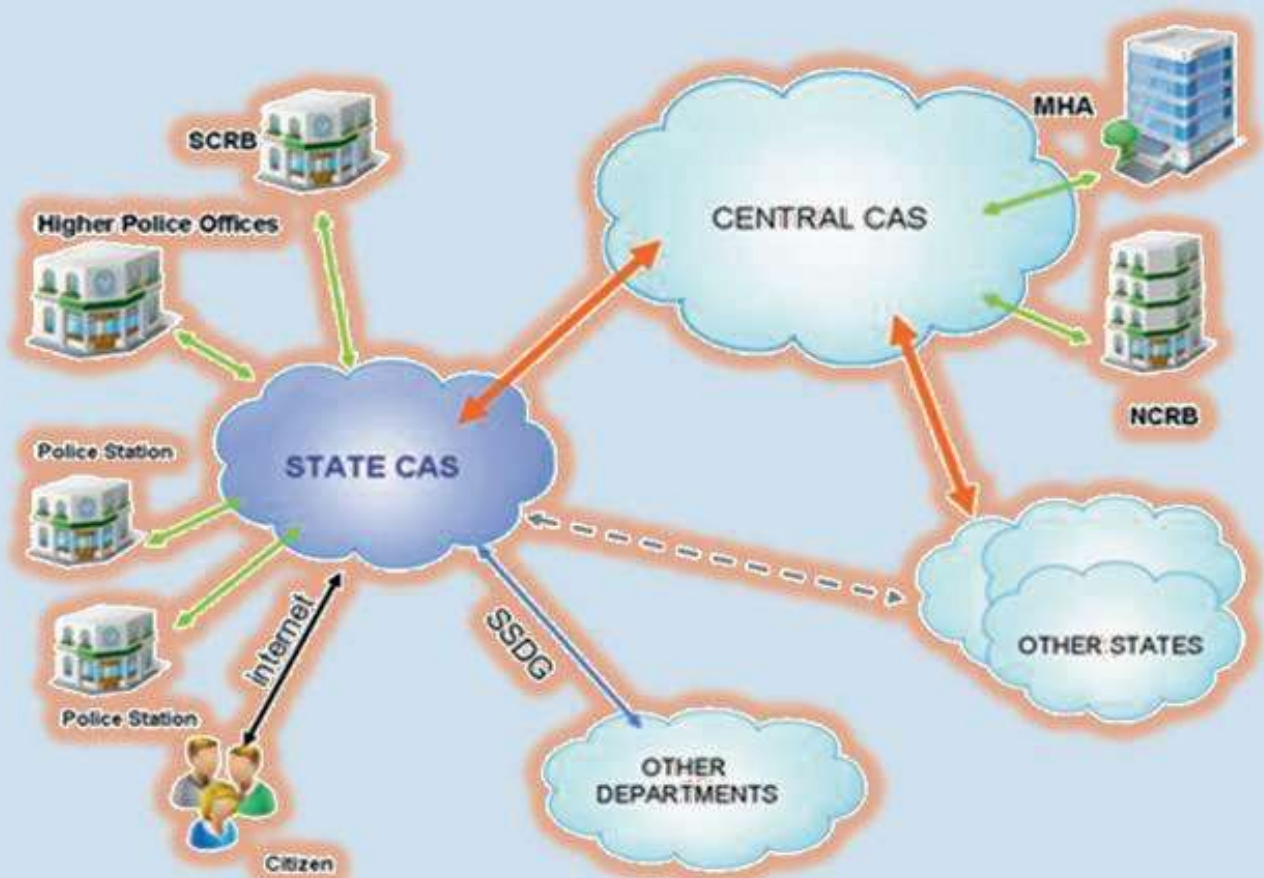


Chapter I

Introduction and Audit Framework



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Introduction and Audit Framework

1.1 Introduction

Crime and Criminal Tracking Network System (CCTNS) is a Mission Mode Project under the National e-Governance Plan (NeGP) of Government of India (GoI). It was conceptualised (2008) by the Ministry of Home Affairs (MHA) in consultation with all stakeholders, including the National Crime Records Bureau (NCRB), the State Governments, the Department of Information Technology (DIT), Government of India and the National Informatics Centre (NIC).

