

Permissions Management System

Powering Agile and Transparent Governance in Cyberabad Police

Edited by NISSY GEORGE

In the era of digital governance, efficiency no longer means merely putting public services online. It means building systems that can evolve - systems that can respond to new policies, urgent situations, and changing citizen needs without heavy technical intervention. Traditional government applications often fail here; their rigid design makes even small updates slow, costly, and dependent on specialized software teams.

Recognizing this challenge, NIC, Hyderabad, developed an innovative, flexible, and citizen-centric solution for the Cyberabad Police Commissionerate - the Permissions Management System (PMS).

The PMS is a comprehensive, configurable digital platform designed to streamline the management of public permissions. It ensures faster approvals, transparency, and adaptability - all while reducing the administrative burden on officials and improving convenience for citizens.

At its heart, the PMS integrates three dynamic tools that enable complete configurability without coding:

- **Dynamic Forms Designer** - To create and manage application forms effortlessly.
- **Workflow Designer** - To configure approval processes and automate decision flows.



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The PMS developed by NIC Hyderabad for Cyberabad Police, is a no-code digital platform that automates and simplifies public permissions. With dynamic forms, workflows, and document tools, it has cut approval times, improved transparency, and enhanced citizen convenience - emerging as a replicable model for adaptive digital governance.



- **Document Template Designer** - To generate official communications automatically.

Together, these tools have transformed how permissions are managed - turning a once time-consuming, paper-driven process into a digital, traceable, and citizen-friendly system.

A Unified Digital Framework for Public Permissions

The Permissions Management System serves as a one-stop digital interface for citizens to apply for, track, and receive approvals for various activities that require police permission.

These include a broad range of cases - from organizing religious processions, public rallies, and marathons to granting film shooting licenses, loudspeaker usage, and establishment permits.

By combining configurability with automation, PMS has replaced manual file movement and physical approvals with digital workflows that are secure, transparent, and efficient.

Dynamic Forms Designer

In traditional setups, introducing a new per-

mission type - or modifying an existing form - involved coordination with software developers, system downtime, and testing delays. The Dynamic Forms Designer built into the PMS eliminates these bottlenecks. It provides a no-code interface that allows administrators to design, edit, and deploy forms instantly.

Key Capabilities

- **Instant Form Creation:** New forms can be built and published in minutes without any coding
- **Field-Level Flexibility:** Administrators can add, remove, or modify fields, rules, and layouts easily
- **Reusable Components:** Frequently used sections, such as Applicant Details or Supporting Documents, can be stored and reused across forms
- **Multilingual Support:** Enables the design of forms in multiple languages for wider accessibility

This capability has been invaluable during high-demand scenarios, such as festivals, when thousands of event permissions must be processed quickly. For example, permissions for Ganeshe pandals, religious parades, and community celebrations were efficiently managed using dynamically generated forms - without the need for new development.

Workflow Designer

Permissions often require scrutiny from multiple departments - law and order, traffic management, intelligence, and local administration. A fixed approval structure cannot accommodate such diversity.

The Workflow Designer introduces flexibility and logic-driven automation to handle these complexities. Using formula-based mapping, administrators can configure workflows that automatically adapt to the nature of the application.

Core Features

- **Configurable Approval Levels:** Create multi-tier approval chains that align with specific permission types
- **Role-Based Assignment:** Automatically routes applications to officers based on role, designation, and jurisdiction
- **Conditional Routing:** Intelligent rules manage exceptions - e.g., if an event involves public roads,

it is routed to the Traffic Police for clearance

- **Auto Escalation:** If delays occur, the system sends reminders or escalates the case to higher authorities

- **Real-Time Tracking:** Both citizens and officials can track application progress at every stage

With this flexibility, Cyberabad Police can introduce or modify workflows within hours, enabling them to respond to changing administrative needs or event-specific requirements without re-writing code.

Document Template Designer

Government communication must be precise, uniform, and timely. The Document Template Designer module automates the creation of official letters, notices, proceedings, and approvals, saving significant manual effort.

Much like an enhanced mail merge system, it merges applicant data dynamically into standardized templates.

Functional Highlights

- **Automated Document Generation:** Instantly produces memos, permissions, or notices
- **Uniformity in Format:** Maintains standard design and structure across departments
- **Error Reduction:** Minimizes manual input and potential inaccuracies
- **Reusability:** Templates can be updated and re-used across multiple workflows

This module ensures that official communications are consistent, professional, and instantly available once a decision is made.

Key Features

The PMS integrates powerful features that enhance usability, transparency, and control at every level of governance:

- **Online, Anytime Access :** Citizens can submit permission requests online, supported by mobile-friendly interfaces, Aadhaar/PAN integration, payment gateways, and reusable sub-forms.
- **Real-Time Notifications :** Automated SMS and email alerts keep applicants and officials informed at every stage of processing.
- **Role-Based Access Control :** Ensures that users - from clerical staff to senior officers - only see

Authentication	Design Application	Design Workflow	Document Designer
Secure Login	Create application form for an event permission	Create workflow for Approval process	Create Output Document Design
CAPTCHA with Audio	Approve	Approve the workflow	Approve document template
	Publish		Publish template

▲ Fig 10.2 System Overview

information relevant to their roles.

- **Comprehensive Tracking :** Applicants can monitor status updates, while officers can access remarks, attachments, and notices through a single interface.

- **Configurable Workflows :** Allows parallel processing, iterative clarifications, and per-stage configurations like remarks, digital signatures, or payments.

- **Document & Feedback Management :** Enables secure document uploads and captures post-event feedback for continuous improvement.

- **Advanced Analytics and Reports :** Generates role-wise, time-wise, and form-wise analytics to identify process bottlenecks and improve efficiency.

- **Legacy Onboarding :** Supports the digitization and renewal of permissions issued previously through offline systems - ensuring inclusivity in digital transformation.

Permissions Covered

The PMS currently supports more than 20 categories of permissions, including:

- Public and private events
- Film and ad shootings (road and off-road)
- Marathons, rallies, and charity walks
- Blasting permissions and renewals
- Loudspeaker and sound system use
- Establishment licenses and renewals
- Event cancellations, modifications, and post-event feedback

Each category can be configured independent-

ly, giving administrators complete control over form design, workflows, and approvals.

Measurable Impact in Cyberabad

Since its rollout, the PMS has brought a measurable transformation in how public applications are processed in Cyberabad:

- **Processing Time Reduced:** Automated workflows have cut average approval time from several days to just a few hours
- **Transparency Enhanced:** Citizens can track applications online, and officials benefit from audit trails and real-time data visibility
- **Convenience for Citizens:** Paperless applications, digital payments, and instant updates save time and eliminate the need for physical visits
- **Administrative Agility:** During major events such as festivals or marathons, new forms and workflows can be deployed instantly
- **Scalability and Adoption:** The system's success led to its adoption by the Hyderabad and Rachakonda Police Commissionerates, demonstrating its scalability and ease of replication.

A notable example was during the festival season, when thousands of pandal and event permissions were processed smoothly and on time, proving the system's resilience under peak load.

Conclusion

The Permissions Management System represents more than an administrative upgrade - it marks a shift towards adaptive, intelligent, and citizen-focused governance.

By combining configurability, automation, and transparency, the PMS reduces dependency on developers, minimizes manual errors, and accelerates decision-making.

It is not limited to policing; its modular design makes it replicable across government departments - from municipal corporations to education boards and environmental agencies.

Contact for more details

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▼ Fig 10.1 : Inauguration of Cyberabad Police Permission Management System by Shri Avinash Mohanty, IPS, Commissioner along with higher officials