highlights

- Integrated with core databases for eligibility verification
- Digital utilization certificates and MIS reports for governance
- Complaint resolution via social media
- Ensures optimal use of government subsidy expenditure

D-Krishi stands as a model for smart, secure, and inclusive agri-governance, delivering the right inputs to the right farmers at the right time.

NIC Andhra Pradesh has been instrumental in transforming digital governance across Andhra Pradesh in contributing G2G, G2E and G2C services under realm of e-governance.

NIC Andhra Pradesh has played a pivotal role in the flagship programs of GoAP namely Office automation, Land Records, Registration, Survey, Agriculture, Transport, Food and Civil Supplies, Education, Health, Election and other sectors

Through their applications i.e. eOffice, AEBAS, WebLand, CARD, Bhunaksha, e-Panta, D-Krishi, Vahan, Sarathi, RCMS, e-Counseling, e-Hospital, PPMS, and other.

NIC District Centres are playing diverse roles right from executing various projects under e-governance and Digital India initiatives and their contributions in General Elections work are commendable.

I convey my heartfelt greetings to the entire team at NIC Andhra Pradesh for their hard work, dedication and look forward to our continued journey towards keeping pace with technological advances. The extended support of network infrastructure and connectivity provided by NIC across the state has brought about a transformative shift in the ICT landscape of Andhra Pradesh.



K. Vijayanand, IAS
Chief Secretary
Government of Andhra Pradesh

e-Panta

<https://karshak.ap.gov.in/ecrop/>

The e-Panta system is a comprehensive digital crop booking platform developed by NIC AP for the Department of Agriculture to address the long-standing challenge of inaccurate crop data and beneficiary identification in farmer welfare schemes. It captures real-time sowing information across Agriculture, Horticulture, and Sericulture for the Kharif, Rabi, and Summer seasons—becoming the single source of truth for planning, verification, and benefit delivery.

Crop booking is conducted jointly by the Agriculture and Revenue Departments, with data sourced from Webland, RoFR, and CCRC databases. The platform recognizes a wide range of cultivators—including owners, tenants, CCRC-certified farmers, and those cultivating under informal or undocumented arrangements.

NIC, Andhra Pradesh has been playing a pivotal role in the design, development, and implementation of the Land Records Management System (WE-BLAND) for more than two decades. The WEBLAND 1.0 portal provided land management through a role-based workflow and a secure environment for maintaining land records, with key modules such as MeeBhoomi, the Online Case Management System (ORCMS), the Loan Charge Module, and the Crop Cultivation Rights Card (CCRC)—all offering seamless, transparent, and efficient citizen services.

Presently, under WEBLAND 2.0, NIC-AP has implemented Auto-Mutation of land records after the registration process, dynamically through online. All the services based on the Land Parcel Map (LPM) based data of the ReSurvey is also being maintained. A Proof of Concept for the Property Chain - the first of its kind in India has been developed, integrating workflows of the Survey, Revenue, and Registration Departments to maintain the Single Source of Truth (SSOT), with support from the Centre of Excellence in Blockchain Technology, NIC, Bangalore.

The Government has decided to implement the Property Chain very soon. NIC-AP is expected to successfully complete this initiative, leveraging emerging technologies for the benefit of the citizens of Andhra Pradesh.



G. Jaya Lakshmi, IAS

Special Chief Secretary
Revenue & Registration, GoAP

System Features

- Web, Services, and Mobile App ecosystem
- Geo-referenced crop booking with e-KYC (Biometric/OTP/Facial Authentication)
- Prevents duplicate bookings on the same land parcel
- Supports single, inter, and mixed crops across all land types
- Real-time SMS alerts and digital certificates to farmers
- VAA/VRO authentication for field-level validation
- Supervisory checks and random booking ID assignments for transparency
- Social audits by villagers to ensure accountability

- Automated PMFBY registration for crops
- Integration with procurement, insurance, and subsidy platforms for:

- Input subsidies
- Crop damage compensation
- Insurance verification and settlement

Impact

- 100% crop coverage across 1.5 crore acres in Andhra Pradesh
- Inclusion of all owners, cultivators, and tenant farmers, across all crop types
- Beneficial for planning and operations of multiple departments—Agriculture, Horticulture, Sericulture, Social Forestry, Civil Supplies, Irrigation, Markfed, Seed Corporations, and more
- Geo-fenced booking across all revenue villages
- Physical and digital acknowledgements issued to every farmer

e-Panta ensures accurate, tamper-proof, and farmer-centric data management—powering efficient governance, timely welfare delivery, and data-driven agricultural planning across Andhra Pradesh.