Prior to implementation of CCTNS, Crime and Criminal Information System (CCIS) and Common Integrated Police Application (CIPA) were launched in 1990 and 2004 respectively. CCIS was primarily an initiative to create exclusively crime and criminals related database that could be used for crime monitoring by security agencies. The aim of CIPA as a stand-alone system was to computerize and automate the functioning at the Police Station level to enhance efficiency and to bring transparency in various processes and functions and improve service delivery to citizens.

CCTNS is a centrally sponsored programme aimed at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing at all levels, especially at the Police Station level by adopting the principles of e-Governance and creating a nationwide networking infrastructure for evolution of IT-enabled tracking system. The CCTNS project covers 35 States and Union Territories (UTs). The CCTNS Core Application Software (CAS) has modules such as Registration, Investigation and Prosecution. Apart from the CAS, a Citizen Service Portal for services such as Complaint Registration, Character Certificate Request, Event/ Performance Request, Protest/ Strike/ Rally Registration Request, Foreigner Registration Requests *etc.*, has been developed by NCRB and provided to all States and UTs for configuration, customisation, enhancement, and deployment at their levels.

A Memorandum of Understanding (MoU) was signed (October 2009) between MHA, GoI and the Government of Odisha (GoO) for implementation of the CCTNS project in the State and the project was launched in 2013. The total expenditure under the project in the State, since its inception was ₹176.16 crore as of March 2023. Of this, ₹66.75 crore was provided by GOI while the GoO spent ₹109.41 crore.

For implementation of the project, GoO selected service providers to provide various functions as detailed below:

Functions	Service Providers	Services provided
State Designated Agency	State Crime Records Bureau, Odisha	Overall management and monitoring of the project and its implementation.
State Project Management Consultant	National Institute of Social Governance	Preparation of Request for Proposal and Project Implementation and Monitoring Reports
State Project Management Unit	Deloitte	Project monitoring
System Integrator	NIIT Technologies Limited (<i>till July 2022</i>) and KPMG Advisory Services Private Limited (<i>from August 2022</i>)	Providing bundle of services <i>i.e.</i> , configuration, customisation, enhancement and deployment of hardware and application

1.2 Governance Structure

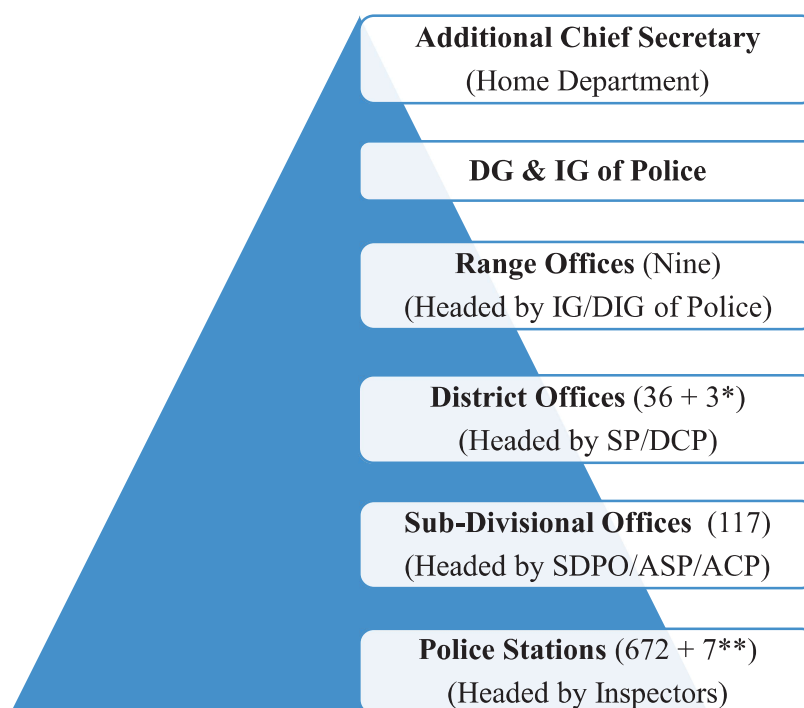
GoI guidelines on implementation of CCTNS requires that the State Government constitute four governance committees namely, the State Apex Committee, the State Empowered Committee, State/UT Mission Team and District Mission Teams. These committees were constituted in Odisha between the period October 2008 to December 2008 and the functions of these committees are as below:

Governance Committee	Functions
State Apex Committee	Review progress of project, monitor fund utilisation, issue Policy directions, guidelines etc.
State Empowered Committee	Allocation of funds, sanctions for various project components, approval of various functionalities, review progress, ensure proper training arrangements, deployment of handholding personnel, guide State/ District Mission Teams
State/ UT Mission Team	Operational responsibility, formulating project proposals, hardware rollout and commissioning, co-ordination with various agencies, resolution of all software and other issues, assist the State Apex and Empowered Committees.
District Mission Teams	Prepare district project proposal, ensure proper rollout of the project in Police Stations, ensure hardware and software installation and operationalisation of the project, training of all police personnel in the district, site preparation, ensure separate account keeping for the project, <i>etc.</i>

1.3 Organisational Structure

The Government of Odisha designated the State Crime Records Bureau, Bhubaneswar as the nodal agency for implementation of CCTNS application and monitoring its overall progress.

Figure 1.1 : Organisational Structure of Odisha Police



* In CCTNS, Crime Investigation Department, Human Rights Protection Cell (HRPC) and Crime Branch were treated as police districts logically.

** One virtual Police Station and six belonging to the above three logical police districts

1.4 Audit Objectives

Audit was conducted with the objectives to assess whether:

- planning process for implementation of the CCTNS was effective;
- CCTNS system has been utilised for enhancing the efficiency and effectiveness of policing and delivery of citizen-centric services; and
- the system has adequate controls to maintain confidentiality, integrity, and availability of data.

1.5 Audit Criteria

- Request for Proposal (RFP) for CCTNS
- Technical documentation including Functional Requirement Specification, Software Requirement Specification, High Level Design Document, Low Level Design Document of each application/ module under CCTNS
- IT Act 2000 and subsequent amendments, National e-Governance policies, and standards, *etc.*
- Indian Penal Code (IPC) and Criminal Procedure Code (Cr.PC)
- Odisha Police Manual
- Orders and Guidelines issued by Home Department, the Government of Odisha
- Odisha General Financial Rules (OGFR)

1.6 Audit scope and methodology

Information Technology Audit on CCTNS was conducted to evaluate the performance and effectiveness of the system for the period 2013 (since inception) till March, 2023. The audit objectives, criteria and scope of audit were discussed with the Home Department in an Entry Conference held on 13 June 2023. Records were examined at the Department, office of the Director General of Police, State Crime Records Bureau and in 68 Police Stations under 18 Sub-Divisional Police Officers of 11 Police Districts in 9 Ranges, selected through simple random sampling without replacement method. Analysis of CCTNS database was conducted using various Computer Assisted Audit Techniques. After completion of Audit, the audit findings were discussed with the Home Department in an Exit Conference held on 27 May 2024.

1.7 Good practice

Director, SCRB had designed and implemented a color-coded ranking tool for districts and Police Stations for monitoring the performance of Superintendents of Police (SsP) like timely supervision of cases, generation of arrest memos, *etc.* This initiative had resulted in better use of CCTNS apart from effective monitoring. The other initiatives in the new state specific systems are as under:

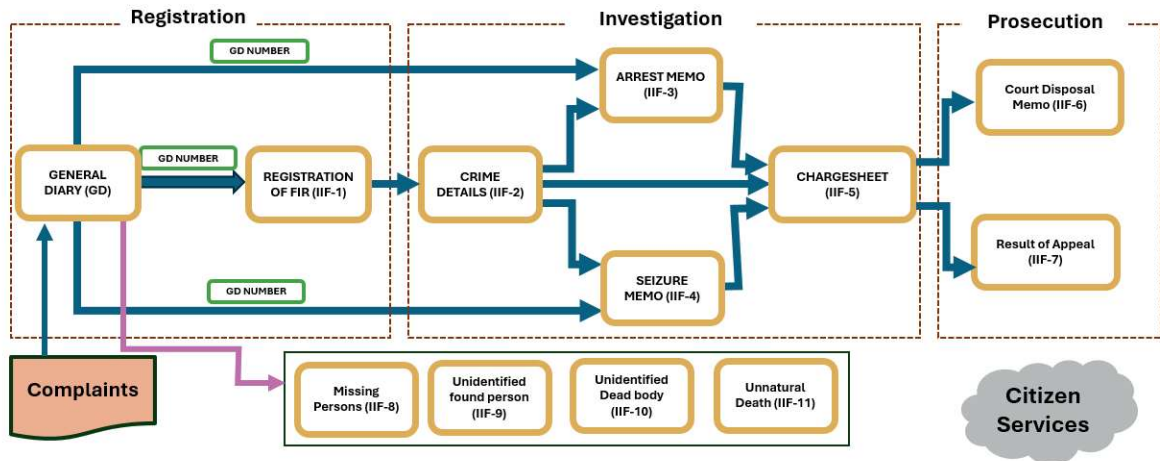
- **Arakhi Mobile App** introduced by Odisha Police under the CCTNS Project helps the investigating officers in on-the-spot creation of digital record, generation of various forms easily, capturing activity digitally in chronological order, generation of case diaries for prompt and effective investigation.

- **Redesigning of CCTNS dashboard** as a single sign-on for all CCTNS modules, aimed at rearranging the entire information of the database using data analytics, to make it more informative and interactive.

1.8 System Overview

The following are the major processes that had been incorporated in CCTNS:

Figure 1.2: Flow chart showing processes in CCTNS



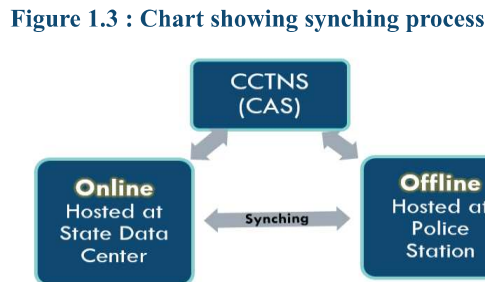
Registration: Under this process, all types of registrations *i.e.*, General Diaries (GD)¹, Complaints, FIRs, non-FIRs, missing persons reports, etc. are carried out.

Investigation: After registration of complaints, the investigation process deals with capturing crime details, preparation of arrest memos and seizure memos and preparation of final form/chargesheet are done by the Police Station users.

Prosecution: Under this process, court disposal memos and results of appeal are managed for interfacing to court and jails.

¹ The General Diary is used to record log of every event or activity during daily functioning of the Police Station. It includes incoming and outgoing communications, complaints received, actions taken, and notable incidents

Keeping in view the connectivity challenges faced by Police Stations in remote locations and to achieve the key goal of facilitating availability of real time information across Police Stations and higher offices, CCTNS was implemented as web applications in two different technology stacks *i.e.*, NET/MS SQL server at a central location in State Data Centre and J2EE/MySQL at Police Stations.



A synchronisation architecture was designed and implemented to maintain the consistency of data between the offline databases at Police Stations and the online database at State Data Centre. In case of failure in connectivity, the PS users could work on the offline servers and upon restoration of connectivity, the works done by them were to be automatically synchronised with the central online database server.

A total of 2.12 crores general diaries (GDs) and 18.49 lakh First Information Reports (FIRs)² were captured in the system as of June 2023. Audit analysed the database for the period from January 2018 to March 2023 involving 1.71 crore GDs, 7.44 lakh FIRs, 16.91 lakh crime details, 3.32 lakh arrest memos, 7.30 lakh seizure memos, and 7.11 lakh charge sheets, to examine and evaluate the general and IT controls.

The Audit observations based on the above detailed analysis, are grouped under seven chapters *i.e.*, Project Management, User Management, Registration, Investigation, Prosecution, Data Security and Supervision and Monitoring. Due to security reasons, suitable generalised phrases have been used in place of the actual table names, field names and process names in explaining the technical aspects of the system throughout the report.

² Any incident or complaint is recorded against a General Diary entry by the Police Station. Subsequently, if the incident is considered as cognizable offence, a First Information Report (FIR) is registered by the SHO against that General Diary.