EMCA · GOVERNMENT & PUBLIC SECTOR · INDIA

A State Government in India Establishes Its Own Certifying Authority to Issue Digital Signature Certificates with eMudhra emCA

SECTOR	REGION	SOLUTION
Government & public sector	India	emCA

CLIENT OVERVIEW

The organisation is the IT department of a state government in India, responsible for delivering e-governance services to citizens and enabling digital workflows across state departments. As part of a broader initiative to reduce dependence on paper-based processes, the state sought to enable government employees and empanelled service providers to use Digital Signature Certificates for official communications, filings, and approvals.

THE CHALLENGE

State government employees and empanelled operators were required to obtain Digital Signature Certificates to authenticate official documents and access central government portals such as GeM and MCA21. The process of procuring DSCs from external Certifying Authorities was slow and administratively cumbersome — employees had to approach third-party RA offices, submit physical documents, and wait several days for issuance. The cost of DSC procurement through commercial CAs was also a consideration for the state, which needed to issue certificates at scale across departments. The state's IT department explored the option of establishing its own Sub-CA under the CCA India framework, which would allow it to issue DSCs directly to government employees and operators without depending entirely on commercial CA infrastructure.

> *"Getting DSCs for thousands of government employees through external CAs was slow and expensive. We wanted the ability to issue certificates directly, under our own authority, within the national PKI framework."*
>
> **State Chief Information Officer**

THE SOLUTION

eMudhra deployed emCA to enable the state government to operate as a Sub-Certifying Authority under the Controller of Certifying Authorities (CCA) India PKI hierarchy. The deployment included the emCA Certificate Manager for certificate issuance and management, the emRA Registration Authority module for distributed identity verification across state departments, and HSM integration for secure key storage. Certificate profiles were configured for the certificate classes required by state employees — including Class 3 individual and organisation certificates for e-procurement, GeM portal access, and MCA21 filings. The emRA module allowed designated registration officers within each department to verify applicant identity and initiate certificate requests, removing the need for employees to visit external RA offices. eMudhra provided end-to-end implementation support including CCA compliance documentation, staff training, and a structured handover to the state's own CA operations team.

RESULTS

The state government issued its first DSCs within 60 days of go-live. Average certificate issuance turnaround dropped from several days to under 24 hours for standard requests processed through departmental RAs. The state has since issued certificates to employees across 22 departments, and the CA infrastructure has been extended to cover empanelled service operators on the state's citizen services network.

METRIC	BEFORE	AFTER
DSC issuance turnaround	Several days via external CA offices	Under 24 hours via departmental RA
Employee access to RA services	Required travel to external RA offices	In-department issuance via emRA
Departments covered	Dependent on commercial CA procurement	22 departments under state CA infrastructure
CCA compliance	No state-level CA capability	Sub-CA established under CCA India PKI hierarchy
Empanelled operator coverage	External CA process; inconsistent adoption	Operator certificates issued under state CA

About eMudhra. eMudhra is a globally trusted provider of digital trust services, offering eSignatures, PKI, Certificate Lifecycle Management, Multi-Factor Authentication and Identity & Access Management solutions. Licensed by the Controller of Certifying Authorities (CCA), India, eMudhra serves 1,000+ enterprises across 40+ countries, helping organisations build secure, compliant and paperless digital ecosystems.

Customer name withheld for confidentiality.