e-Hospital

<https://nextgen.ehospital.gov.in>

The NextGen eHospital platform, offered under a SaaS model, provides a comprehensive suite of cloud-based modules to streamline hospital operations across OPD, IPD, diagnostics, billing, inventory, and administration. Key modules include Patient Registration, Lab & Radiology Information Systems, Appointment, Ambulance, OT, MRD, Dietary, Store, Feedback, and more. The integrated e-BloodBank manages end-to-end blood services, while ORS (Online Registration System) allows citizens to book appointments online.

Andhra Pradesh launched the eHospital project on January 6, 2022, beginning with 54 hospitals. Out of 279 hospitals, 278 hospitals migrated to NextGen and remaining 1 hospital will migrate soon in June 2025.

Recognition

Andhra Pradesh has been recognized as the top integrator in the country for on boarding the highest number of government health facilities to the eHospital platform.

AYUSH Portal

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

The AYUSH Portal, launched by the Government of Andhra Pradesh, is a unified digital platform for managing the licensing and regulation of traditional medical systems—Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homoeopathy. Developed with support from NIC, the portal offers end-to-end digital services including online registration, application submission, document upload, fee payment, inspections, and issuance of digitally signed licenses.

Key Benefits

- End-to-End Online Processing – Fully digital, eliminating manual visits and delays

- Transparency & Accountability – Every step is trackable with defined responsibilities
- Faster Service Delivery – Automated workflows speed up inspections and approvals
- User Empowerment – Real-time application tracking and timely status updates
- Support for AYUSH Growth – Enables structured expansion of traditional medicine system

e-Doctor

<https://online.apmc.ap.gov.in>

Launched on 01 March 2020, the e-Doctor portal—developed by NIC AP for the Andhra Pradesh Medical Council (APMC)—offers a fully digital, transparent, and efficient system for the registration and certification of medical professionals.

Key Services

- Provisional & Final Medical Registration
- Renewal & Re-Registration
- Additional Qualification Entry
- No Objection & Good Standing Certificates
- CME Certificates
- Tatkal & Non-Tatkal Modes with Slot Booking

Achievements

- 24,000+ doctors registered
- Integrated secure payment gateway and QR code validation
- Supports digital signatures, SMS alerts, and document chaining
- Significantly reduced paperwork and processing time
- Ensured data accuracy, compliance, and ease of access

ePDS

<https://epds1.ap.gov.in/epdsAP/epds>

The ePDS platform ensures food security and efficient ration distribution in Andhra Pradesh through end-to-end digital integration of ration card management, supply chain automation, and fair price shop operations, in line with the National Food Security Act, 2013. It also supports Minimum Support Price (MSP) for farmers, price stabilization, and grievance reduction.

Developed by NIC AP, the portal facilitates issuance, modification, and management of ration cards and beneficiary data, while enabling real-time monitoring of Supply Chain Management (SCM).

- Stage-I Transport: FCI godowns/Sugar Factories → Mandal Level Stock Points (MLS)
- Stage-II Transport: MLS Points → Fair Price Shops
- SCM is tracked through: https://scm.ap.gov.in/Home_SCM
- The state has 439 MLS Points, with 29 managed by GCC and the rest by AP Civil Supplies Corporation Website: <https://civilsupplies.ap.gov.in>

The ePDS-RCMS and distribution data are also integrated with the central IMPDS platform via APIs for national-level tracking. Additionally, the Deepam LPG Cylinder distribution is managed digitally via: <https://epds2.ap.gov.in/lpgDeepam/>



▲ Fig 2.1 : e-Cabinet application was launched by Hon'ble Chief Minister of Andhra Pradesh

epds/publicepdsDashBoard.epds

ePDS Andhra Pradesh ensures transparent, accountable, and citizen-centric food delivery across the state—right from procurement to doorstep delivery.

Bhunaksha

<https://bhunaksha.ap.gov.in/bhunakshalpm>

The Bhunaksha software, developed by NIC using open-source tools, supports the re-survey of agricultural lands in Andhra Pradesh. It enables generation of ULPINs, land parcel maps, and online subdivisions post-resurvey.

- **ULPIN (Unique Land Parcel Identification Number):** A geo-referenced ID based on cadastral maps, offering integrated land services to citizens and departments.
- **LPM (Land Parcel Mapping):** Defines boundaries, ownership, and geographic attributes of land parcels to improve land administration, reduce disputes, and support investment decisions.

Status (as of now):

- Total Villages: 17,597
- Resurvey Completed: 7,015 Villages
- ULPINs & LPMs Generated: 84,82,015
- Online Subdivisions Done: 1,91,067

▼ Fig 2.2 : Website Inaugurated by Shri Satya Kumar Yadav, Hon'ble Minister of Health, Family Welfare and Medical Education, Govt. of A.P.



Mobile App for Resurvey Operations

An Android-based app developed by NIC AP supports real-time data entry, attendance logging, inspection tracking, and survey progress monitoring during resurvey activities at village and mandal levels. A companion web app enables block allocation, SMS alerts to farmers, and customized reports for administrative use.

PENMAN

Designed by NIC AP for the Principal Accountant General (PAG) office, PENMAN (Pension Management System) is a web-based platform that streamlines pension workflows for All India Services, Judicial Services, and State Government employees. It ensures transparency, efficiency, and end-to-end digital processing for stakeholders including the Finance Department, Treasuries, Government Offices, and the AG Office.

Key Features

- Employee data is sent electronically to the AG Office, registered, verified, and authorized through a role-based workflow. The system generates an ePPO (Electronic Pension Payment Order), which is sent directly to treasuries

- PENMAN is integrated with the Document Management System (DMS) via APIs, linking current data with legacy records—eliminating the need for redundant scanning and saving time and storage costs

- All ePPOs are secured using digital signatures to ensure authenticity and legal validity
- Implemented with the Centre of Excellence in Blockchain Technology (NIC, Bangalore), the system secures ePPOs using blockchain, ensuring tamper-proof document integrity. Production roll-out is underway
- Users can register for SMS notifications for real-time updates on pension processing

Impact

The implementation of PENMAN has significantly accelerated pension processing, reducing authorization time from the earlier 30–45 days to just 7–10 working days. This has not only improved service delivery but also minimized administrative delays. By digitizing the entire pension workflow, PENMAN promotes a paperless, efficient, and eco-friendly office environment, reducing manual errors and enhancing overall governance. It stands as a model of modern, transparent, and citizen-centric pension management in Andhra Pradesh.

e-Cabinet

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

e-Cabinet is a secure, web-based platform designed to enable paperless cabinet meetings for the Government of Andhra Pradesh. It streamlines agenda management, document uploads, meeting coordination, and information retrieval—reducing paperwork while enhancing efficiency and confidentiality.

The application includes modules for Ministers, the CM Office, Meeting Day Management, and a Waiting Lounge for Secretaries. It is fully customized to meet AP's administrative needs.

Andhra Pradesh conducted its first paperless cabinet meeting in August 2024, and since then, over 25 meetings have been successfully held through the platform. NIC AP trained all OSDs/PS to ministers to ensure smooth adoption and usage.

House of Parliament & AP State Assembly Elections 2024

NIC Andhra Pradesh provided end-to-end technical and logistical support to the Election Commission and State Government for the smooth conduct of the 2024 General Elections in the state. Services included robust ICT infrastructure and custom-built software solutions to ensure a transparent, efficient, and secure electoral process. NIC AP developed and deployed PPMS (Polling Personnel Management System) and CPMS (Counting Personnel Management System) using ASP.NET and SQL Server, facilitating randomized deployment of polling and counting staff. Technical assistance was also extended for ERONET, Poll Day Monitoring, and other election-related applications.

At the request of the Chief Electoral Officer,

The adoption of VAHAN and SARATHI, developed by NIC, has transformed the delivery of RTA services in Andhra Pradesh. These digital platforms have enabled efficient, transparent, and citizen-friendly services, accessible anytime and anywhere.

Through VAHAN, the state effectively manages a vast database of over 1.8 crore vehicle records, covering registration, tax payments, fitness, and permits. The integration of a secure online payment gateway has facilitated fully digital, cashless transactions for citizens.

SARATHI has simplified all driving license-related services, including application, renewal, and slot booking, ensuring minimal need for physical visits.

The e-Challan system, integrated with ANPR cameras and mobile enforcement tools, has strengthened road safety and compliance.

While the platforms offer a robust framework with a wide range of modules, a few challenges persist. Manpower constraints, limited ownership in issue resolution, rigid process flows, and data migration inconsistencies occasionally affect seamless service delivery. Addressing these gaps with greater flexibility, timely support, and a collaborative spirit will further enhance the system's effectiveness.

These platforms support Andhra Pradesh's vision of "contactless, paperless, and faceless" governance, and we look forward to continued collaboration with NIC to improve further and enrich RTA services for the people of the state.



Manish Kumar Sinha, IPS

Transport Commissioner
Government of Andhra Pradesh

NIC teams incorporated real-time feature enhancements and district-level customizations starting January 2024. A dedicated team from the State Unit and District NIC offices played a pivotal role in the successful execution of the simultaneous Parliamentary and State Assembly elections.

CARD

<https://ainibhrit-card.ap.gov.in>

CARD (Computer-Aided Administration of Registration Department) is a flagship e-Governance initiative by the Government of Andhra Pradesh, aimed at fully digitizing the land registration process. Launched in 1996 and

expanded statewide by 2003, CARD replaced time-consuming manual procedures with an electronic registration system—streamlining property valuation, stamp duty assessment, document handling, and title verification.

To enhance document privacy, AI-Nibhrit has been developed as an AI-driven solution that intelligently masks personal identifiers such as Aadhaar numbers, PAN numbers, and biometric data (e.g., fingerprints) in Certified Copies (CCs) of land records. This ensures secure sharing, protects against identity theft, and aligns with data protection norms.

Key Innovations

- AI Algorithms trained to detect and mask sensitive information
- Hybrid Access Models for SROs and citizens—manual and auto modes
- End-to-End Digital Workflow for CC request, approval, and delivery
- Secure PDF Handling to prevent data leaks post-masking
- Scalable Engine capable of processing high CC volumes daily

The application is ready for launch following final review by the Commissioner, IGRS—marking a key step toward privacy-first digital governance in land registration.

SIC Portal

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

The SIC RTIMIS (State Information Commissions Right to Information Management Information System) is a digital platform developed to manage the complete lifecycle of RTI applications under the RTI Act, 2005. It enables efficient filing, tracking, and resolution of RTI requests across Public Authorities (PAs), promoting transparency and accountability in governance.

Built on a multi-tier architecture, RTIMIS includes a User Interface Layer for citizens, Nodal Officers, and PIOs; an Application Layer for managing workflows and alerts; and a Database Layer for securely storing requests, roles, and logs.

Key Features

- Online Filing & Tracking of RTI applications
- SMS/Email Alerts for pending actions
- Role-based Access for Citizens, Nodal Officers, PIOs, and Appellate Authorities
- Real-time MIS Dashboards for monitoring performance and pendency
- Digital Audit Trail for every action taken on a request

The SIC Department Portal also provides citizens access to RTI Act information, cause lists, and Commissioner decisions. The RTIMIS application is finalized and will be launched soon after departmental approval—paving the way for a transparent, responsive, and citizen-centric RTI ecosystem in Andhra Pradesh.

e-Transport

<https://sarathi.parivahan.gov.in>

<https://vahan.parivahan.gov.in>

Andhra Pradesh has made significant strides in digitalizing transport services through the SARATHI and VAHAN platforms, enabling faceless, paperless, and contactless service delivery across the state.

SARATHI Highlights

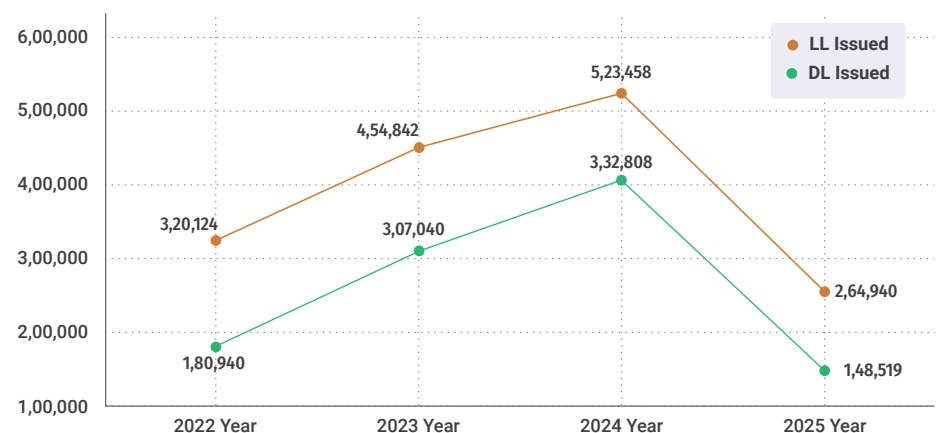
- 53 services upgraded to completely faceless, ensuring zero office visits
- Migrated all transport services across 83 offices (Jan 2022–Dec 2023)
- 10 Automated Driving Test Tracks operational
- Issued 15.13 lakh Learner's Licenses and 9.64 lakh Driving Licenses, generating ₹220 crore in revenue

VAHAN Highlights

- 57 services made faceless and ready by June 2024
- New Non-Transport Registrations and Fancy Number Auctions launched in April 2022
- Statewide rollout completed by December 2024
- 12 Automated Fitness Management Systems (AFMS) functional
- Integrated VAHAN with e-Pragathi until full migration in Dec 2024

▼ Fig 2.3

Year wise statistics on LL and DL issued in Andhra Pradesh



- Total revenue generated: ₹8,396 crore

eChallan

- eChallan system implemented for Transport and Police Departments
- Payments enabled via Meeseva, APOne, and Sachivalaya Centres
- Integrated 1,640 CCTV cameras and 26 speed guns with the Integrated Traffic Management System (ITMS) for automated challan generation
- e-Transport in Andhra Pradesh stands as a model for next-gen, citizen-centric governance, combining digital efficiency with real-time enforcement and transparency.

Other Initiatives in the State

eOffice

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

eOffice is a paperless digital platform that streamlines file workflows in government offices, enhancing transparency, efficiency, and accountability. It integrates modules like eFile, Knowledge Management, and MIS dashboards for seamless governance.

The platform is operational across the Andhra Pradesh Secretariat, State Departments, Raj Bhawan, Police Headquarters, and all 26 districts, with over 1.2 lakh users—among the largest eOffice deployments in India.

The Secretariat instance and 18 district instances are upgraded to latest version 7.3.13, with regular training programs conducted for departments and districts to ensure smooth adoption.

eOffice is a key pillar in Andhra Pradesh's journey toward digital-first, responsive administration.

e-Counselling

<https://polycetap.nic.in>

e-Counselling, developed by NIC AP, is an end-to-end digital platform designed to streamline admissions into Polytechnic and D-Pharmacy diploma courses across the state. Built with a student-first approach, it ensures transparency, efficiency, and ease of access through robust ICT infrastructure and intuitive user interfaces.

NIC-AP extended full technical support to the State Board of Technical Education and Training (SBTET) for smooth conduct of POLYCET from online registration and payment to hall ticket generation, rank cards, and allotment.

System Highlights

Student Portal

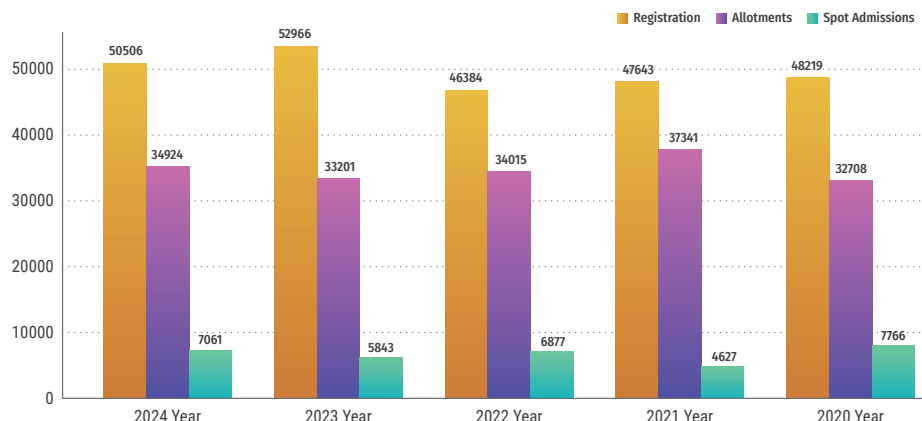
A one-stop solution for:

- Registration & Application Submission
- Online Payment Integration
- Option Entry & Allotment Orders
- Self-Joining Report and Final Confirmation

Department Portal

Enables complete operational control through:

- **Admin Module** – System setup, access, and process flow
- **Helpline Centre Module** – Document verification and student support



▲ Fig 2.4

e-Counselling year wise statistics

- **College Module** – Seat data updates, student verification, admission status
- **Verification Module** – Ensures authenticity of submitted documents

APDPHARMACY e-Counselling

A parallel platform for Diploma in Pharmacy admissions, mirroring the same modular structure for smooth processing, institutional coordination, and real-time student engagement.

Spot Admission Phase

After regular counselling, colleges conduct spot admissions to fill vacant seats on a first-come, first-served basis. Colleges upload details and process bulk fee payments to DTE, with system-generated reports maintaining full transparency and accountability.

Key Benefits

- **End-to-End Digitization:** From registration to final admission—fully paperless
- **Student-Centric Design:** Real-time updates, flexible options, and simplified access
- **Administrative Efficiency:** Well-structured modules for departments and colleges
- **Transparency & Accountability:** Every allotment and transaction is traceable

e-Counselling redefines the admission experience in Andhra Pradesh—digital, dependable, and designed for the future.

AEBAS

<https://nicap.attendance.gov.in>

AEBAS eliminates manual attendance processes through Aadhaar-enabled biometric authentication, improving accuracy, accountability, and ease of use across government offices in Andhra Pradesh.

Key Highlights

- Migrated from L0 to L1 fingerprint devices as per UIDAI guidelines
- Ongoing integration of autonomous bodies under a unified state-level portal
- AIIMS Mangalagiri launched AEBAS on April 5, 2025, calling it a major step in tech-driven governance

AEBAS is also operational at NIC AP State Centre, all District and Sub-Centres, AP Secretariat, High Court, IVFRT Visakhapatnam, and Customs Visakhapatnam, covering NIC officers and NICSI outsourced staff via desktop and mobile facial recognition apps.

S3WaaS

In Andhra Pradesh, the State Portal and 26 District Portals are hosted on the S3WaaS platform. These portals have been live and operational since 2023, featuring the latest Content Management System (CMS) capabilities along with secure and audit-compliant architecture.

Content updates are coordinated by the respective District DIOs, under the ownership and supervision of the District Collectors.

GeM

NIC AP actively uses the GeM (Government e-Marketplace) portal for transparent and efficient procurement of goods and services.

Jeevan Pramaan

<https://jeevanpramaan.gov.in>

Implemented across 196 Sub-Treasury Offices and key power departments (APSPDCL, APEPDCL, APGENCO, APTRANSCO), Jeevan Pramaan enables digital submission of life certificates by pensioners under the Digital India initiative.

IVFRT

IVFRT MMP: Immigration, Visa and Foreigners Registration & Tracking Mission Mode Project (IVFRT MMP) of Ministry of Home Affairs is a secure and integrated system that facilitate legitimate travelers while strengthening national security. Various modules of IVFRT Project have been successfully implemented at Immigration Check Posts, FRO offices, State Home Department at A.P Secretariat, A.P Intelligence Department and Subsidiary Intelligence Bureau, Vijayawada. The project has been implemented successfully at the Immigration Check Posts at Visakhapatnam, Vijayawada & Tirupati Airports and Visakhapatnam, Kakinada and Krishnapatnam Seaports for providing immigration services by

setting up of ICT infrastructure and providing day to day support and eFRRO system at Foreigner's Registration Offices in all districts in Andhra Pradesh and providing services to foreigners for registration, visa and other services. In addition to eFRRO system various modules like Prior Reference Check (PRC), Pak Tracking System, C-Form, S-Form, Sri Kartarpur Sahib Module, Look Out Circular Module are implemented at the SP & FRO offices and recently District Police Module, Foreigner's Identification Portal are implemented for tracking the illegal immigrants and over staying foreigners in Andhra Pradesh.

ICPS

ICPS (Indian Citizenship Processing System) has replaced manual procedures in Andhra Pradesh. Implemented in collectorates, SP offices, and the Home Department, it facilitates citizenship applications through birth, descent, registration, or naturalization.

NDAL-ALIS

Implemented across district collectorates and police commissionerates, the NDAL-ALIS portal provides secure, centralized issuance of arms licenses through the National Database of Arms Licenses.

ITI Admissions Portal

NIC AP's ITI application manages the complete admission life cycle for over 500 government and private ITIs. Modules include application processing, merit list generation, seat allotment, and admission slip issuance. Each year, over 50,000 students are admitted through this transparent, online system.

Here is a crisp, structured, and professionally edited version in Hemen's style, ensuring clarity and flow across all sections:

APBOCWBB

The APBOCWBB (AP Building and Other Construction Workers Welfare Board) application enables the issuance of Labour Cards to construction and building workers. Integrated with NREGA and e-SHRAM, the system fetches authenticated worker data to streamline registration and benefits distribution.

APDCA

The Andhra Pradesh Drug Control Administration (APDCA) application handles end-to-end processing of Drug Firm Licenses, Renewals, and Amendments. In 2024 alone, 4,970 licenses were issued, 4,565 renewed, and 7,165 amended. Modules include Query handling, Inspections, Pharmacist Registration, Payments, with Email notifications and Digital Signature integration for secure and transparent operations.

UBD

The UBD (Unified Births and Deaths) web application is successfully implemented in all ULBs and RLBs, enabling real-time, standardized registration of births and deaths across the state.

NREGA

NIC AP led the successful migration from the TCS-developed RAGASOFT to the Government of India's NREGA platform in 2022, ensuring compliance and continuity in MGNREGS operations across the state.

High Court of Andhra Pradesh – Official Website

<https://aphc.gov.in>

Developed by NIC AP, the official portal provides access to cause lists, judge profiles, notifications, e-filing, and judicial manuals—serving both legal professionals and the general public as a one-stop legal information hub.

Online Certified Document Application – High Court of AP

<https://digi-apply.aphc.ap.gov.in/ecdapply/login.php>

The Online Certified Document (CD) Application allows users to apply for digitally signed certified copies of court orders and judgments. With integrated payment gateway, users receive access credentials via SMS once verification and digital signing are complete.

WaterSoft

<https://rwss.ap.nic.in>

WaterSoft is a state-wide web-based MIS launched in 2009 for the Department of Rural Water Supply and Sanitation (RWSS). It integrates all offices and labs, offering modules for planning, monitoring, and decision-making. New modules are continuously added to meet departmental needs with enhanced transparency and accountability.

Drinking Water Transportation & Monitoring App

NIC AP has developed two Android apps for RWSS:

- **Water Tanker Movement App** – Tracks real-time movement of tankers
- **Monitoring App** – Enables field staff to inspect and verify water delivery

These apps ensure timely, accountable water delivery to rural habitations, with SMS alerts for trip monitoring. NIC AP received the elets National Water Innovation Summit 2020 award for this product under Efficient Water Transportation & Distribution.

ICT Infrastructure in Andhra Pradesh

NIC AP has built a robust and scalable ICT infrastructure to support the State and Central Government's digital initiatives. This backbone enables seamless communication, data exchange, and citizen service delivery, enhancing governance efficiency across departments.

NIC LAN

NIC Andhra Pradesh has established a comprehensive LAN infrastructure connecting key

In today's rapidly evolving digital era, reliable, secure, and citizen-centric digital infrastructure forms the backbone of effective governance. The National Informatics Centre (NIC), Andhra Pradesh, has consistently demonstrated excellence in providing technological support that empowers both administration and judiciary alike.

It is commendable that NIC Andhra Pradesh, through its State and District Centres, has extended steadfast technical expertise, ensuring smooth e-Governance initiatives and judicial digitization across the State. Their contribution towards case information systems, e-Courts, and digital documentation has significantly enhanced accessibility, transparency, and efficiency in our justice delivery process.

A notable achievement in this regard is the successful design, development and management of the Online Certified Document (CD) Application system. This initiative has simplified the process for litigants and advocates to obtain digitally signed certified copies of judgments and orders, enhancing convenience, transparency, and accountability. The secure integration of online payments and document delivery reflects NIC's commitment to citizen-friendly innovation.

Take this opportunity to appreciate the NIC Andhra Pradesh team for their unwavering commitment and innovation in supporting the High Court and subordinate judiciary. Their role is invaluable in shaping a digitally empowered legal ecosystem for the people of Andhra Pradesh.



Rao Raghunandan Rao

Judge and Chairman
Computer Committee High Court of AP

government office across the state for efficient communication and data exchange, LANs in Vijayawada and Amaravathi serves 500 nodes across the sites like the Secretariat, Departments and NIC Centres. Network extended to all 13 districts, encompassing over 500 nodes. All LANs are connected with 1Gbps bandwidth links with redundancy. All the nodes in the LANs protected with secure systems like centralized End point protection and Antivirus systems. All the NIC LANs and data centre are connected to 1/10Gbps uplinks to state NoC gateway. Departments LANs are connected with 10/34/100Mbps connectivity.

NICNET & NKN

NIC AP delivers high-speed, secure internet and data centre services through NICNET and NKN.

- NICNET serves government offices statewide, linking all district offices via a triangular, redundant leased-line topology
- NKN connects 7 key research, academic, and government institutions, including the State Data Centre
- Backbone bandwidth includes 1 Gbps connectivity to INOC and 10 Gbps uplinks at the state level for uninterrupted performance

Email & Messaging Services

NIC provides secure, government-grade email and messaging services to over 2 lakh users across departments and PSUs. Services include:

- Disaster recovery, anti-virus/anti-spam protection
- 24/7 technical support for seamless operations

Video Conferencing (VC)

A network of 27 VC studios has been set up across the State Centre, districts, and Secretariat to support official meetings and coordination. NIC AP also extends on-site technical support during high-level VVIP events and provides remote VC facilitation for government departments.

Important Events organized

Judges Dashboard Inaugurated: The Hon'ble Chief Justice of Andhra Pradesh, Sri Justice Dhiraj Singh Thakur, inaugurated the Judges Dashboard developed by NIC AP at the High Court on 08 Jan 2025, in the presence of Hon'ble Judges.

• **Technical Education Website Launched:** Smt. C. Naga Rani, IAS, Director of Technical Education, launched the department's new website on 03 July 2023, developed by the eCounselling Team, NIC AP

• **Chairman APMC Lauds NIC:** The Chairman of APMC appreciated NIC AP's work on a recent application, commending its efficiency, user-friendliness, and completeness, and recommended future enhancements

• **ePension (PENMAN) Portal Launch:** Smt. Manjula, PAG, officially launched the ePension portal



▲ Fig 2.5 : Hon'ble Prime Minister reviewing with Chief Secretaries through PRAGATI VC

developed by NIC AP, in the presence of Dr. R.K. Pathak, DDG, NIC HQ

• **Cybersecurity Awareness Initiative:** As part of Safer Internet Day, NIC AP conducted cybersecurity awareness programs. A brochure was released by PB Siddhartha College in the presence of Shri S. Madhusudhana Rao, ASIO (State)

• **National Recognition at ArogyaManthan 2022:** Andhra Pradesh bagged six national-level awards at Arogya Manthan 2022, marking milestones in AB-PMJAY and the Ayushman Bharat Digital Mission

• VVIP VCs like Pragati (Pro-Active Governance and Timely Implementation) VC chaired by honorable Prime minister every month with chief Secretaries and cabinet secretaries.

• NIC AP regularly supporting various events through VCs like Hon'ble President, Cab secretaries, CIC, and other VIP VC like Vikasit Bharat, Rozgar mela and inauguration of central and state projects.

Accolades

• Webland Project received the prestigious SKOCH Award 2024 for its transformative contribution to land records management in Andhra Pradesh

• The Chief Electoral Officer, AP commended NIC AP for delivering outstanding technical support during the General Elections 2024, ensuring seamless operations across the state

• The eHospital Project was lauded by Shri G.S. Naveen Kumar, IAS, Special Chief Secretary, Health & Family Welfare, in 2022 for its exceptional performance and user impact across hospitals and staff

• Andhra Pradesh secured six national-level awards at ArogyaManthan 2022, held in New Delhi, commemorating the 4th anniversary of AB-PMJAY and 1st anniversary of Ayushman Bharat Digital Mission

• NIC AP was honoured with the Award of Excellence under Efficient Water Transportation & Distribution for its Drinking Water Transportation App, at the Elets National Water Innovation Summit 2020

Way Forward

NIC AP is at the forefront of delivering cutting-edge ICT solutions, aligning with the visionary leadership and digital aspirations of the Government. Leveraging emerging technologies, the State Centre continues to reimagine governance through innovation, integration, and impact.

A flagship initiative under this vision is Property Chain—India's first-of-its-kind blockchain-based land record system. Developed in collaboration with the Centre of Excellence in Blockchain Technology, Bengaluru and IIT Hyderabad, this project aims to seamlessly integrate the Survey, Revenue, and Registration departments into a unified Single Source of Truth for land records. By using blockchain, it ensures transparency, security, and immutability in land asset management.

Beyond land governance, NIC AP is driving next-gen digital services across G2G, G2E, and G2C domains. These solutions embed Artificial Intelligence (AI), Machine Learning (ML), and Data Analytics to enhance administrative efficiency, optimize public service delivery, and empower citizens through digital inclusion.

Contact for more details

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▼ Fig 2.6 : Hon'ble Chief Justice of the High Court of Andhra Pradesh, Shri Dhiraj Singh Thakur inaugurating the "Judges Dashboard", in the presence of Hon'ble Judges of the High Court, Andhra Pradesh

